2013 Surface Water Sampling Report
Middle River Complex
2323 Eastern Boulevard
Middle River, Maryland

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Lockheed Martin Corporation

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ACRONYMS

AWQC	ambient water quality criteria
BTAG	Biological Technical Advisory Group
ºC	degrees Celsius
cis-1,2-DCE	cis-1,2-dichloroethene
COC	chain of custody
DO	dissolved oxygen
ESA	environmental site assessment
GIS	geographic information system
GLM	Glenn L. Martin Company
HHRA	human health risk assessment
IDW	investigation-derived waste
Lockheed Martin	Lockheed Martin Corporation
MDE	Maryland Department of the Environment
µg/L	microgram(s) per liter
mg/L	milligram(s) per liter
MRC	Middle River Complex
mS/cm	milliSiemen(s) per centimeter
Mv	millivolt(s)
NRWQC	national recommended water quality criteria
NTU	nephelometric turbidity unit(s)
ORP	oxidation-reduction potential
PDF	portable document format
pH	a measure of hydrogen-ion content indicating relative acidity or alkalinity
PM	project manager
REC	recognized environmental condition
SC	specific conductivity
S.U.	standard unit(s)
Tetra Tech	Tetra Tech, Inc.
TCE	trichloroethene
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

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Section 1
Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this *2013 Surface Water Monitoring Report* for the Lockheed Martin Middle River Complex (MRC) in Middle River, Maryland (see Figure 1-1). This report addresses surface water sampling in 2013 along five transects in Dark Head Cove at Outfalls 5, 6, 7, 8, and 9, and at two locations in Cow Pen Creek near the western plume of trichloroethene (TCE) in groundwater. Two of the Dark Head Cove transects (Outfalls 6 and 8) are downgradient of the eastern trichloroethene plume.

The sampling objective was to provide additional and updated surface water quality data in Dark Head Cove and Cow Pen Creek to determine whether volatile organic compounds (VOCs) in groundwater at the site are impacting Dark Head Cove and Cow Pen Creek surface water. Additionally, the sampling provides information regarding whether 1,4-dioxane in the western trichloroethene plume groundwater is impacting Cow Pen Creek surface water. These chemicals may be conveyed by groundwater seepage into surface water, or by groundwater infiltration into drains and outfalls that discharge to surface water.

This report is organized as follows:

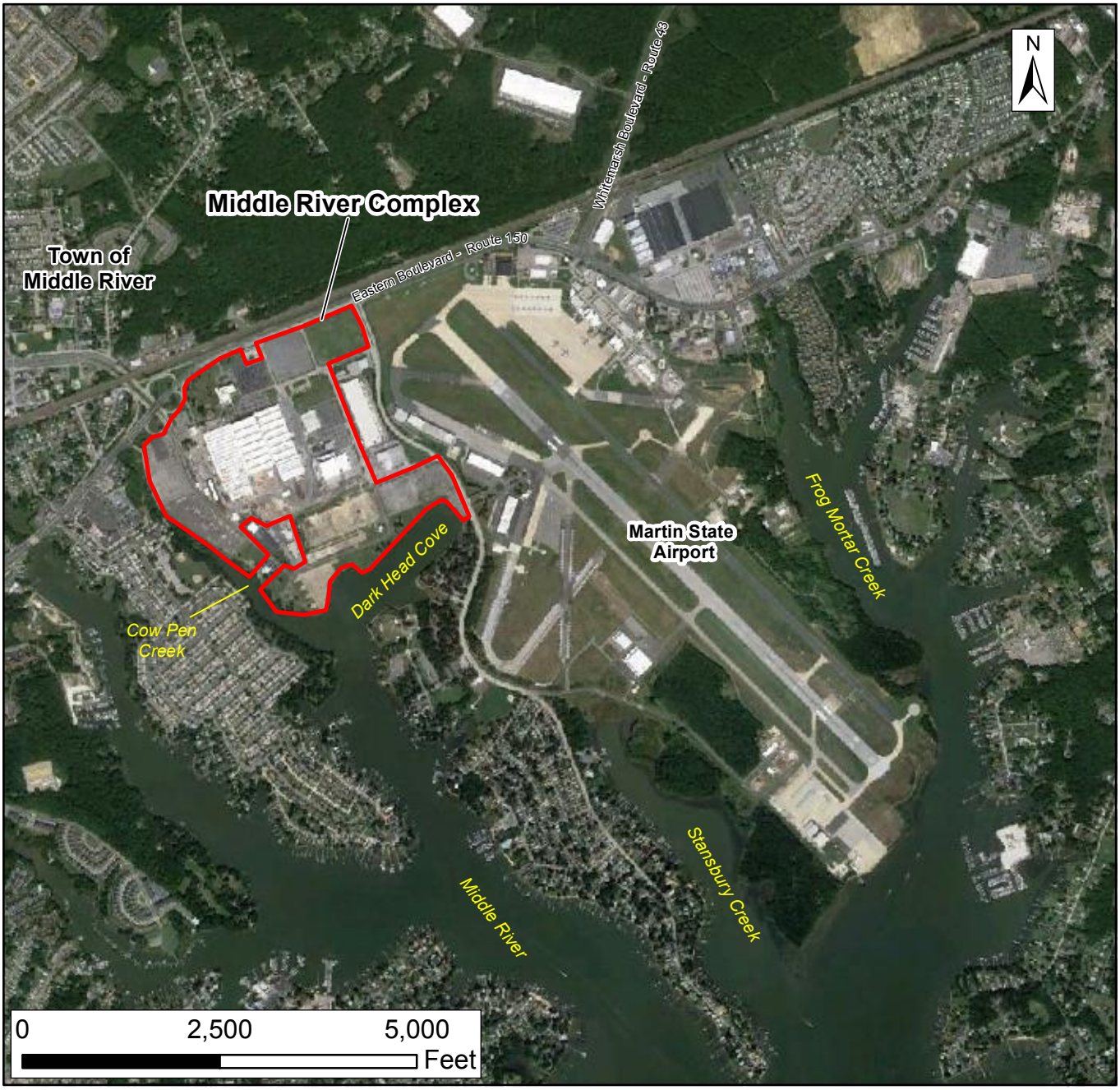
Section 2—Site Background: Briefly describes the site and where detailed background information and reports of previous investigations can be found.

Section 3—Investigation Approach and Methodology: Presents the technical approach to surface water sampling and describes the field methodology employed.

Section 4—Results: Presents the field program's investigation results.

Section 5—Summary: Summarizes the investigation approach and findings.

Section 6—References: Cites references used to compile this report.



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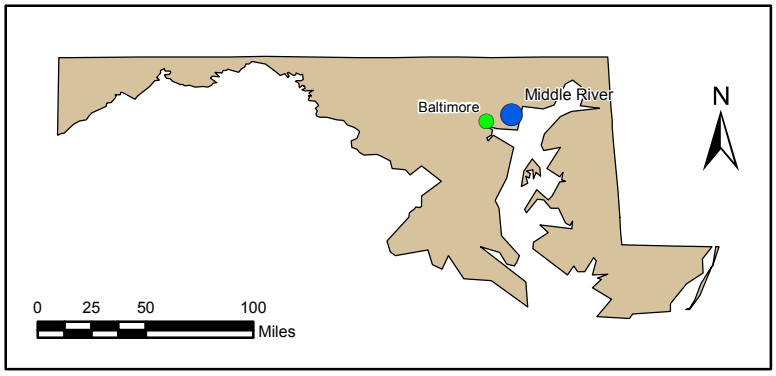

FIGURE 1-1

MIDDLE RIVER COMPLEX LOCATION MAP

Lockheed Martin Middle River Complex
Middle River, Maryland

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Section 2
Site Background

The Middle River Complex (MRC), part of the Chesapeake Industrial Park, is at 2323 Eastern Boulevard in Middle River, Maryland, approximately 11.5 miles northeast of downtown Baltimore. The MRC comprises approximately 161 acres and includes 12 main buildings, an active industrial area and yard, perimeter parking lots, an athletic field, a vacant concrete lot, a trailer and parts storage lot, and numerous grassy spaces along its perimeter. The MRC is bounded by Eastern Boulevard (Route 150) to the north, Martin State Airport to the east, Dark Head Cove to the south, and Cow Pen Creek to the west. Figure 2-1 shows the MRC layout.

LMC Properties, Inc. (the current MRC property owner) is responsible for facility and building management and maintenance. The main tenant at the site, MRA Systems, Inc. (a subsidiary of General Electric Company), designs, manufactures, fabricates, tests, overhauls, repairs, and maintains aeronautical structures, parts, and components for military and commercial applications. Lockheed Martin Mission Systems & Training (a Lockheed Martin Corporation [Lockheed Martin] business segment) conducts engineering activities and fabricates, assembles, tests, and otherwise supports vertical-launch systems. A Lockheed Martin subsidiary, Applied NanoStructured Solutions LLC, also occupies a portion of MRC, researching and designing nanotechnology applications.

In 1929, the Glenn L. Martin Company (GLM) (a predecessor entity of Lockheed Martin) acquired a large parcel of undeveloped land in Middle River, Maryland to manufacture aircraft for United States government and commercial clients. In the early 1960s, GLM merged with American-Marietta Company to form Martin Marietta Corporation. Around 1975, the adjacent eastern airport (currently Martin State Airport) area (comprising approximately 750 acres) was transferred to the State of Maryland. In the mid-1990s, Martin Marietta Corporation merged with Lockheed to form Lockheed Martin Corporation. Shortly after the merger, General Electric Company acquired most of Lockheed Martin's aeronautical business in Middle River and a General Electric subsidiary, MRA Systems, Inc., began operations.

Numerous environmental investigations have been conducted at the Lockheed Martin MRC. These include underground storage-tank closures and abandonments, soil excavations, Phase I environmental site assessments (ESAs), and Phase II ESAs. A facility-wide Phase I ESA was conducted at the Lockheed Martin MRC in 2003. It identified 13 recognized environmental conditions (RECs) at the facility associated primarily with then-current site conditions (Earth Tech, 2003). Subsequent review of historical site activities identified another 18 RECs at the facility (Tetra Tech, 2004). Many RECs are in the southern portion of the facility along the waterfront.

Soil and groundwater sampling has identified sporadic soil and groundwater contamination in environmental media underlying the facility. The MRC previously entered into the Maryland Department of the Environment (MDE) Voluntary Cleanup Program. Studies of soil and groundwater are ongoing (Tetra Tech, 2012a).

Surface water and sediment sampling adjacent to the MRC's southern and western property boundaries occurred on March 17–18, 2005. Ten additional surface water and 50 additional sediment samples were later collected in October 2005 to further characterize and delineate chemicals identified during the March sampling event. The October event included a detailed investigation of Dark Head Cove and vertical profiling of chemical concentrations in sediments.

In March 2005, seven surface-water samples (SW-1 through SW-7) and 12 sediment samples (SD-1 through SD-12) were collected from Cow Pen Creek and Dark Head Cove. Two (SW/SD-1 and SW/SD-2) were collected as background reference-samples; SW/SD-1 was collected along Cow Pen Creek and hydraulically upgradient of the facility's first outfall, and SW/SD-2 was collected from a cove within Dark Head Creek. The remaining sampling locations are along the facility waterfront, approximately 10 feet from the shoreline and spaced to generally coincide with outfall locations.

In October 2005, 10 surface water samples (SW-8 through SW-17) and 50 sediment samples from 30 locations (SD-13 through SD-42) were collected from Cow Pen Creek and Dark Head Cove. Surface water sampling locations were distributed to provide sufficient data to broadly evaluate surface water quality. Sediment sampling locations were chosen to evaluate the horizontal distribution of chemicals of concern previously identified in March 2005.

Results of a 2006 human health risk assessment (HHRA) based on data from the 2005 sampling events indicated that non-carcinogenic risks for a hypothetical recreational receptor due to surface water and sediment exposure were regulatorily acceptable (the calculated hazard index was less than 1.0). Potential carcinogenic risks resulting from exposures to surface water (e.g., incidental ingestion, dermal contact) were less than the MDE threshold limit of 1×10^{-05} (i.e., a one-in-100,000 probability of developing cancer), whereas exposures to sediment exceeded the MDE threshold for excess carcinogenic effects. However, this (1×10^{-05}) estimated risk result is within the United States Environmental Protection Agency (USEPA) acceptable risk range of 1×10^{-04} to 1×10^{-06} (i.e., one-in-10,000 to one-in-one-million) for excess carcinogenic effects.

The 2006 HHRA evaluated exposure to contaminants via incidental ingestion and dermal contact with surface waters and sediments as direct-contact exposure pathways. Risks associated with consumption of fish from the study area were not evaluated in the 2006 HHRA. The 2006 ecological risk assessment (likewise based on the 2005 data) identified cadmium in surface water and barium, silver, benzo(a)pyrene, benzo(g,h,i)perylene, and indeno(1,2,3-cd)pyrene as the primary chemicals of potential concern in sediment. Food-chain modeling also identified mercury in sediment as a concern (Tetra Tech, 2006).

In June 2012, 13 surface water samples were collected from Dark Head Cove and Cow Pen Creek and chemically analyzed to assess concentrations of volatile organic compounds (VOCs) that may be emanating from stormwater outfalls or groundwater plumes. Trichloroethene (TCE) was detected in the Dark Head Cove samples, but not in the Cow Pen Creek samples. Detected concentrations of TCE in the Dark Head Cove samples ranged from 0.17–0.82 micrograms per liter (µg/L). No TCE concentration in June 2012 exceeded the TCE ecological surface-water screening level (21 µg/L), the human health consumption-of-aquatic-organism screening level (300 µg/L), or the site-specific swimming screening level of 10 µg/L developed by Lockheed Martin Corporation to assess human health risk in adjacent creeks. Acetone was detected in both surface water samples collected in Cow Pen Creek, at concentrations (3.6 and 4.7 µg/L) below the ecological surface water screening level of 1,500 µg/L (Tetra Tech, 2012b). Acetone is commonly used in analytical laboratories, and its detection during sample analysis is frequently attributed to laboratory-blank contamination; however, acetone was not detected in laboratory blank samples in this data set.

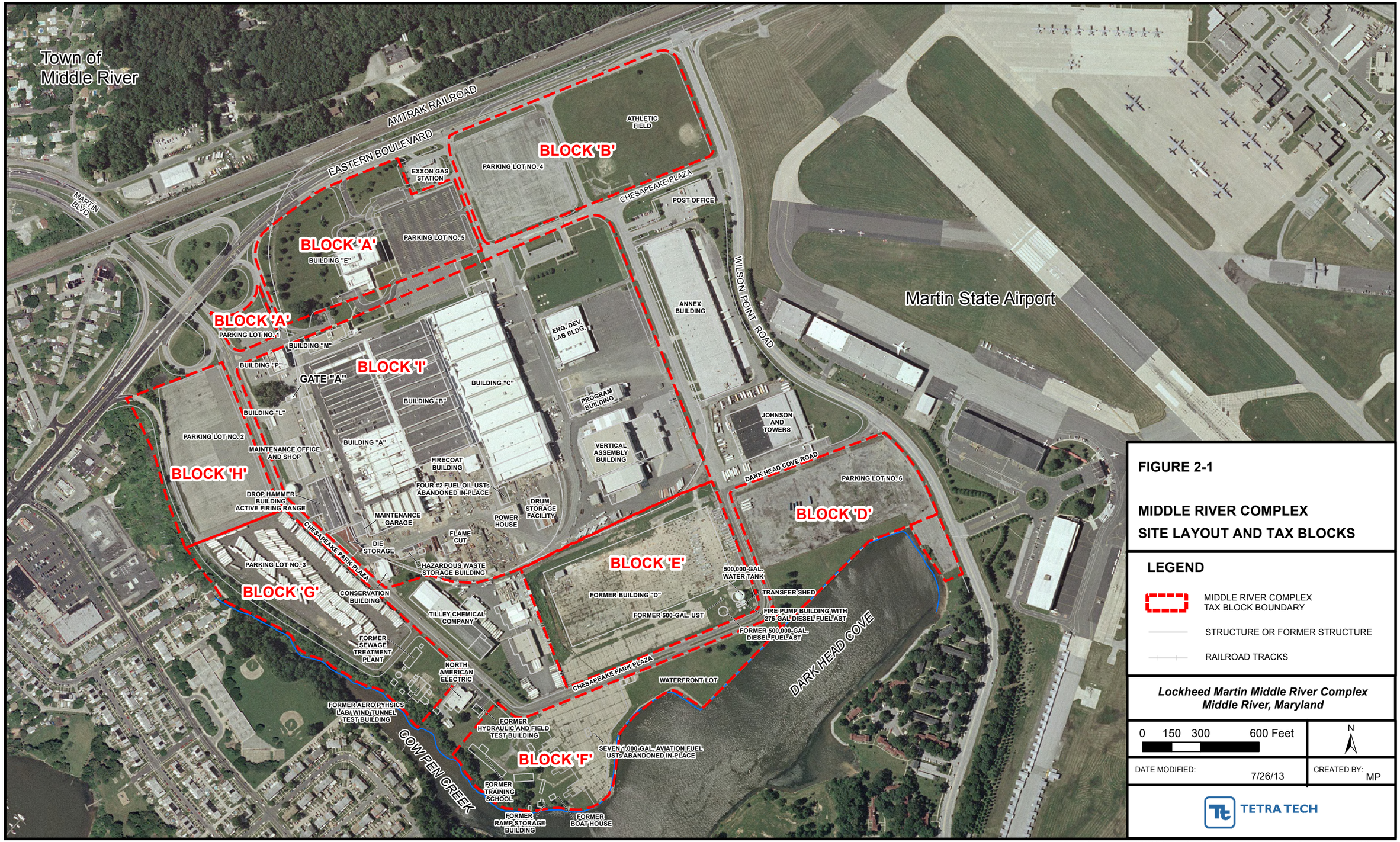

FIGURE 2-1

MIDDLE RIVER COMPLEX
SITE LAYOUT AND TAX BLOCKS

LEGEND

- MIDDLE RIVER COMPLEX TAX BLOCK BOUNDARY
- STRUCTURE OR FORMER STRUCTURE
- RAILROAD TRACKS

Lockheed Martin Middle River Complex
Middle River, Maryland

0 150 300 600 Feet

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Section 3
Investigation Approach and Methodology

3.1 SURFACE WATER SAMPLING

The overall objective of the 2013 surface water sampling is to provide additional and updated surface water quality data for Dark Head Cove and Cow Pen Creek and determine whether volatile organic compounds (VOCs) in groundwater at the site are impacting Dark Head Cove and Cow Pen Creek surface water. A secondary objective is to ascertain if 1,4-dioxane in groundwater is impacting Cow Pen Creek surface water. Although polychlorinated biphenyls (PCBs) are known to be in Middle River Complex (MRC) soil and creek sediment, prior sampling indicates they are not chemicals of concern in groundwater. Therefore, no surface water samples were analyzed for PCBs in 2013.

Thirteen surface water samples were collected from Dark Head Cove and Cow Pen Creek on June 18, 2013 (Figure 3-1). Eleven of these were collected in Dark Head Cove and two were collected in Cow Pen Creek. Samples were analyzed for VOCs (the primary contaminants of concern in MRC groundwater). The two samples from Cow Pen Creek were also analyzed for 1,4-dioxane, a groundwater contaminant in that area. Sampling was done in accordance with the 2013 MRC surface water sampling work plan (Tetra Tech, Inc. [Tetra Tech], 2013).

3.1.1 Surface Water Sampling and Analyses

Surface water samples were collected in Dark Head Cove along transects at Outfalls 5 through 9 (Figure 3-1). Two samples were collected along each transect near Outfalls 6 through 9: one sample per transect was collected 10-feet from shore (“A” sample) and a second was collected 50-feet from shore (“B” sample). At Outfall 5 (which has two outlets), one sample was collected at each outlet 10-feet from shore (“A1” and “A2” samples), and a single sample was collected 50-feet from shore, approximately midway between the two outlets (“B” sample). Surface water samples

were collected in Cow Pen Creek near the western trichloroethene (TCE) plume. Samples were collected along the approximate centerline of the creek upstream and downstream of the estimated boundaries of the western TCE plume. Table 3-1 summarizes (by surface water sampling location) the chemical analyses conducted for the 2013 monitoring program (Tetra Tech, 2013).

Surface water samples were collected as grab samples using direct-fill sampling techniques. All samples were collected approximately one foot below the water surface using a stainless-steel discrete-interval sampler (i.e., a "bacon bomb" sampler). The sampler was lowered to approximately one foot below the water surface and the check valve was engaged to allow it to fill; the sampler was then brought to the surface and the water was removed through a valve to fill laboratory-cleaned, hydrochloric-acid-preserved, 40-milliliter (mL) sample vials (for VOCs); a separate container was used to collect samples for 1,4-dioxane analysis. The discrete-interval sampler was cleaned after each use by rinsing with potable water; all equipment was cleaned after each sample had been collected. No decontamination fluids other than potable water were used, so it was not necessary to collect and dispose of rinse water generated during this sampling event.

Samples were analyzed for VOCs at a fixed-base laboratory via Method 8260B. 1,4-Dioxane was analyzed using Method 8270D. No duplicates were collected during this investigation. All samples were shipped in a single container, so only one trip blank was needed to ensure quality assurance/quality control. Water-quality parameters, including temperature, pH (a measure of hydrogen-ion content indicating relative acidity or alkalinity), specific conductance (SC), salinity, turbidity, dissolved oxygen (DO), color, and oxidation-reduction potential (ORP), were measured at all surface water sampling locations at the time of sampling. The depth of water at each sampling location was also recorded.

Tidal stages were recorded on June 18, 2013 before sampling started, using the MRC Cow Pen Creek direct-read staff gauge. The staff gauge read 3.8 feet at 8:20 a.m. Tide data for the North Point station south of Middle River, Maryland show high tide at 2:44 a.m., low tide at 9:35 a.m., and high tide at 2:30 p.m. Surface water samples were collected at low tide between 8:35 a.m. and 9:52 a.m., at the end of the falling limb of the tidal cycle and the beginning of its rising limb (Maryland Department of Natural Resources, 2013). All information was documented on surface water sample forms (see Appendix A) and in the master site logbook.

Surface water sampling locations (horizontal locational coordinates) were surveyed using a handheld global positioning system receiver and recorded in the field logbook. Sampling locations were recorded in degrees, minutes, and seconds using geographical latitude and longitude coordinates, and have an accuracy of approximately 15 feet. Coordinates were converted to the Maryland State Plane North American Datum 1983 (feet) for use in the MRC geographical information system (GIS).

3.1.2 Documentation

A master site logbook was maintained as an overall record of field activities. Sample documentation includes completed chain of custody (COC) forms and matrix-specific sampling log sheets. COC forms are standardized to summarize and document pertinent sample information, such as sample identification and type, matrix, date and time of collection, preservation, requested analysis, and the times and dates of custody transfers. Sample custody procedures document sample acquisition and integrity. COC forms are in Appendix A.

3.1.3 Sample Nomenclature and Handling

Surface water samples were identified with a unique sample-identification tag. Surface water samples were labeled with an “SW” prefix followed by the sample number, followed by an “A” (designating a sample collected 10 feet from the shoreline) or a “B” (designating a sample collected 50 feet from the shoreline), followed by a six-digit sampling date. For example, a surface water sample collected on June 18, 2013 from transect MRC-SW6 at the 10-foot (“A”) location was labeled MRC-SW6A-061813. The trip blank was labeled with a “TB” prefix followed by the blank’s six-digit submittal date (e.g., TB-061813).

Sample handling includes field-related considerations concerning the selection of sample containers, preservatives, allowable holding times, and analyses requested. Proper custody procedures were followed throughout all phases of sample collection and handling. COC protocols used throughout sample handling assure the evidentiary integrity of sample containers.

Sample containers were released under signature from the laboratory and accepted under signature by the sampler(s) or individual responsible for maintaining custody until the sample containers were transferred to the sampler(s). Transport containers returned to the laboratory were

sealed with strapping tape and a tamper-proof custody seal. The custody seal includes the signature of the individual initially releasing the transport container, along with the date and time.

3.1.4 Equipment Decontamination

Both dedicated and disposable equipment (e.g., gloves, rope) were used for surface water sampling to minimize decontamination. The stainless-steel discrete-interval sampler (i.e., a "bacon bomb" sampler) was rinsed with creek water before and after each use.

3.1.5 Waste Management

No investigation-derived waste (IDW) was generated during this surface water sampling. General waste (i.e., gloves, rope, etc.) was disposed of in the proper waste disposal containers at the facility. The discrete-interval sampler was cleaned with potable water while suspended over the water body; therefore, no IDW was generated during surface water sampling.

3.2 DATA MANAGEMENT

Laboratory data-handling procedures meet the requirements of the laboratory subcontract. All analytical and field data are maintained in project files. These files include copies of the COC forms, sampling log forms, sampling location maps, and documentation of laboratory quality assurance.

3.2.1 Data Tracking and Control

A cradle-to-grave sample-tracking system was used from the beginning to the end of the sampling event. This system allows for early detection of errors made in the field so adjustments can be made while the field team is still mobilized. Before field mobilization, the field operations leader coordinated and initiated sample tracking. Sample jar labels were handwritten in the field and reviewed to ensure that they were accurate and adhered to work plan requirements.

The project manager (PM) coordinated with the analytical laboratory to ensure that they were aware of the number and types of samples and analyses being submitted. On each day that samples were collected in the field, the field operations leader forwarded that day's COC forms to the PM (or designee) and the laboratory. The PM or designee confirmed that the COC forms provided the information required by the work plan. After all requested analyses had been completed, the laboratory submitted an electronic deliverable for every sample delivery group.

When all electronic deliverables had been received from the laboratory, the PM or designee ensured that the laboratory had performed all requested analyses.

3.2.2 Sample Information

Data from field measurements were recorded using appropriate log sheets and summarized in tabular form. Raw instrument-data from the laboratory was also tabulated. The field operations leader verified field data daily; laboratory data were verified by the group supervisor and then by the laboratory's quality control/documentation department.

3.2.3 Project Data Compilation

The analytical laboratory generated a portable document format (PDF) file of the analytical data packages, as well as electronic database deliverables. The electronic data were checked against the PDF file from the laboratory and updated as required by data qualifier flags applied during data validation. All data, such as units of measure and chemical nomenclature, are consistent with the project database.

3.2.4 Geographical Information System

Data management systems consist of a relational database and GIS used to manage environmental information pertaining to the MRC. The relational database stores chemical, geological, hydrogeologic, and other environmental data collected during environmental investigations; the GIS is created from the relational database and contains subsets of the larger data pool. The GIS allows posting of environmental data onto base maps to represent the information graphically. Compiled sampling, chemical, and positional data were incorporated into the GIS.

3.3 DATA REVIEW

Data from the laboratory were entered into a sample database and evaluated against risk-based criteria. Data validation, consisting of data completeness, holding time, calibrations, laboratory contamination, and detection limits, was completed concurrent with the data evaluation. The review was based on USEPA Region 3's *Modifications to the National Functional Guidelines for Data Review* (USEPA, 1993 and 1994) and the specifics of the analytical method used. Data from this sampling event consist of surface water sample chemical results. The COC is in Appendix A and the data validation report is in Appendix B (on compact disc). Appendix C

contains tables of all 2013 MRC surface water sample analytical data, and includes validation qualifiers, non-detects, and analytical detection limits.

Validation of these MRC data concluded that they are acceptable for their intended uses (i.e., risk screening and risk assessment), except for data qualified as unreliable (*R* or UR flags). The data qualifiers (i.e., flags) applied to the chemical results during data validation are listed below:

J The analyte is considered present in the sample, but the value is estimated and may not meet highest accuracy or precision standards. In this program, samples were qualified with "*J*" because quantitation was above the method detection limit but below the laboratory reporting limit.

NJ The analyte was tentatively identified. This qualifier indicates presumptive evidence of a compound. Special methods may be required to confirm its presence or absence in future sampling efforts.

R The result is qualitatively or quantitatively unreliable.

U Not detected; the analyte was not detected at the reported value.

UR The non-detect result is qualitatively or quantitatively unreliable.

UJ The analyte was not detected, but the quantitation or detection limit may be inaccurate or imprecise.

The first two flags appear on the chemical-results tables in Section 4, and all flags appear in Appendices B and C. Tertiary butyl-alcohol and vinyl acetate are the only chemicals with (non-detected) results flagged with the "UR" data qualifier. Results for one tentatively identified compound, trimethyl-silanol, are flagged with an "*R*" data qualifier.

Table 3-1

Chemical Analyses for Surface Water Samples—
Dark Head Cove and Cow Pen Creek, June 2013
Lockheed Martin, Middle River Complex, Middle River, Maryland

Sampling location	Sample number	Distance from shore (feet)	Analytical parameters	Sampling month	Number of samples
Dark Head Cove					
Outfall 5	SW5A1 SW5A2 SW5B	10[(1)] 10[(1)] 50	Volatile organic compounds (VOCs), field parameters	June	1 1 1
Outfall 6 and near the eastern trichloroethene (TCE) plume	SW6A SW6B	10 50	VOCs, field parameters	June	1 1
Outfall 7	SW7A SW7B	10 50	VOCs, field parameters	June	1 1
Outfall 8 and near eastern TCE plume	SW8A SW8B	10 50	VOCs, field parameters	June	1 1
Outfall 9	SW9A SW9B	10 50	VOCs, field parameters	June	1 1
Cow Pen Creek					
Near the western TCE plume	SW1A SW2A	Upstream Downstream (both centerline)	VOCs, 1,4-dioxane, field parameters	June	1 1

[(1)]Two near-shore samples (10-feet out) were collected at Outfall 5 only. One near-shore sample was collected at each of the other Dark Head Cove outfalls (6–9).

FIGURE 3-1

2013 SURFACE WATER SAMPLING LOCATIONS

LEGEND

- 2013 SURFACE WATER SAMPLE LOCATION
- STORMWATER OUTFALL LOCATION
- EXTENT OF TCE IN GROUNDWATER GREATER THAN 5 UG/L - 2012
- INFERRED

TCE CONTOURS FROM TETRA TECH (2012A).

UG/L MICROGRAMS PER LITER

TCE TRICHLOROETHENE

Lockheed Martin Middle River Complex
Middle River, Maryland

0 100 200 300 400 Feet

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Section 4
Results

Validated surface-water chemical data were used to generate a statistical summary table (Table 4-1) and a detection table (Table 4-2) listing positive detections of chemical analytes in the surface water samples collected in 2013. Tables 4-1 and 4-2 are based on the full data listing in Appendix C (Table C-1). Table 4-2 compares surface-water sampling results to several applicable screening criteria, including:

- United States Environmental Protection Agency (USEPA) Region 3 Biological Technical Advisory Group (BTAG) freshwater screening benchmarks (USEPA, 2006)
- USEPA national recommended water quality criteria (NRWQC) for acute and chronic aquatic organism exposures, and NRWQC for human health aquatic organism consumption (USEPA, 2009)
- State of Maryland ambient water quality criteria (AWQC) for acute and chronic aquatic-organism-exposures, and AWQC for human health aquatic-organism-consumption (*Code of Maryland Regulations*, 2013)
- Site-specific screening levels for swimming (developed by Lockheed Martin Corporation [Lockheed Martin]) for current assessments of volatile organic compounds (VOCs) at Frog Mortar Creek near Martin State Airport (Tetra Tech, Inc., [Tetra Tech], 2012c)

As shown in Table 4-1, seven VOCs were detected in surface water. Trichloroethene (TCE) (the primary VOC detected in the Middle River Complex [MRC] groundwater plumes) was detected in 12 of 13 samples (92%). TCE was detected in all Dark Head Cove samples and in one sample collected in Cow Pen Creek. *cis*-1,2-Dichloroethene (*cis*-1,2-DCE) (a daughter-product of TCE also associated with the groundwater plumes) was detected in three of 13 samples (23%). Vinyl chloride, another daughter-product, was not detected in any sample.

Acetone was detected in 11 samples, for a detection frequency of 85%. Acetone is commonly used at analytical laboratories, and its detection during sample analysis is frequently attributed to laboratory blank contamination; however, acetone was not detected in laboratory-blank samples in this data set. Other VOCs detected (carbon disulfide, 2-butanone, chloroform, and styrene)

were encountered in one to three samples, for a detection frequency of 8–23%. 1,4-Dioxane was not detected in the two samples from Cow Pen Creek.

All contaminant concentrations are low and less than screening criteria. Nine TCE results are "*J*" qualified, because the concentrations are above the method detection limit but below the laboratory reporting limit. All *cis*-1,2-DCE detections are "*J*" qualified. Similarly, all but two of the acetone concentrations are "*J*" qualified. All other detected VOCs are "*J*" qualified.

Figure 4-1 shows the distribution of TCE in the Dark Head Cove and Cow Pen Creek samples. Detected TCE concentrations range from 0.33*J* micrograms per liter (µg/L) in the northern portion of Cow Pen Creek (MRC-SW1A) to 1.9 µg/L in the southern portion of Dark Head Cove (MRC-SW5A2). The highest TCE concentrations (1.1–1.9 µg/L) were detected near Outfall 5 (locations MRC-SW5A2, MRC-SW5B, and MRC-SW5A1), southwest of the area where the eastern TCE plume discharges to Dark Head Cove. TCE concentrations are lower (0.46*J*–0.81*J* µg/L) adjacent to the eastern TCE plume discharge area at transects 6 and 8 (samples MRC-SW6A, MRC-SW6B, MRC-SW8A, and MRC-SW8B).

Similar TCE concentrations (0.35*J*–0.7*J* µg/L) were detected at transects 7 and 9, northeast of the eastern TCE plume discharge area (samples MRC-SW7A, MRC-SW7B, MRC-SW9A, and MRC-SW9B). The lowest concentration of TCE (0.33*J* µg/L) was detected at MRC-SW1A, which is in Cow Pen Creek at the western TCE-plume discharge point. TCE was not detected in MRC-SW2A, which is also in Cow Pen Creek. As shown in Figure 4-1, TCE concentrations vary little with distance from shore; shoreline samples ("A" samples collected 10 feet from the shoreline) and samples collected approximately 50 feet from the shoreline ("B" samples) are similar within any transect.

Figure 4-2 shows the distribution of *cis*-1,2-DCE in surface water samples. All three detected *cis*-1,2-DCE concentrations (0.17*J*–0.35*J* µg/L) are associated with Outfall 5 (sampling locations MRC-SW5A1, MRC-SW5A2, MRC-SW5B), and are southwest of the eastern TCE plume. *cis*-1,2-DCE was not detected at any other sampling locations.

USEPA and the State of Maryland have not established acute or chronic freshwater criteria for TCE, *cis*-1,2-DCE, or acetone. However, USEPA and Maryland have established a "human health for consumption of organisms" criterion for TCE (300 µg/L, when adjusted for a risk level

of 1×10^{-5}). The BTAG ecological screening levels for TCE and acetone are 21 and 1,500 µg/L, respectively. Maximum detected concentrations of TCE (1.9 µg/L) and acetone (9.3 µg/L) in this investigation are at least one order of magnitude (i.e., a power of 10) lower than the lowest screening levels set by environmental regulations. The maximum TCE concentration is five times less than (i.e., one-fifth of) its site-specific swimming screening-criterion (10 µg/L).

Detected concentrations of *cis*-1,2-DCE (0.17*J*–0.35*J* µg/L) are well below the only available criterion for it: the site-specific swimming screening level (300 µg/L). Concentrations of other detected VOCs (carbon disulfide, 2-butanone, chloroform, and styrene) range from 0.13*J*–1.7*J* µg/L; these detections do not exceed any available screening criteria. 1,4-Dioxane was not detected in the two samples from Cow Pen Creek.

Table 4-3 shows the VOCs detected near outfalls in Cow Pen Creek and Dark Head Cove from 2005–2013. Carbon disulfide is the only detected analyte exceeding a screening criterion, and only in four samples collected in 2005. TCE and *cis*-1,2-DCE were not detected in the 2005 samples; however, the reporting limits for those samples were higher than was the case for the 2012–2013 samples. Carbon disulfide was not detected in 2012, and was detected less frequently in 2013 than in 2005. All 2013 concentrations of carbon disulfide are less than the screening criteria. The 2013 results are generally consistent with those of 2012. However, samples with the highest 2012 TCE concentrations were collected near Outfalls 6 and 8 (i.e., the eastern TCE plume discharge area), whereas the highest TCE concentrations in 2013 samples were collected near Outfall 5. Furthermore, cis-1,2-DCE and acetone were detected in several of the 2013 Dark Head Cove samples, but were not detected in any of the 2012 Dark Head Cove samples.

Table 4-4 presents the water-quality parameters measured in the field for each surface water sample. Data were collected for color, pH, specific conductivity (SC), temperature, turbidity, dissolved oxygen (DO), salinity, and oxidation-reduction potential (ORP). The color of the sampled surface water was uniformly greenish-brown. The pH varied from 7.19–8.04, with an average pH of 7.74. Specific conductivity ranged from 0.119–0.370 milliSiemens per centimeter (mS/cm), with an average value of 0.332 mS/cm. The water temperature averaged 25.35 degrees Celsius (ºC). Turbidity varied between 5.5–15.2 nephelometric turbidity units (NTUs), with an average value of 7.90 NTUs. DO ranged from 4.35–9.71 milligrams per liter (mg/L), with an

average of 6.36 mg/L. Salinity varied from 0.6 to 1.9%, with an average of 1.71%. ORP ranged from 143 to 188 millivolts (mv), with an average value of 170.3 mv.

The pH values measured during this event are consistent with natural surface water in this region. SC is closely associated with salinity, and samples with lower salinity had an expected lower SC, and vice versa. Water temperature was lower in Cow Pen Creek samples, which also had lower salinity and SC as compared to samples from Dark Head Cove. These results may be due to runoff into the creek, or restricted water flow into or out of the creek.

Turbidity was consistent in most samples, but slightly higher in Cow Pen Creek, possibly due to the shallow depths of that creek. As expected, DO concentrations are higher in colder water samples. All DO levels are very high, indicating a healthy estuarine environment. ORP values are all positive, which is consistent with an oxygen-rich environment. All parameters, except for DO (which is unusually high) are typical of a tidally controlled estuarine environment.

TABLE 4-1

STATISTICAL SUMMARY OF ANALYTES DETECTED IN SURFACE WATER SAMPLES - DARK HEAD COVE AND COW PEN CREEK, JUNE 2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Chemical	Frequency of detection		Minimum non-detect concentration	Maximum non-detect concentration	Minimum detected concentration		Maximum detected concentration		Sample location(s) with maximum detected concentration[1]	Mean of all samples[2]	Mean of positive detects[3]	Standard deviation
	Number	Percent										
VOLATILE ORGANIC COMPOUNDS (UG/L)												
Trichloroethene	12/13	92	0.17	0.17	0.33	J	1.9		MRC-SW5A2-061813	0.74	0.80	0.50
Acetone	11/13	85	1.1	1.1	1.5	J	9.3		MRC-SW1A-061813	2.82	3.23	2.51
Carbon disulfide	3/13	23	0.13	0.13	0.13	J	0.4	J	MRC-SW2A-061813	0.10	0.23	0.09
cis-1,2-Dichloroethene	3/13	23	0.17	0.17	0.17	J	0.35	J	MRC-SW5B-061813	0.13	0.26	0.09
2-Butanone	2/13	15	0.57	0.57	0.8	J	1.7	J	MRC-SW1A-061813	0.43	1.25	0.41
Chloroform	1/13	8	0.16	0.16	0.18	J	0.18	J	MRC-SW1A-061813	0.09	0.18	0.03
Styrene	1/13	8	0.11	0.11	0.25	J	0.25	J	MRC-SW7B-061813	0.07	0.25	0.05

Footnotes:
1 - All surface water samples were collected on June 18, 2013.
2 - One-half the sample quantitation limit was used as proxy for non-detects.
3 - One-half the detection limit was used for B qualified data.
J - estimated positive result (below reporting limit)
MRC - Middle River Complex
SW - surface water
UG/L - micrograms per liter

Associated Samples

MRC-SW1A-061813	MRC-SW6A-061813	MRC-SW8B-061813
MRC-SW2A-061813	MRC-SW6B-061813	MRC-SW9A-061813
MRC-SW5A1-061813	MRC-SW7A-061813	MRC-SW9B-061813
MRC-SW5A2-061813	MRC-SW7B-061813	
MRC-SW5B-061813	MRC-SW8A-061813	

TABLE 4-2

VOLATILE ORGANIC COMPOUNDS DETECTED IN SURFACE WATER SAMPLES - DARK HEAD COVE AND COW PEN CREEK, JUNE 2013 LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

SAMPLE ID	National Recommended an Ambient Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,3]	Swimming Screening Levels[4]	MRC-SW1A-061813	MRC-SW2A-061813	MRC-SW5A1-061813	MRC-SW5A2-061813	MRC-SW5B-061813	MRC-SW6A-061813	MRC-SW6B-061813	MRC-SW7A-061813	MRC-SW7B-061813	MRC-SW8A-061813	MRC-SW8B-061813	MRC-SW9A-061813	MRC-SW9B-061813
SAMPLE DATE						20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618
LOCATION	Freshwater					MRC-SW1A	MRC-SW2A	MRC-SW5A1	MRC-SW5A2	MRC-SW5B	MRC-SW6A	MRC-SW6B	MRC-SW7A	MRC-SW7B	MRC-SW8A	MRC-SW8B	MRC-SW9A	MRC-SW9B
	Acute	Chronic																
VOLATILE ORGANIC COMPOUNDS (UG/L)																		
2-Butanone	NA	NA	14000	NA	NA	1.7 J	0.8 J	--	--	--	--	--	--	--	--	--	--	--
Acetone	NA	NA	1500	NA	NA	9.3	4.3 J	2 J	6.5	2.7 J	1.5 J	1.8 J	--	1.5 J	2 J	1.5 J	2.4 J	--
Carbon disulfide	NA	NA	0.92	NA	NA	--	0.4 J	--	0.16 J	--	--	0.13 J	--	--	--	--	--	--
Chloroform	NA	NA	1.8	4700[3]	NA	0.18 J	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	NA	NA	NA	NA	300	--	--	0.17 J	0.26 J	0.35 J	--	--	--	--	--	--	--	--
Styrene	NA	NA	72	NA	NA	--	--	--	--	--	--	--	--	0.25 J	--	--	--	--
Trichloroethene	NA	NA	21	300[3]	10	0.33 J	--	1.1	1.9	1.5	0.46 J	0.81 J	0.7 J	0.51 J	0.65 J	0.65 J	0.62 J	0.35 J

Samples were analyzed for volatile organic compounds (VOCs) only.

1- National Recommended Water Quality Criteria, http://water.epa.gov/scitech/swguidance/standards/current/index.cfm; and Maryland Numerical Criteria for Toxic Substances in Surface Waters, Code of Maryland Regulations (COMAR) 26.08.02.03, http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm

2- United States Environmental Protection Agency Region 3 Biological Technical Advisory Group Freshwater Screening Benchmarks.

3- For carcinogens, criterion is for incremental cancer risk of $1x10^{-5}$.

4- Site specific screening levels developed for trichloroethene, cis-1,2-dichloroethene, and vinyl chloride by Lockheed Martin for Frog Mortar Creek studies at Martin State Airport (Tetra Tech, 2012c). Value for vinyl chloride (0.7 µg/L) is not shown because this analyte was not detected.

-- - not detected at the method detection limit

J - estimated positive result (below reporting limit)

MRC - Middle River Complex

NA - not available (criterion columns) or not analyzed.

SW - surface water

UG/L - micrograms per liter.

TABLE 4-3

DETECTED VOLATILE ORGANIC COMPOUNDS AND CRITERIA EXCEEDANCES FOR SURFACE WATER SAMPLES NEAR OUTFALLS-
DARK HEAD COVE AND COW PEN CREEK, 2005-2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

		Concentration (µg/L)								
		Trichloroethene	*cis*-1,2-Dichloroethene	Vinyl chloride	Chloroform	Acetone	2-Butanone	Carbon Disulfide	Methyl tert-butyl ether	Styrene
	Screening criteria									
	Freshwater acute[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Freshwater chronic[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Human health organism only[1]	300 [3]	NA	24 [3]	4700 [3]	NA	NA	NA	NA	NA
	BTAG Screening Benchmark[2]	21	590[4]	930	1.8	1,500	14,000	0.92	11,070	72
	Swimming Screening Level[5]	10	300	0.7	NA	NA	NA	NA	NA	NA
Location	Date									
COW PEN CREEK										
Outfall 1										
SW-1	3/17/2005	--	--	--	1.2 J	5.7 J	--	--	--	--
Outfall 4/Block G Swale										
SW-3	3/17/2005	--	--	--	--	--	--	**6.8 J**	--	--
MRC-SW1A	6/13/2012	--	--	--	--	3.6 J	--	--	--	--
MRC-SW1A	6/18/2013	0.33 J	--	--	0.18 J	9.3	1.7 J	--	--	--
MRC-SW2A	6/13/2012	--	--	--	--	4.7 J	--	--	--	--
MRC-SW2A	6/18/2013	--	--	--	--	4.3 J	0.8 J	0.4 J	--	--
Mouth-Cow Pen Creek										
SW-4	3/17/2005	--	--	--	--	--	--	**5.8**	--	--
SW-17	10/20/2005	--	--	--	--	--	--	--	1 J	--
DARK HEAD COVE										
Outfall 5										
SW-5	3/17/2005	--	--	--	--	--	--	**8.6**	--	--
SW-14	10/20/2005	--	--	--	--	--	--	--	2 J	--
MRC-SW5A1	6/13/2012	0.17 J	--	--	--	--	--	--	--	--
MRC-SW5A1	6/18/2013	1.1	0.17 J	--	--	2 J	--	--	--	--
MRC-SW5A2	6/13/2012	0.19 J	--	--	--	--	--	--	--	--
MRC-SW5A2	6/18/2013	1.9	0.26 J	--	--	6.5	--	0.16 J	--	--
MRC-SW5B	6/13/2012	0.19 J	--	--	--	--	--	--	--	--
MRC-SW5B	6/18/2013	1.5	0.35 J	--	--	2.7 J	--	--	--	--

TABLE 4-3

DETECTED VOLATILE ORGANIC COMPOUNDS AND CRITERIA EXCEEDANCES FOR SURFACE WATER SAMPLES NEAR OUTFALLS-
DARK HEAD COVE AND COW PEN CREEK, 2005-2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

		Concentration (µg/L)								
		Trichloroethene	*cis*-1,2-Dichloroethene	Vinyl chloride	Chloroform	Acetone	2-Butanone	Carbon Disulfide	Methyl tert-butyl ether	Styrene
	Screening criteria									
	Freshwater acute[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Freshwater chronic[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Human health organism only[1]	300 [3]	NA	24 [3]	4700 [3]	NA	NA	NA	NA	NA
	BTAG Screening Benchmark[2]	21	590[4]	930	1.8	1,500	14,000	0.92	11,070	72
	Swimming Screening Level[5]	10	300	0.7	NA	NA	NA	NA	NA	NA
Location	Date									
Outfall 6										
SW-6[6]	3/17/2005	--	--	--	--	--	--	**4.8 J**	--	--
MRC-SW6A	6/13/2012	0.55 J	--	--	--	--	--	--	--	--
MRC-SW6A	6/18/2013	0.46 J	--	--	--	1.5 J	--	--	--	--
MRC-SW6B	6/13/2012	0.63 J	--	--	--	--	--	--	--	--
MRC-SW6B	6/18/2013	0.81 J	--	--	--	1.8 J	--	0.13 J	--	--
Outfall 7										
SW-7	3/17/2005	--	--	--	--	--	--	--	--	--
MRC-SW7A	6/13/2012	--	--	--	--	--	--	--	--	--
MRC-SW7A	6/18/2013	0.7 J	--	--	--	--	--	--	--	--
MRC-SW7B	6/13/2012	0.32 J	--	--	--	--	--	--	--	--
MRC-SW7B	6/18/2013	0.51 J	--	--	--	1.5 J	--	--	--	0.25 J
Outfall 8										
SW-11[6]	10/20/2005	--	--	--	--	--	--	--	2 J	--
MRC-SW8A	6/13/2012	0.66 J	--	--	--	--	--	--	--	--
MRC-SW8A	6/18/2013	0.65 J	--	--	--	2 J	--	--	--	--
MRC-SW8B	6/13/2012	0.82 J	--	--	--	--	--	--	--	--
MRC-SW8B	6/18/2013	0.65 J	--	--	--	1.5 J	--	--	--	--
Outfall 9										
SW-9	10/20/2005	--	--	--	--	--	--	--	1 J	--
MRC-SW9A	6/13/2012	0.33 J	--	--	--	--	--	--	--	--
MRC-SW9A	6/18/2013	0.62 J	--	--	--	2.4 J	--	--	--	--
MRC-SW9B	6/13/2012	0.34 J	--	--	--	--	--	--	--	--
MRC-SW9B	6/18/2013	0.35 J	--	--	--	--	--	--	--	--

TABLE 4-3

DETECTED VOLATILE ORGANIC COMPOUNDS AND CRITERIA EXCEEDANCES FOR SURFACE WATER SAMPLES NEAR OUTFALLS-DARK HEAD COVE AND COW PEN CREEK, 2005-2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

1 National Recommended Water Quality Criteria, http://water.epa.gov/scitech/swguidance/standards/current/index.cfm; and Maryland Numerical Criteria for Toxic Substances in Surface Waters, COMAR 26.08.02.03, http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm
2 USEPA Region 3 Biological Technical Advisory Group (BTAG) freshwater screening benchmarks (USEPA, 2006).
3 For carcinogens, criterion is adjusted for incremental cancer risk of $1x10^{-5}$.
4 The BTAG screening benchmark for 1,2-dichloroethene (590 µg/L) is used as a surrogate screenng level for cis-1,2-dichloroethene.
5 Site-specific swimming screening levels were developed for trichloroethene, *cis* -1,2-dichloroethene, and vinyl chloride only.
6 This sample was located midway between Outfall 6 and Outfall 9.
7 This sample was located midway between Outfall 5 and Outfall 8.

Black shading indicates the value exceeds one of the criteria.
-- - not detected at the method detection limit
BTAG - Biological Technical Advisory Group
COMAR - Code of Maryland Regulations
J - estimated results
NA - not analyzed or not available
UG/L - micrograms per liter
USEPA - United States Environmental Protection Agency

Table 4-4
Surface Water Quality Field Measurements—
Dark Head Cove and Cow Pen Creek, June 2013
Lockheed Martin Middle River Complex, Middle River, Maryland

Sample No.	Color	pH (S.U.)	SC (mS/cm)	Temperature (ºC)	Turbidity (NTU)	DO (mg/L)	Salinity (%)	ORP (mv)
SW1A	Gr/Br	7.19	0.119	23.32	9.19	9.71	0.6	143
SW2A	Gr/Br	7.38	0.279	25.0	15.2	4.35	1.4	163
SW5A1	Gr/Br	7.85	0.359	25.65	5.80	6.54	1.9	188
SW5A2	Gr/Br	7.79	0.358	25.70	5.50	6.99	1.9	182
SW5B	Gr/Br	7.93	0.361	25.74	6.94	6.77	1.9	171
SW6A	Gr/Br	7.76	0.344	25.56	6.93	5.48	1.8	171
SW6B	Gr/Br	8.04	0.361	25.78	7.28	7.19	1.9	167
SW7A	Gr/Br	7.68	0.359	25.02	8.05	5.43	1.7	173
SW7B	Gr/Br	7.74	0.370	25.52	8.04	6.20	1.9	173
SW8A	Gr/Br	7.67	0.340	25.50	7.13	5.45	1.8	173
SW8B	Gr/Br	7.97	0.362	25.49	7.20	6.30	1.8	167
SW9A	Gr/Br	7.79	0.349	25.58	8.15	5.60	1.8	173
SW9B	Gr/Br	7.90	0.363	25.71	7.33	6.70	1.9	170

ºC— degrees Celsius
DO— dissolved oxygen
Gr/Br— greenish brown
mg/L— milligram(s) per liter
mS/cm— milliSiemen(s) per centimeter
mv— millivolts
NTU— nephelometric turbidity unit(s)
ORP— oxidation-reduction potential
pH— hydrogen ion content (a measure of acidity or alkalinity)
SC— specific conductance
S.U.— standard unit(s)

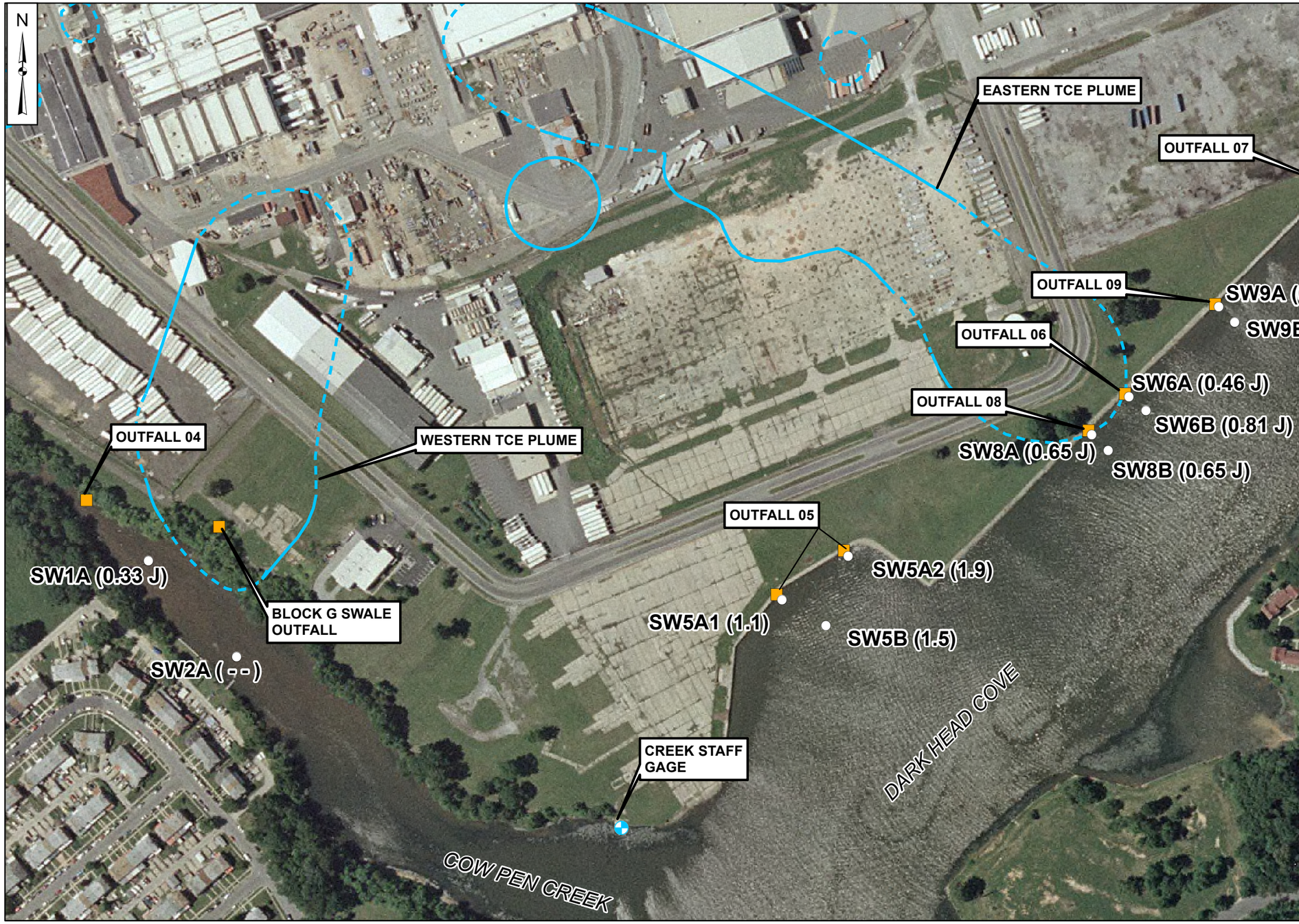

FIGURE 4-1

CONCENTRATIONS OF TRICHLOROETHENE IN SURFACE WATER SAMPLES - JUNE 2013

LEGEND

- 2013 SURFACE WATER SAMPLE LOCATION
- STORMWATER OUTFALL LOCATION
- EXTENT OF TCE IN GROUNDWATER GREATER THAN 5 UG/L - 2012
- INFERRED

(0.35) = TCE CONCENTRATION IN SURFACE WATER
J = ESTIMATED VALUE
- - = NOT DETECTED
TCE = TRICHLOROETHENE

CONCENTRATION IN MICROGRAMS PER LITER (UG/L)
TCE CONTOURS FROM TETRA TECH (2012A).

Lockheed Martin Middle River Complex
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 9/11/13

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\2013 Surface Water Samples_TCE.mxd)
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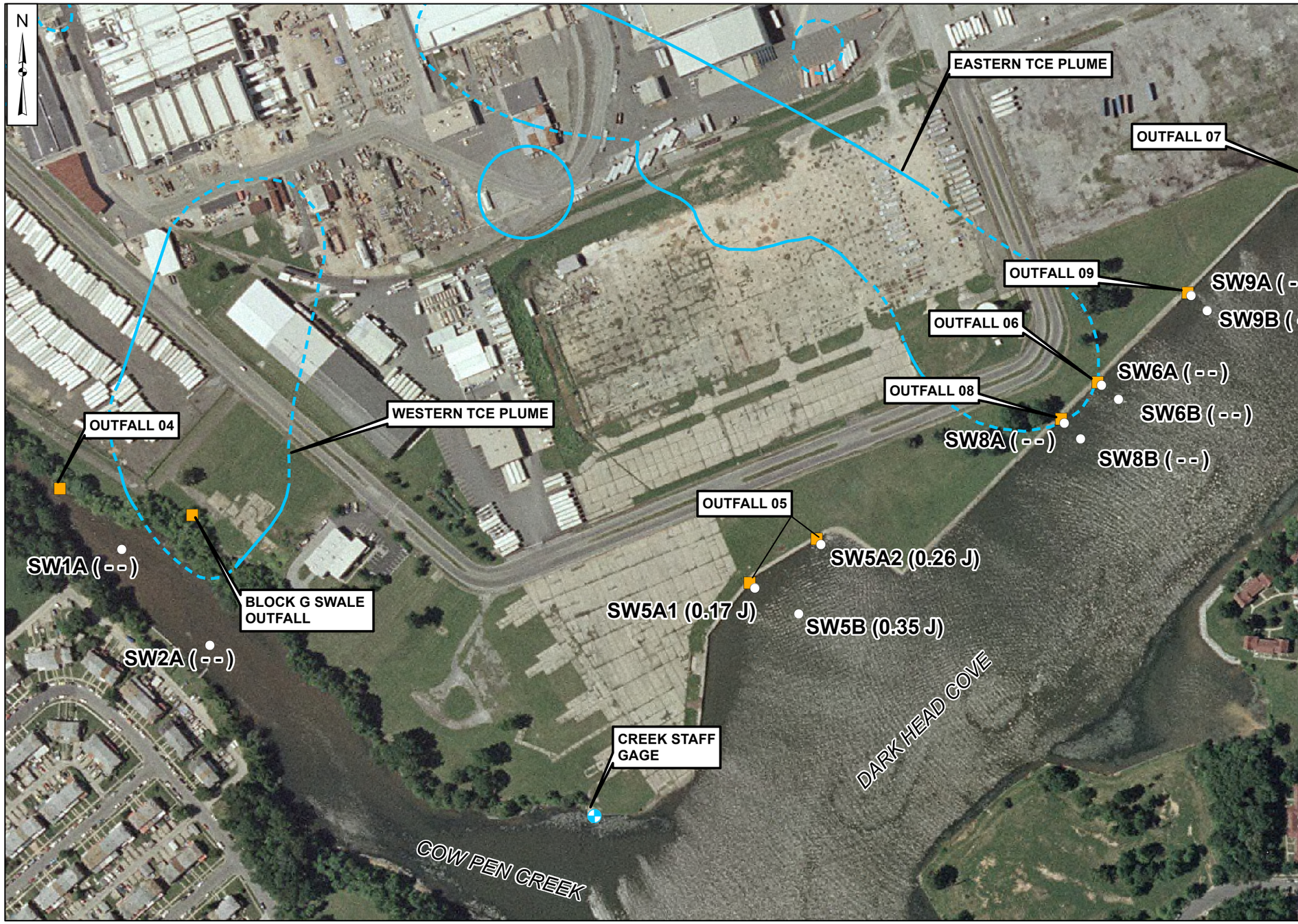

FIGURE 4-2

CONCENTRATIONS OF CIS-1,2-DICHLOROETHENE IN SURFACE WATER SAMPLES - JUNE 2013

LEGEND

- 2013 SURFACE WATER SAMPLE LOCATION
- STORMWATER OUTFALL LOCATION
- EXTENT OF TCE IN GROUNDWATER GREATER THAN 5 UG/L - 2012
- INFERRED

(0.17) = CIS-1,2-DICHLOROETHENE CONCENTRATION IN SURFACE WATER
J = ESTIMATED VALUE
- - = NOT DETECTED
TCE = TRICHLOROETHENE

CONCENTRATION IN MICROGRAMS PER LITER (UG/L)
TCE CONTOURS FROM TETRA TECH (2012A).

Lockheed Martin Middle River Complex
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 9/11/13

CREATED BY: MP

TETRA TECH

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Section 5
Summary

A summary Lockheed Martin Corporation's (Lockheed Martin's) June 2013 Dark Head Cove and Cow Pen Creek surface water investigation follows:

- Thirteen surface water samples were collected from Dark Head Cove and Cow Pen Creek on June 18, 2013 and chemically analyzed for volatile organic compounds (VOCs) and 1,4-dioxane (for the two Cow Pen Creek samples only), which may be emanating from stormwater outfalls or groundwater plumes originating at the Middle River Complex (MRC). Although polychlorinated biphenyls (PCBs) are known to be in soil and sediment, prior sampling indicates that they are not a concern for surface water; so samples for polychlorinated biphenyls were not collected this round.

- In Dark Head Cove, samples were collected along each of five transects spaced along the northern shoreline. Along four transects, one sample was collected near the shoreline ("A" sample) and a second was collected approximately 50 feet from the shoreline ("B" sample). At Outfall 5 (which has two outlets), samples were collected 10-feet offshore from each outlet, and a third sample was collected 50-feet offshore between the two outlets. Each sample was collected approximately one foot below the water surface.

- Samples were analyzed for volatile organic compounds (all samples) and 1,4-dioxane (Cow Pen Creek samples only).

- Chemical data were validated in accordance with the United States Environmental Protection Agency (USEPA) *Region III Modifications to the National Functional Guidelines for Organic Data Review* (USEPA, 1993 and 1994) and the specifics of the analytical methods used.

- Sampling results were screened against the following standards:

  - United States Environmental Protection Agency Region 3 Biological Technical Advisory Group (BTAG) ecological freshwater screening benchmarks

  - United States Environmental Protection Agency national recommended water quality criteria (NRWQC) for acute and chronic aquatic-organism exposures and for human health aquatic-organism consumption

  - State of Maryland ambient water quality criteria (AWQC) for acute and chronic aquatic-organism exposures and for human health aquatic-organism consumption

- Site-specific screening levels developed by Lockheed Martin Corporation for evaluating risks to recreational swimmers from exposure to volatile organic compounds in surface water

- The volatile organic compound trichloroethene (TCE) was detected at low concentrations in 12 of 13 surface water samples. Trichloroethene was detected at a low concentration in all Dark Head Cove samples and in one of two samples collected in Cow Pen Creek.
- None of the detected concentrations of trichloroethene (0.35*J*–1.9*J* micrograms per liter [µg/L]) exceeds the ecological surface-water screening level (21 µg/L), the human health consumption-of-aquatic-organism screening level (300 µg/L), or the site-specific swimming screening level (10 µg/L).
  - Concentrations of trichloroethene are highest at the Outfall 5 transect (MRC-SW5A1, MRC-SW5A2, and MRC-SW5B). This transect is in Dark Head Cove and is unrelated to the area where the eastern trichloroethene plume may discharge to the cove. The eastern plume has the highest trichloroethene concentrations detected in groundwater on site.
  - As with previous sampling events, trichloroethene concentrations within any transect vary little with distance from the shoreline (i.e., concentrations in samples collected immediately adjacent to the shoreline are similar to concentrations in samples collected 50 feet from the shoreline).
  - Trichloroethene concentrations in samples collected at Outfalls 6, 7, 8, and 9 are lower than in samples collected at Outfall 5.
- *cis*-1,2-Dichloroethene (*cis*-1,2-DCE) was only detected in the three samples collected adjacent to the Outfall 5 transect, at concentrations ranging from 0.17*J*–0.35*J* µg/L. These concentrations are well below the site-specific screening level for swimming (300 µg/L). Ecological surface-water and human-health screening levels for the consumption-of-organisms exposure pathway have not been established for *cis*-1,2-dichloroethene.
- The volatile organic compound acetone was detected in 11 samples, at concentrations ranging from 1.5*J*–9.3*J* µg/L. These concentrations are below the ecological surface-water screening level (1,500 µg/L). Human-health screening levels for acetone have not been established for the consumption-of-organisms exposure pathway or for the swimming scenario. Acetone is commonly used in analytical laboratories, and its detection during sample analysis is frequently attributed to laboratory-blank contamination; however, acetone was not detected in laboratory-blank samples in this data set.
- Other detected VOCs (carbon disulfide, 2-butanone, chloroform, and styrene) were encountered in one to three samples at low concentrations (0.13*J*–1.7*J* µg/L) that do not exceed any available screening criteria.
- 1,4-Dioxane was not detected in the two samples collected from Cow Pen Creek.

- The 2013 surface-water sampling results are generally consistent with those of 2012. However, samples with the highest 2012 trichloroethene concentrations were collected near Outfalls 6 and 8 (i.e., the eastern trichloroethene plume discharge area), whereas the highest trichloroethene concentrations in 2013 were collected from samples near Outfall 5. Furthermore, cis-1,2-DCE and acetone were detected in several of the 2013 Dark Head Cove samples, but neither was detected in any of the 2012 Dark Head Cove samples. No results exceed available screening criteria.

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Section 6
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APPENDIX A—SURFACE WATER SAMPLING LOG SHEETS

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Cow Pen Creek

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW1A-061813
Sample Location: MRC-SW1A
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP(mv)
Date:	06/ 18 /2013								
Time:	0835								
Depth:	0.5 meter	GR/Br	7.19	0.119	23.32	9.19	9.71	0.6	143
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓
1,4-dioxane	None	2	1-liter glass	✓

OBSERVATIONS / NOTES:

6/18/2013
8:20 staff gage
Direct read + 3.80 ft.
Bottom to water 1.55 ft
water to top 1.01 ft

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Cow Pen Creek

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW2A061813
Sample Location: MRC-SW2A
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP(mV)
Date:	06/ 18 /2013								
Time:	845								
Depth:	0.59 m	GR/Br	7.38	0.279	25.0	15.2	4.38	1.4	163
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓
1,4-dioxane	None	2	1-liter glass	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW5A1-061813
Sample Location: MRC-SW5A1
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP(mV)
Date:	06/ 18 /2013								
Time:	857								
Depth:	2.7 m	GR/Br	7.85	0.359	25.65	5.80	6.54	1.9	188
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW5A2061813
Sample Location: MRC-SW5A2
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other orp(mv)
Date:	06/ 18 /2013								
Time:	0905								
Depth:	0.85	GR/Br	7.79	0.358	25.70	5.50	6.99	1.9	182
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW5B-061813
Sample Location: MRC-SW5B
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP(mv)
Date:	06/ 18 /2013								
Time:	910								
Depth:	3.7 m	G-R/Br	7.93	0.361	25.74	6.94	6.77	1.9	171
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW6A-061813
Sample Location: MRC-SW6A
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP(mV)
Date: 06/ 18 /2013								
Time: 915								
Depth: 1.75 m								
Method: Grab-BaconBomb	BA/BR	7.76	0.344	25.56	6.93	5.48	1.8	171

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW6B061813
Sample Location: MRC-SW6B
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mV)
Date:	06/ 18 /2013								
Time:	9:24								
Depth:	3.45 M	Gr/Br	8.04	0.361	25.78	7.28	7.19	1.9	167
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW7A-061813
Sample Location: MRC-SW7A
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mv)
Date: 06/ 18 /2013								
Time: 9:47								
Depth: 2 m	Gr/Br	7.68	0.359	25.02	8.05	5.43	1.7	173
Method: Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW7B-061813
Sample Location: MRC-SW7B
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mV)
Date: 06/ 18 /2013								
Time: 0952								
Depth: 2.49 m	GR/Br	7.74	0.370	25.52	8.04	6.20	1.9	173
Method: Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW8A-061813
Sample Location: MRC-SW8A
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mv)
Date: 06/ 18 /2013								
Time: 9:27								
Depth: 2.83 m	GR/BR	7.67	0.340	25.50	7.13	5.45	1.8	173
Method: Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW3B-061813
Sample Location: MRC-SW3B
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mV)
Date:	06/ 18 /2013								
Time:	9:32								
Depth:	3.2 m	Br/Br	7.97	0.362	25.49	7.20	6.30	1.9	167
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW9A-061813
Sample Location: MRC-SW9A
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mv)
Date: 06/ 18 /2013								
Time: 9:40								
Depth: 1.8M	G-r/Br	7.79	0.349	25.58	8.15	5.60	1.8	173
Method: Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Middle River Complex-Surface Water
Project No.: 112IC04795 Middle River, Maryland
Dark Head Cove

[] Stream
[] Spring
[] Pond
[] Lake
X Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MRC-SW9B-061813
Sample Location: MRC-SW9B
Sampled By: S.Cameron/W. Pryor
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mv)
Date:	06/ 18 /2013								
Time:	9:43								
Depth:	3.1 M	Gr/Br	7.90	0.363	25.71	7.33	6.70	1.9	170
Method:	Grab-BaconBomb								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Qty.	Container Requirements	Collected
TCL VOCs	HCL pH<2	3	40 ml glass vial	✓

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

DNR.MARYLAND.GOV/FISHERIES

Tides for North Point starting with June 18, 2013.

Day		High /Low	Tide Time	Height Feet	Sunrise Sunset	Moon	Time	% Moon Visible
Tu	18	High	2:44 AM	1.7	5:39 AM	Set	1:45 AM	61
	18	Low	9:35 AM	0.8	8:35 PM	Rise	3:19 PM	
	18	High	2:30 PM	1.2				
	18	Low	8:42 PM	0.3				

For information on regulations for fishing in Maryland contact: Maryland Department of Natural Resources

WARNING: The Maryland Department of Natural Resources and Tide High and Low, Inc. does not warrant, for any use or purpose, the accuracy nor completeness of these charts. User hereby agrees to hold harmless The Maryland Department of Natural Resources and Tide High and Low, Inc., their officers, directors, employees and agents, from any and all liability for any damages whatsoever, and regardless of cause, to person or property, including third persons, arising from the use of this service. The prudent mariner will never rely on any single aid for navigation.

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APPENDIX B—DATA VALIDATION REPORT (ON CD)

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**JULY 16, 2013**
FROM:	**LEIGH A. CIOFANI**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION - VOC / SVOC (1,4-DIOXANE)**
LOCKHEED-MRC
SAMPLE DELIVERY GROUP (SDG) 240-25905-1

SAMPLES: 14 / Aqueous / VOC

MRC-SW1A-061813	MRC-SW2A-061813	MRC-SW5A1-061813
MRC-SW5A2-061813	MRC-SW5B-061813	MRC-SW6A-061813
MRC-SW6B-061813	MRC-SW7A-061813	MRC-SW7B-061813
MRC-SW8A-061813	MRC-SW8B-061813	MRC-SW9A-061813
MRC-SW9B-061813	TB-061813	

2 / Aqueous / SVOC (1,4-Dioxane)

MRC-SW1A-061813	MRC-SW2A-061813

OVERVIEW

The sample set for Lockheed-MRC, SDG 240-25905-1, consists of thirteen (13) aqueous environmental samples and one (1) trip blank (VOC fraction only). There are no field duplicate pairs included with this SDG.

All samples were analyzed for volatile organic compounds (VOC), and two (2) samples were analyzed for 1,4-dioxane.

The samples were collected by Tetra Tech on June 18, 2013 and analyzed by TestAmerica Laboratories, Inc. All analyses were conducted in accordance with SW-846 Method 8260B and 8270C analysis and reporting protocols.

The data in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method/field blank results, surrogate spike recovery, internal standard recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, compound identification, tentatively identified compounds, compound quantitation, and detection limits. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Major

VOC

- The initial calibration run on 06/25/13 on instrument A3UX11 had a mean relative response factor (RRF) result that was less than the quality control minimum of 0.05 for tertiary-butyl alcohol. Samples MRC-SW1A-061813, MRC-SW2A-061813, MRC-SW5A1-061813, MRC-SW5A2-061813, MRC-SW5B-061813, MRC-SW6A-061813, MRC-SW9B-061813, and TB-061813 were affected. Non-detected results for tertiary-butyl alcohol were rejected (UR) in the affected samples.

- The continuing calibration run on 06/26/13 at 09:17 on instrument A3UX11 had an RRF result that was

less than the quality control minimum of 0.05 for tertiary-butyl alcohol. Samples MRC-SW1A-061813, MRC-SW2A-061813, MRC-SW5A1-061813, MRC-SW5A2-061813, MRC-SW5B-061813, MRC-SW6A-061813, MRC-SW9B-061813, and TB-061813 were affected. Non-detected results for tertiary-butyl alcohol were rejected (UR) in the affected samples.

- The initial calibration run on 06/13/13 on instrument A3UX15 had mean RRF results that were less than the quality control minimum of 0.05 for tertiary-butyl alcohol and vinyl acetate. Samples MRC-SW6B-061813, MRC-SW7A-061813, MRC-SW7B-061813, MRC-SW8A-061813, MRC-SW8B-061813, and MRC-SW9A-061813 were affected. Non-detected results for tertiary-butyl alcohol and vinyl acetate were rejected (UR) in the affected samples.

- The continuing calibration run on 06/24/13 at 22:20 on instrument A3UX15 had RRF results that were less than the quality control minimum of 0.05 for tertiary-butyl alcohol and vinyl acetate. Samples MRC-SW6B-061813, MRC-SW7A-061813, MRC-SW7B-061813, MRC-SW8A-061813, MRC-SW8B-061813, and MRC-SW9A-061813 were affected. Non-detected results for tertiary-butyl alcohol and vinyl acetate were rejected (UR) in the affected samples.

- The tentatively identified compound (TIC) trimethyl-silanol was noted in several samples. The results for this TIC were rejected (R) due to column bleed.

Minor

VOC

- The continuing calibration run on 06/24/13 at 22:20 on instrument A3UX15 had percent difference results for bromomethane and chloroethane that were outside of the ±20% acceptance range and also outside of the ±50% range. Samples MRC-SW6B-061813, MRC-SW7A-061813, MRC-SW7B-061813, MRC-SW8A-061813, MRC-SW8B-061813, and MRC-SW9A-061813 were affected. Non-detected results for bromomethane and chloroethane were qualified as estimated (UJ) in the associated samples because the quality control acceptance criteria were grossly exceeded.

- The laboratory control sample (LCS) 240-91167 associated with prep batch 240-91167 had a percent recovery that exceeded the acceptance range for styrene. Samples MRC-SW6B-061813, MRC-SW7A-061813, MRC-SW7B-061813, MRC-SW8A-061813, MRC-SW8B-061813, and MRC-SW9A-061813 were affected. The positive result for styrene in sample MRC-SW7B-061813 was qualified as estimated (J) due to conflicting noncompliances. Non-detected results in the remaining associated samples were not qualified on this basis.

- 4-Ethyl-1-octyn-3-ol and unknown TICs were identified in several samples. These TICs were qualified as presumptively present (~~JN~~) NJ.

- Positive results between the method detection limit (MDL) and the reporting limit (RL) were qualified as estimated (J) due to uncertainty near the detection limit.

Notes

The VOC continuing calibration run on 06/26/13 at 09:17 on instrument A3UX11 had a percent difference result for 1,2-dibromo-3-chloropropane that was greater than the ±20% acceptance range but within ±50%. Samples MRC-SW1A-061813, MRC-SW2A-061813, MRC-SW5A1-061813, MRC-SW5A2-061813, MRC-SW5B-061813, MRC-SW6A-061813, MRC-SW9B-061813, and TB-061813 were affected. No action was necessary because results for 1,2-dibromo-3-chloropropane were non-detected in the associated samples.

The VOC continuing calibration run on 06/24/13 at 22:20 on instrument A3UX15 had percent difference results for chloromethane, trichlorofluoromethane, and 1,3-dichloropropane that were outside of the ±20% acceptance range but within ±50%. Samples MRC-SW6B-061813, MRC-SW7A-061813, MRC-SW7B-061813, MRC-SW8A-061813, MRC-SW8B-061813, and MRC-SW9A-061813 were affected. No action was necessary because results for the aforementioned analytes were non-detected in all associated samples.

The VOC continuing calibration run on 06/24/13 at 22:42 on instrument A3UX15 had percent difference results that were outside of the ±20% acceptance range but within ±50% for ethyl tert-butyl ether and tert-amyl methyl ether. Samples MRC-SW6B-061813, MRC-SW7A-061813, MRC-SW7B-061813, MRC-SW8A-061813, MRC-SW8B-061813, and MRC-SW9A-061813 were affected. No action was necessary, as results for the aforementioned analytes were non-detected in the affected samples.

The following analyte was detected in the VOC method blanks at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Methylene chloride[1]	0.351 ug/L	3.51 ug/L

1 – Maximum concentration detected in method blank associated with Prep. Batch 240-91443 affecting samples MRC-SW1A-061813, MRC-SW2A-061813, MRC-SW5A1-061813, MRC-SW5A2-061813, MRC-SW5B-061813, MRC-SW6A-061813, MRC-SW9B-061813, and TB-061813.

An action level of 10x the maximum concentration of methylene chloride was used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were considered in evaluating for blank contamination. No action was necessary because all results for methylene chloride were non-detected.

No qualifications were necessary for SVOC results.

Non-detected results were reported to the MDL.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Some non-detected VOC results were rejected due to calibration noncompliance. One detected VOC result was qualified due to LCS recovery noncompliance.

Other Factors Affecting Data Quality: Several TIC results were rejected due to column bleed, and other TIC results were qualified as presumptively present. Some positive VOC results were qualified due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the "Region III Modifications to the National Functional Guidelines for Organic Data Review" (09/94). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech

Leigh A. Ciofani
Environmental Scientist/Data Validator

Tetra Tech

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04795	NSAMPLE	MRC-SW1A-061813			MRC-SW2A-061813			MRC-SW5A1-061813			MRC-SW5A2-061813		
SDG: 240-25905-1	LAB_ID	240-25905-1			240-25905-2			240-25905-3			240-25905-4		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		1.7	J	P	0.8	J	P	0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		9.3			4.3	J	P	2	J	P	6.5		
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW5B-061813			MRC-SW6A-061813			MRC-SW6B-061813			MRC-SW7A-061813		
SDG: 240-25905-1	LAB_ID	240-25905-5			240-25905-6			240-25905-7			240-25905-8		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		2.7	J	P	1.5	J	P	1.8	J	P	1.1	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	UJ	C	0.41	UJ	C

PROJ_NO: 04795	NSAMPLE	MRC-SW7B-061813						MRC-SW8A-061813					
SDG: 240-25905-1	LAB_ID	240-25905-9						240-25905-10					
FRACTION: OV	SAMP_DATE	6/18/2013						6/18/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U					0.23	U				
1,1,1-TRICHLOROETHANE		0.22	U					0.22	U				
1,1,2,2-TETRACHLOROETHANE		0.18	U					0.18	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U					0.28	U				
1,1-DICHLOROETHANE		0.15	U					0.15	U				
1,1-DICHLOROETHENE		0.19	U					0.19	U				
1,1-DICHLOROPROPENE		0.13	U					0.13	U				
1,2,3-TRICHLOROBENZENE		0.17	U					0.17	U				
1,2,3-TRICHLOROPROPANE		0.43	U					0.43	U				
1,2,3-TRIMETHYLBENZENE		0.0059	U					0.0059	U				
1,2,4-TRICHLOROBENZENE		0.15	U					0.15	U				
1,2,4-TRIMETHYLBENZENE		0.12	U					0.12	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U					0.67	U				
1,2-DIBROMOETHANE		0.24	U					0.24	U				
1,2-DICHLOROBENZENE		0.13	U					0.13	U				
1,2-DICHLOROETHANE		0.22	U					0.22	U				
1,2-DICHLOROPROPANE		0.18	U					0.18	U				
1,3-DICHLOROBENZENE		0.14	U					0.14	U				
1,3-DICHLOROPROPANE		0.16	U					0.16	U				
1,4-DICHLOROBENZENE		0.13	U					0.13	U				
2,2-DICHLOROPROPANE		0.13	U					0.13	U				
2-BUTANONE		0.57	U					0.57	U				
2-CHLOROETHYL VINYL ETHER		0.99	U					0.99	U				
2-CHLOROTOLUENE		0.11	U					0.11	U				
2-HEXANONE		0.41	U					0.41	U				
4-CHLOROTOLUENE		0.18	U					0.18	U				
4-ISOPROPYLTOLUENE		0.12	U					0.12	U				
4-METHYL-2-PENTANONE		0.32	U					0.32	U				
ACETONE		1.5	J	P				2	J	P			
BENZENE		0.13	U					0.13	U				
BROMOBENZENE		0.13	U					0.13	U				
BROMOCHLOROMETHANE		0.29	U					0.29	U				
BROMODICHLOROMETHANE		0.15	U					0.15	U				
BROMOFORM		0.64	U					0.64	U				
BROMOMETHANE		0.41	UJ	C				0.41	UJ	C			

PROJ_NO: 04795	NSAMPLE	MRC-SW8B-061813			MRC-SW9A-061813						MRC-SW9A-061813A		
SDG: 240-25905-1	LAB_ID	240-25905-11			240-25905-12						240-25905-12		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013						6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U							
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U							
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U							
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U							
1,1-DICHLOROETHANE		0.15	U		0.15	U							
1,1-DICHLOROETHENE		0.19	U		0.19	U							
1,1-DICHLOROPROPENE		0.13	U		0.13	U							
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U							
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U							
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U							
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U							
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U							
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U							
1,2-DIBROMOETHANE		0.24	U		0.24	U							
1,2-DICHLOROBENZENE		0.13	U		0.13	U							
1,2-DICHLOROETHANE		0.22	U		0.22	U							
1,2-DICHLOROPROPANE		0.18	U		0.18	U							
1,3-DICHLOROBENZENE		0.14	U		0.14	U							
1,3-DICHLOROPROPANE		0.16	U		0.16	U							
1,4-DICHLOROBENZENE		0.13	U		0.13	U							
2,2-DICHLOROPROPANE		0.13	U		0.13	U							
2-BUTANONE		0.57	U		0.57	U							
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U							
2-CHLOROTOLUENE		0.11	U		0.11	U							
2-HEXANONE		0.41	U		0.41	U							
4-CHLOROTOLUENE		0.18	U		0.18	U							
4-ISOPROPYLTOLUENE		0.12	U		0.12	U							
4-METHYL-2-PENTANONE		0.32	U		0.32	U							
ACETONE		1.5	J	P	2.4	J	P						
BENZENE		0.13	U		0.13	U							
BROMOBENZENE		0.13	U		0.13	U							
BROMOCHLOROMETHANE		0.29	U		0.29	U							
BROMODICHLOROMETHANE		0.15	U		0.15	U							
BROMOFORM		0.64	U		0.64	U							
BROMOMETHANE		0.41	UJ	C	0.41	UJ	C						

PROJ_NO: 04795	NSAMPLE	MRC-SW9B-061813			TB-061813		
SDG: 240-25905-1	LAB_ID	240-25905-13			240-25905-14		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U	
ACETONE		1.1	U		1.1	U	
BENZENE		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW1A-061813			MRC-SW2A-061813			MRC-SW5A1-061813			MRC-SW5A2-061813		
SDG: 240-25905-1	LAB_ID	240-25905-1			240-25905-2			240-25905-3			240-25905-4		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U		0.4	J	P	0.13	U		0.16	J	P
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.18	J	P	0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U		0.17	U		0.17	J	P	0.26	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.28	U		0.28	U		0.28	U		0.28	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.33	J	P	0.17	U		1.1			1.9		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW5B-061813			MRC-SW6A-061813			MRC-SW6B-061813			MRC-SW7A-061813		
SDG: 240-25905-1	LAB_ID	240-25905-5			240-25905-6			240-25905-7			240-25905-8		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U		0.13	U		0.13	J	P	0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	UJ	C	0.29	UJ	C
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.35	J	P	0.17	U		0.17	U		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.28	U		0.28	U		0.28	U		0.28	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		1.5			0.46	J	P	0.81	J	P	0.7	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW7B-061813						MRC-SW8A-061813					
SDG: 240-25905-1	LAB_ID	240-25905-9						240-25905-10					
FRACTION: OV	SAMP_DATE	6/18/2013						6/18/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U					0.13	U				
CARBON TETRACHLORIDE		0.13	U					0.13	U				
CHLOROBENZENE		0.15	U					0.15	U				
CHLORODIBROMOMETHANE		0.18	U					0.18	U				
CHLOROETHANE		0.29	UJ	C				0.29	UJ	C			
CHLOROFORM		0.16	U					0.16	U				
CHLOROMETHANE		0.3	U					0.3	U				
CIS-1,2-DICHLOROETHENE		0.17	U					0.17	U				
CIS-1,3-DICHLOROPROPENE		0.14	U					0.14	U				
DIBROMOMETHANE		0.28	U					0.28	U				
DICHLORODIFLUOROMETHANE		0.31	U					0.31	U				
DIISOPROPYL ETHER		1.5	U					1.5	U				
ETHYL TERT-BUTYL ETHER		0.11	U					0.11	U				
ETHYLBENZENE		0.17	U					0.17	U				
HEXACHLOROBUTADIENE		0.3	U					0.3	U				
ISOPROPYLBENZENE		0.13	U					0.13	U				
M+P-XYLENES		0.24	U					0.24	U				
METHYL TERT-BUTYL ETHER		0.17	U					0.17	U				
METHYLENE CHLORIDE		0.33	U					0.33	U				
NAPHTHALENE		0.24	U					0.24	U				
N-BUTYLBENZENE		0.12	U					0.12	U				
N-PROPYLBENZENE		0.14	U					0.14	U				
O-XYLENE		0.14	U					0.14	U				
SEC-BUTYLBENZENE		0.13	U					0.13	U				
STYRENE		0.25	J	EP				0.11	U				
TERT-AMYL METHYL ETHER		0.067	U					0.067	U				
TERT-BUTYLBENZENE		0.13	U					0.13	U				
TERTIARY-BUTYL ALCOHOL		3.9	UR	C				3.9	UR	C			
TETRACHLOROETHENE		0.29	U					0.29	U				
TOLUENE		0.13	U					0.13	U				
TOTAL XYLENES		0.28	U					0.28	U				
TRANS-1,2-DICHLOROETHENE		0.19	U					0.19	U				
TRANS-1,3-DICHLOROPROPENE		0.19	U					0.19	U				
TRICHLOROETHENE		0.51	J	P				0.65	J	P			
TRICHLOROFLUOROMETHANE		0.21	U					0.21	U				

PROJ_NO: 04795	NSAMPLE	MRC-SW8B-061813			MRC-SW9A-061813						MRC-SW9A-061813A		
SDG: 240-25905-1	LAB_ID	240-25905-11			240-25905-12						240-25905-12		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013						6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U		0.13	U							
CARBON TETRACHLORIDE		0.13	U		0.13	U							
CHLOROBENZENE		0.15	U		0.15	U							
CHLORODIBROMOMETHANE		0.18	U		0.18	U							
CHLOROETHANE		0.29	UJ	C	0.29	UJ	C						
CHLOROFORM		0.16	U		0.16	U							
CHLOROMETHANE		0.3	U		0.3	U							
CIS-1,2-DICHLOROETHENE		0.17	U		0.17	U							
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U							
DIBROMOMETHANE		0.28	U		0.28	U							
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U							
DIISOPROPYL ETHER		1.5	U		1.5	U							
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U							
ETHYLBENZENE		0.17	U		0.17	U							
HEXACHLOROBUTADIENE		0.3	U		0.3	U							
ISOPROPYLBENZENE		0.13	U		0.13	U							
M+P-XYLENES		0.24	U		0.24	U							
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U							
METHYLENE CHLORIDE		0.33	U		0.33	U							
NAPHTHALENE		0.24	U		0.24	U							
N-BUTYLBENZENE		0.12	U		0.12	U							
N-PROPYLBENZENE		0.14	U		0.14	U							
O-XYLENE		0.14	U		0.14	U							
SEC-BUTYLBENZENE		0.13	U		0.13	U							
STYRENE		0.11	U		0.11	U							
TERT-AMYL METHYL ETHER		0.067	U		0.067	U							
TERT-BUTYLBENZENE		0.13	U		0.13	U							
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C						
TETRACHLOROETHENE		0.29	U		0.29	U							
TOLUENE		0.13	U		0.13	U							
TOTAL XYLENES		0.28	U		0.28	U							
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U							
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U							
TRICHLOROETHENE		0.65	J	P	0.62	J	P						
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U							

PROJ_NO: 04795	NSAMPLE	MRC-SW9B-061813			TB-061813		
SDG: 240-25905-1	LAB_ID	240-25905-13			240-25905-14		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U	
TOTAL XYLENES		0.28	U		0.28	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U	
TRICHLOROETHENE		0.35	J	P	0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW1A-061813			MRC-SW2A-061813			MRC-SW5A1-061813			MRC-SW5A2-061813		
SDG: 240-25905-1	LAB_ID	240-25905-1			240-25905-2			240-25905-3			240-25905-4		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN													
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW5B-061813			MRC-SW6A-061813			MRC-SW6B-061813			MRC-SW7A-061813		
SDG: 240-25905-1	LAB_ID	240-25905-5			240-25905-6			240-25905-7			240-25905-8		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN													
VINYL ACETATE		0.19	U		0.19	U		0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW7B-061813						MRC-SW8A-061813					
SDG: 240-25905-1	LAB_ID	240-25905-9						240-25905-10					
FRACTION: OV	SAMP_DATE	6/18/2013						6/18/2013					
MEDIA: WATER	QC_TYPE	NM			TIC			NM			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN					2	JN	Z1				1.9	JN	Z1
VINYL ACETATE		0.19	UR	C				0.19	UR	C			
VINYL CHLORIDE		0.22	U					0.22	U				

PROJ_NO: 04795	NSAMPLE	MRC-SW8B-061813			MRC-SW9A-061813						MRC-SW9A-061813A		
SDG: 240-25905-1	LAB_ID	240-25905-11			240-25905-12						240-25905-12		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013						6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN								2.5	JN	Z1	1.8	JN	Z1
VINYL ACETATE		0.19	UR	C	0.19	UR	C						
VINYL CHLORIDE		0.22	U		0.22	U							

PROJ_NO: 04795	NSAMPLE	MRC-SW9B-061813			TB-061813		
SDG: 240-25905-1	LAB_ID	240-25905-13			240-25905-14		
FRACTION: OV	SAMP_DATE	6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
UNKNOWN							
VINYL ACETATE		0.19	U		0.19	U	
VINYL CHLORIDE		0.22	U		0.22	U	

PROJ_NO: 04795	NSAMPLE	MRC-SW1A-061813			MRC-SW2A-061813			MRC-SW5A1-061813			MRC-SW5A2-061813		
SDG: 240-25905-1	LAB_ID	240-25905-1			240-25905-2			240-25905-3			240-25905-4		
FRACTION: TICOV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-OCTYN-3-OL, 4-ETHYL-													
SILANOL, TRIMETHYL-		5	R	Z2	5.3	R	Z2	5.7	R	Z2	6.7	R	Z2

PROJ_NO: 04795	NSAMPLE	MRC-SW5B-061813			MRC-SW6A-061813			MRC-SW9B-061813			TB-061813		
SDG: 240-25905-1	LAB_ID	240-25905-5			240-25905-6			240-25905-13			240-25905-14		
FRACTION: TICOV	SAMP_DATE	6/18/2013			6/18/2013			6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	TIC			TIC			TIC			TIC		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-OCTYN-3-OL, 4-ETHYL-								1.2	JN	Z1			
SILANOL, TRIMETHYL-		5.1	R	Z2	3.8	R	Z2	2.6	R	Z2	3.8	R	Z2

PROJ_NO: 04795	NSAMPLE	MRC-SW1A-061813			MRC-SW2A-061813		
SDG: 240-25905-1	LAB_ID	240-25905-1			240-25905-2		
FRACTION: OS	SAMP_DATE	6/18/2013			6/18/2013		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.48	U		0.47	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813 | Lab Sample ID: 240-25905-1

Matrix: Water | Lab File ID: UXJ2284.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:35

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 12:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	9.3		5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	1.7	J	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	0.18	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813 | Lab Sample ID: 240-25905-1

Matrix: Water | Lab File ID: UXJ2284.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:35

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 12:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.33	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813 | Lab Sample ID: 240-25905-1

Matrix: Water | Lab File ID: UXJ2284.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:35

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 12:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
2037-26-5	Toluene-d8 (Surr)	91		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813 Lab Sample ID: 240-25905-1

Matrix: Water Lab File ID: UXJ2284.D

Analysis Method: 8260B Date Collected: 06/18/2013 08:35

Sample wt/vol: 5(mL) Date Analyzed: 06/26/2013 12:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 91443 Units: ug/L

Number TICs Found: 1 TIC Result Total: 5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	5.0	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW2A-061813 | Lab Sample ID: 240-25905-2

Matrix: Water | Lab File ID: UXJ2285.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:45

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 13:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	4.3	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	0.80	J	5.0	0.57
75-15-0	Carbon disulfide	0.40	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW2A-061813 | Lab Sample ID: 240-25905-2

Matrix: Water | Lab File ID: UXJ2285.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:45

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 13:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW2A-061813 | Lab Sample ID: 240-25905-2

Matrix: Water | Lab File ID: UXJ2285.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:45

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 13:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
2037-26-5	Toluene-d8 (Surr)	93		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID: MRC-SW2A-061813
Lab Sample ID: 240-25905-2
Matrix: Water
Lab File ID: UXJ2285.D
Analysis Method: 8260B
Date Collected: 06/18/2013 08:45
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 13:14
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L
Number TICs Found: 1
TIC Result Total: 5.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	5.3	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5A1-061813 | Lab Sample ID: 240-25905-3

Matrix: Water | Lab File ID: UXJ2286.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:57

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 13:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.0	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	0.17	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5A1-061813 | Lab Sample ID: 240-25905-3

Matrix: Water | Lab File ID: UXJ2286.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:57

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 13:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.1		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5A1-061813 | Lab Sample ID: 240-25905-3

Matrix: Water | Lab File ID: UXJ2286.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:57

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 13:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		63-129
2037-26-5	Toluene-d8 (Surr)	90		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID: MRC-SW5A1-061813
Lab Sample ID: 240-25905-3
Matrix: Water
Lab File ID: UXJ2286.D
Analysis Method: 8260B
Date Collected: 06/18/2013 08:57
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 13:37
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L
Number TICs Found: 1
TIC Result Total: 5.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	5.7	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5A2-061813 | Lab Sample ID: 240-25905-4

Matrix: Water | Lab File ID: UXJ2287.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.5		5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	0.16	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	0.26	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5A2-061813 | Lab Sample ID: 240-25905-4

Matrix: Water | Lab File ID: UXJ2287.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.9		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5A2-061813 | Lab Sample ID: 240-25905-4

Matrix: Water | Lab File ID: UXJ2287.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
2037-26-5	Toluene-d8 (Surr)	93		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5A2-061813 Lab Sample ID: 240-25905-4

Matrix: Water Lab File ID: UXJ2287.D

Analysis Method: 8260B Date Collected: 06/18/2013 09:05

Sample wt/vol: 5(mL) Date Analyzed: 06/26/2013 14:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 91443 Units: ug/L

Number TICs Found: 1 TIC Result Total: 6.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	6.7	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5B-061813 | Lab Sample ID: 240-25905-5

Matrix: Water | Lab File ID: UXJ2288.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:10

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.7	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	0.35	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5B-061813 | Lab Sample ID: 240-25905-5

Matrix: Water | Lab File ID: UXJ2288.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:10

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.5		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5B-061813 | Lab Sample ID: 240-25905-5

Matrix: Water | Lab File ID: UXJ2288.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:10

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		66-117
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
2037-26-5	Toluene-d8 (Surr)	88		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW5B-061813 | Lab Sample ID: 240-25905-5

Matrix: Water | Lab File ID: UXJ2288.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:10

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 5.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	5.1	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW6A-061813 | Lab Sample ID: 240-25905-6

Matrix: Water | Lab File ID: UXJ2289.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	1.5	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW6A-061813 | Lab Sample ID: 240-25905-6

Matrix: Water | Lab File ID: UXJ2289.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.46	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW6A-061813 | Lab Sample ID: 240-25905-6

Matrix: Water | Lab File ID: UXJ2289.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
2037-26-5	Toluene-d8 (Surr)	94		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW6A-061813 | Lab Sample ID: 240-25905-6

Matrix: Water | Lab File ID: UXJ2289.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:15

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 14:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 3.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	3.8	T J N

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW6B-061813 | Lab Sample ID: 240-25905-7

Matrix: Water | Lab File ID: UXC2652.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:24

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 05:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	1.8	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	0.13	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW6B-061813 | Lab Sample ID: 240-25905-7

Matrix: Water | Lab File ID: UXC2652.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:24

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 05:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U *	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.81	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID: MRC-SW6B-061813
Lab Sample ID: 240-25905-7
Matrix: Water
Lab File ID: UXC2652.D
Analysis Method: 8260B
Date Collected: 06/18/2013 09:24
Sample wt/vol: 5(mL)
Date Analyzed: 06/25/2013 05:23
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91167
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
2037-26-5	Toluene-d8 (Surr)	97		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW6B-061813 Lab Sample ID: 240-25905-7

Matrix: Water Lab File ID: UXC2652.D

Analysis Method: 8260B Date Collected: 06/18/2013 09:24

Sample wt/vol: 5(mL) Date Analyzed: 06/25/2013 05:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 91167 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7A-061813 | Lab Sample ID: 240-25905-8

Matrix: Water | Lab File ID: UXC2653.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:47

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 05:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7A-061813 | Lab Sample ID: 240-25905-8

Matrix: Water | Lab File ID: UXC2653.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:47

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 05:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U *	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.70	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7A-061813 | Lab Sample ID: 240-25905-8

Matrix: Water | Lab File ID: UXC2653.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:47

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 05:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
2037-26-5	Toluene-d8 (Surr)	97		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7A-061813 | Lab Sample ID: 240-25905-8

Matrix: Water | Lab File ID: UXC2653.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:47

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 05:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7B-061813 | Lab Sample ID: 240-25905-9

Matrix: Water | Lab File ID: UXC2654.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:52

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	1.5	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7B-061813 | Lab Sample ID: 240-25905-9

Matrix: Water | Lab File ID: UXC2654.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:52

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	0.25	J *	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.51	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7B-061813 | Lab Sample ID: 240-25905-9

Matrix: Water | Lab File ID: UXC2654.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:52

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
1868-53-7	Dibromofluoromethane (Surr)	97		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-129
2037-26-5	Toluene-d8 (Surr)	99		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW7B-061813 | Lab Sample ID: 240-25905-9

Matrix: Water | Lab File ID: UXC2654.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:52

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	1.82	2.0	T J

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8A-061813 | Lab Sample ID: 240-25905-10

Matrix: Water | Lab File ID: UXC2655.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:27

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.0	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8A-061813 | Lab Sample ID: 240-25905-10

Matrix: Water | Lab File ID: UXC2655.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:27

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U *	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.65	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8A-061813 | Lab Sample ID: 240-25905-10

Matrix: Water | Lab File ID: UXC2655.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:27

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
2037-26-5	Toluene-d8 (Surr)	97		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8A-061813 Lab Sample ID: 240-25905-10

Matrix: Water Lab File ID: UXC2655.D

Analysis Method: 8260B Date Collected: 06/18/2013 09:27

Sample wt/vol: 5(mL) Date Analyzed: 06/25/2013 06:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 91167 Units: ug/L

Number TICs Found: 1 TIC Result Total: 1.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	1.77	1.9	T J

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8B-061813 | Lab Sample ID: 240-25905-11

Matrix: Water | Lab File ID: UXC2656.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:32

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	1.5	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8B-061813 | Lab Sample ID: 240-25905-11

Matrix: Water | Lab File ID: UXC2656.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:32

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U *	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.65	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8B-061813 | Lab Sample ID: 240-25905-11

Matrix: Water | Lab File ID: UXC2656.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:32

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 06:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	99		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		63-129
2037-26-5	Toluene-d8 (Surr)	100		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW8B-061813 Lab Sample ID: 240-25905-11

Matrix: Water Lab File ID: UXC2656.D

Analysis Method: 8260B Date Collected: 06/18/2013 09:32

Sample wt/vol: 5(mL) Date Analyzed: 06/25/2013 06:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 91167 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID: MRC-SW9A-061813
Lab Sample ID: 240-25905-12
Matrix: Water
Lab File ID: UXC2657.D
Analysis Method: 8260B
Date Collected: 06/18/2013 09:40
Sample wt/vol: 5(mL)
Date Analyzed: 06/25/2013 07:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91167
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	2.4	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW9A-061813 | Lab Sample ID: 240-25905-12

Matrix: Water | Lab File ID: UXC2657.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 07:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U *	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.62	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW9A-061813 | Lab Sample ID: 240-25905-12

Matrix: Water | Lab File ID: UXC2657.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 07:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
1868-53-7	Dibromofluoromethane (Surr)	100		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		63-129
2037-26-5	Toluene-d8 (Surr)	97		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW9A-061813 | Lab Sample ID: 240-25905-12

Matrix: Water | Lab File ID: UXC2657.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 06/25/2013 07:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 4.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	1.62	1.8	T J
	Unknown	1.76	2.5	T J

FORM I-TIC 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW9B-061813 | Lab Sample ID: 240-25905-13

Matrix: Water | Lab File ID: UXJ2290.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 15:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW9B-061813 | Lab Sample ID: 240-25905-13

Matrix: Water | Lab File ID: UXJ2290.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 15:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.35	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW9B-061813 | Lab Sample ID: 240-25905-13

Matrix: Water | Lab File ID: UXJ2290.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 15:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
2037-26-5	Toluene-d8 (Surr)	92		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW9B-061813 | Lab Sample ID: 240-25905-13

Matrix: Water | Lab File ID: UXJ2290.D

Analysis Method: 8260B | Date Collected: 06/18/2013 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 15:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 3.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	2.6	T J N
5877-42-9	1-Octyn-3-ol, 4-ethyl-	10.58	1.2	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: TB-061813 | Lab Sample ID: 240-25905-14

Matrix: Water | Lab File ID: UXJ2291.D

Analysis Method: 8260B | Date Collected: 06/18/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 15:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: TB-061813 | Lab Sample ID: 240-25905-14

Matrix: Water | Lab File ID: UXJ2291.D

Analysis Method: 8260B | Date Collected: 06/18/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 15:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID: TB-061813
Lab Sample ID: 240-25905-14
Matrix: Water
Lab File ID: UXJ2291.D
Analysis Method: 8260B
Date Collected: 06/18/2013 00:00
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 15:36
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
2037-26-5	Toluene-d8 (Surr)	90		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID: TB-061813
Lab Sample ID: 240-25905-14
Matrix: Water
Lab File ID: UXJ2291.D
Analysis Method: 8260B
Date Collected: 06/18/2013 00:00
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 15:36
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L
Number TICs Found: 1
TIC Result Total: 3.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	3.8	T J N

FORM I-TIC 8260B

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813 | Lab Sample ID: 240-25905-1

Matrix: Water | Lab File ID: 30625024.D

Analysis Method: 8270D | Date Collected: 06/18/2013 08:35

Extract. Method: 3520C | Date Extracted: 06/20/2013 08:23

Sample wt/vol: 1030(mL) | Date Analyzed: 06/25/2013 18:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 91258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.97	U	0.97	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	65		20-110
367-12-4	2-Fluorophenol (Surr)	66		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	96		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	75		21-110
4165-62-2	Phenol-d5 (Surr)	69		21-110
1718-51-0	Terphenyl-d14 (Surr)	61		24-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW2A-061813 | Lab Sample ID: 240-25905-2

Matrix: Water | Lab File ID: 30625025.D

Analysis Method: 8270D | Date Collected: 06/18/2013 08:45

Extract. Method: 3520C | Date Extracted: 06/20/2013 08:23

Sample wt/vol: 1050(mL) | Date Analyzed: 06/25/2013 18:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 91258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	66		20-110
367-12-4	2-Fluorophenol (Surr)	72		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	95		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	78		21-110
4165-62-2	Phenol-d5 (Surr)	74		21-110
1718-51-0	Terphenyl-d14 (Surr)	55		24-110

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-25905-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	MRC-SW2A-061813	240-25905-2	NM	06/18/2013	06/20/2013	06/25/2013	2	5	7
OS	UG/L	MRC-SW1A-061813	240-25905-1	NM	06/18/2013	06/20/2013	06/25/2013	2	5	7
OV	UG/L	MRC-SW6B-061813	240-25905-7	NM	06/18/2013	06/25/2013	06/25/2013	7	0	7
OV	UG/L	MRC-SW1A-061813	240-25905-1	NM	06/18/2013	06/26/2013	06/26/2013	8	0	8
OV	UG/L	MRC-SW2A-061813	240-25905-2	NM	06/18/2013	06/26/2013	06/26/2013	8	0	8
OV	UG/L	MRC-SW5A1-061813	240-25905-3	NM	06/18/2013	06/26/2013	06/26/2013	8	0	8
OV	UG/L	MRC-SW5A2-061813	240-25905-4	NM	06/18/2013	06/26/2013	06/26/2013	8	0	8
OV	UG/L	MRC-SW6A-061813	240-25905-6	NM	06/18/2013	06/26/2013	06/26/2013	8	0	8
OV	UG/L	TB-061813	240-25905-14	TB	06/18/2013	06/26/2013	06/26/2013	8	0	8
OV	UG/L	MRC-SW7A-061813	240-25905-8	NM	06/18/2013	06/25/2013	06/25/2013	7	0	7
OV	UG/L	MRC-SW7B-061813	240-25905-9	NM	06/18/2013	06/25/2013	06/25/2013	7	0	7
OV	UG/L	MRC-SW8A-061813	240-25905-10	NM	06/18/2013	06/25/2013	06/25/2013	7	0	7
OV	UG/L	MRC-SW8B-061813	240-25905-11	NM	06/18/2013	06/25/2013	06/25/2013	7	0	7
OV	UG/L	MRC-SW9A-061813	240-25905-12	NM	06/18/2013	06/25/2013	06/25/2013	7	0	7
OV	UG/L	MRC-SW9B-061813	240-25905-13	NM	06/18/2013	06/26/2013	06/26/2013	8	0	8

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MRC-SW5B-061813	240-25905-5	NM	06/18/2013	06/26/2013	06/26/2013	8	0	8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-25905-1

Job Description: MRC Surface Water Sampling

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Approved for release.
John McFadden
Project Manager I
6/30/2013 12:26 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
06/30/2013

cc: Samantha Brenner
Vanessa Good
Mike Martin
Tobrena Sedlmyer
Final Data Tracking

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MRC Surface Water Sampling

Report Number: 240-25905-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT
The samples were received on 06/19/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.8 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MRC-SW1A-061813 (240-25905-1), MRC-SW2A-061813 (240-25905-2), MRC-SW5A1-061813 (240-25905-3), MRC-SW5A2-061813 (240-25905-4), MRC-SW5B-061813 (240-25905-5), MRC-SW6A-061813 (240-25905-6), MRC-SW6B-061813 (240-25905-7), MRC-SW7A-061813 (240-25905-8), MRC-SW7B-061813 (240-25905-9), MRC-SW8A-061813 (240-25905-10), MRC-SW8B-061813 (240-25905-11), MRC-SW9A-061813 (240-25905-12), MRC-SW9B-061813 (240-25905-13) and TB-061813 (240-25905-14) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/25/2013 and 06/26/2013.

Methylene Chloride was detected in method blank MB 240-91443/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for batch 91167 recovered outside control limits for the following analytes: Styrene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MRC-SW1A-061813 (240-25905-1) and MRC-SW2A-061813 (240-25905-2) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 06/20/2013 and analyzed on 06/25/2013.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

The continuing calibration verification (CCV) for analytical batch 91258 recovered outside control limits for 2,4,6-Tribromophenol surrogate. However, since only BN compounds were requested no corrective action was necessary.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 90620.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

Shipping and Receiving Documents

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 6/18/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 2 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112-64795-07
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MRC Surface Water Sampling	☐ 1 week			
Site: Middle River Complex	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	1,4-Dioxane	Sample Specific Notes:
MRC-SW1A-061813	6/18/2013	0835	SW	Water	5	x	x	x	
MRC-SW2A-061813	6/18/2013	0845	SW	Water	5	x	x	x	
MRC-SW5A1-061813	6/18/2013	0857	SW	Water	3	x	x		
MRC-SW5A2-061813	6/18/2013	0905	SW	Water	3	x	x		
MRC-SW5B-061813	6/18/2013	0910	SW	Water	3	x	x		
MRC-SW6A-061813	6/18/2013	0915	SW	Water	3	x	x		
MRC-SW6B-061813	6/18/2013	0924	SW	Water	3	x	x		
MRC-SW7A-061813	6/18/2013	0947	SW	Water	3	x	x		
MRC-SW7B-061813	6/18/2013	0952	SW	Water	3	x	x		
MRC-SW8A-061813	6/18/2013	0927	SW	Water	3	x	x		
MRC-SW8B-061813	6/18/2013	0932	SW	Water	3	x	x		
MRC-SW9A-061813	6/18/2013	0940	SW	Water	3	x	x		

240-25905 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tera Tech	6/18/13-1100	[signature]	TestAmerica	6/18/13/1600
[signature]	TestAmerica	6/18/13/1800	[signature]	TA	6-19-13 920

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 6/18/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	2 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 1212C04795-07
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MRC Surface Water Sampling	☐ 1 week			
Site: Middle River Complex	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	1,4-Dioxane	Sample Specific Notes:
MRC-SW9B-061813	6/18/2013	0943	SW	Water	3		x		
TB-061813	--	--	SW	Water	2		x		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For _____ Months*

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tera Tech	6/18/13-1100	Paul Gaylord	TestAmerica	6/18/13 1600
[signature]	TestAmerica	6/18/13 1810	[signature]	TA	6/19/13 920

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TestAmerica Canton Sample Receipt Form/Narrative **Login # : 25905**
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 6-19-13 Opened on 6-19-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # Another Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. 1.8 °C	Corrected Cooler Temp. 1.8 °C	~~See Multiple Cooler Form~~
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 3 Yes No
   - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MRC-SW1A-061813	240-25905-1	90	84	91	96
MRC-SW2A-061813	240-25905-2	95	90	93	94
MRC-SW5A1-061813	240-25905-3	89	85	90	91
MRC-SW5A2-061813	240-25905-4	89	88	93	96
MRC-SW5B-061813	240-25905-5	93	87	88	94
MRC-SW6A-061813	240-25905-6	95	90	94	98
MRC-SW6B-061813	240-25905-7	95	96	97	82
MRC-SW7A-061813	240-25905-8	92	96	97	82
MRC-SW7B-061813	240-25905-9	97	100	99	85
MRC-SW8A-061813	240-25905-10	92	94	97	82
MRC-SW8B-061813	240-25905-11	99	101	100	88
MRC-SW9A-061813	240-25905-12	100	102	97	86
MRC-SW9B-061813	240-25905-13	91	87	92	96
TB-061813	240-25905-14	91	86	90	90
	MB 240-91167/5	93	98	96	90
	MB 240-91443/5	91	90	96	95
	LCS 240-91167/4	101	98	102	104
	LCS 240-91443/4	92	89	96	100
	240-25728-B-9 MS	98	97	100	101
	240-25728-B-11 MS	99	92	99	100
	240-25728-B-9 MSD	100	98	103	100
	240-25728-B-11 MSD	88	89	95	100

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC2635.D

Lab ID: LCS 240-91167/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	20.0	18.5	92	43-136	
Benzene	10.0	10.9	109	83-112	
Bromobenzene	10.0	10.3	103	76-115	
Bromochloromethane	10.0	10.5	105	77-120	
Bromodichloromethane	10.0	11.7	117	72-121	
Bromoform	10.0	8.90	89	40-131	
Bromomethane	10.0	14.2	142	11-185	
2-Butanone	20.0	20.6	103	60-126	
Carbon disulfide	10.0	11.2	112	62-142	
Carbon tetrachloride	10.0	9.81	98	66-128	
Chlorobenzene	10.0	10.6	106	85-110	
Chloroethane	10.0	14.4	144	25-153	
2-Chloroethyl vinyl ether	10.0	9.57 J	96	52-131	
Chloroform	10.0	10.7	107	79-117	
Chloromethane	10.0	10.5	105	44-126	
2-Chlorotoluene	10.0	10.2	102	76-116	
4-Chlorotoluene	10.0	10.2	102	77-115	
cis-1,2-Dichloroethene	10.0	10.5	105	80-113	
cis-1,3-Dichloropropene	10.0	9.37	94	61-115	
Dibromochloromethane	10.0	9.52	95	64-119	
1,2-Dibromo-3-Chloropropane	10.0	10.5	105	42-136	
1,2-Dibromoethane	10.0	11.0	110	79-113	
Dibromomethane	10.0	11.2	112	81-120	
1,2-Dichlorobenzene	10.0	10.6	106	81-110	
1,3-Dichlorobenzene	10.0	10.4	104	80-110	
1,4-Dichlorobenzene	10.0	10.2	102	82-110	
Dichlorodifluoromethane	10.0	7.45	74	19-129	
1,1-Dichloroethane	10.0	10.7	107	82-115	
1,2-Dichloroethane	10.0	10.6	106	71-127	
1,1-Dichloroethene	10.0	9.56	96	78-131	
1,2-Dichloropropane	10.0	11.3	113	81-115	
1,3-Dichloropropane	10.0	11.2	112	79-116	
2,2-Dichloropropane	10.0	9.47	95	50-129	
1,1-Dichloropropene	10.0	9.98	100	83-114	
Diisopropyl ether	10.0	8.64	86	77-118	
Ethylbenzene	10.0	10.8	108	83-112	
Hexachlorobutadiene	10.0	10.0	100	36-134	
2-Hexanone	20.0	21.3	106	55-133	
Isopropylbenzene	10.0	10.6	106	75-114	
Methylene Chloride	10.0	10.8	108	66-131	
4-Methyl-2-pentanone	20.0	21.6	108	63-128	
Methyl tert-butyl ether	10.0	7.67	77	52-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC2635.D

Lab ID: LCS 240-91167/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
m-Xylene & p-Xylene	20.0	22.7	113	83-113	
Naphthalene	10.0	10.1	101	32-141	
n-Butylbenzene	10.0	10.2	102	66-125	
n-Propylbenzene	10.0	10.1	101	74-121	
o-Xylene	10.0	10.8	108	83-113	
p-Isopropyltoluene	10.0	10.4	104	74-120	
sec-Butylbenzene	10.0	10.1	101	70-117	
Styrene	10.0	11.5	115	79-114	*
tert-Butyl alcohol	200	192	96	70-130	
tert-Butylbenzene	10.0	10.0	100	71-115	
1,1,1,2-Tetrachloroethane	10.0	11.4	114	72-116	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	68-118	
Tetrachloroethene	10.0	10.5	105	79-114	
Toluene	10.0	10.7	107	84-111	
trans-1,2-Dichloroethene	10.0	9.85	98	83-117	
trans-1,3-Dichloropropene	10.0	9.13	91	58-117	
1,2,3-Trichlorobenzene	10.0	10.7	107	54-126	
1,2,4-Trichlorobenzene	10.0	9.82	98	48-135	
1,1,1-Trichloroethane	10.0	11.0	110	74-118	
Trichloroethene	10.0	11.1	111	76-117	
Trichlorofluoromethane	10.0	12.7	127	49-157	
1,2,3-Trichloropropane	10.0	10.2	102	73-129	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.5	105	74-151	
1,2,3-Trimethylbenzene	10.0	9.93	99	70-130	
1,2,4-Trimethylbenzene	10.0	10.4	104	76-120	
Vinyl acetate	10.0	9.21	92	46-161	
Vinyl chloride	10.0	9.00	90	53-127	
Xylenes, Total	30.0	33.5	112	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2277.D

Lab ID: LCS 240-91443/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	20.0	15.6	78	43-136	
Benzene	10.0	9.75	98	83-112	
Bromobenzene	10.0	9.45	94	76-115	
Bromochloromethane	10.0	9.70	97	77-120	
Bromodichloromethane	10.0	10.0	100	72-121	
Bromoform	10.0	9.41	94	40-131	
Bromomethane	10.0	8.43	84	11-185	
2-Butanone	20.0	18.5	92	60-126	
Carbon disulfide	10.0	9.95	100	62-142	
Carbon tetrachloride	10.0	10.0	100	66-128	
Chlorobenzene	10.0	9.57	96	85-110	
Chloroethane	10.0	9.34	93	25-153	
2-Chloroethyl vinyl ether	10.0	9.52 J	95	52-131	
Chloroform	10.0	9.66	97	79-117	
Chloromethane	10.0	8.93	89	44-126	
2-Chlorotoluene	10.0	9.85	98	76-116	
4-Chlorotoluene	10.0	9.74	97	77-115	
cis-1,2-Dichloroethene	10.0	9.76	98	80-113	
cis-1,3-Dichloropropene	10.0	9.39	94	61-115	
Dibromochloromethane	10.0	9.71	97	64-119	
1,2-Dibromo-3-Chloropropane	10.0	7.96	80	42-136	
1,2-Dibromoethane	10.0	9.50	95	79-113	
Dibromomethane	10.0	9.64	96	81-120	
1,2-Dichlorobenzene	10.0	9.39	94	81-110	
1,3-Dichlorobenzene	10.0	9.53	95	80-110	
1,4-Dichlorobenzene	10.0	9.49	95	82-110	
Dichlorodifluoromethane	10.0	8.41	84	19-129	
1,1-Dichloroethane	10.0	10.2	102	82-115	
1,2-Dichloroethane	10.0	10.0	100	71-127	
1,1-Dichloroethene	10.0	9.41	94	78-131	
1,2-Dichloropropane	10.0	9.94	99	81-115	
1,3-Dichloropropane	10.0	9.42	94	79-116	
2,2-Dichloropropane	10.0	9.58	96	50-129	
1,1-Dichloropropene	10.0	9.62	96	83-114	
Diisopropyl ether	10.0	10.4	104	77-118	
Ethylbenzene	10.0	9.81	98	83-112	
Hexachlorobutadiene	10.0	8.71	87	36-134	
2-Hexanone	20.0	17.7	89	55-133	
Isopropylbenzene	10.0	9.51	95	75-114	
Methylene Chloride	10.0	9.81	98	66-131	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
Methyl tert-butyl ether	10.0	9.63	96	52-144	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2277.D

Lab ID: LCS 240-91443/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
m-Xylene & p-Xylene	20.0	19.1	96	83-113	
Naphthalene	10.0	8.83	88	32-141	
n-Butylbenzene	10.0	9.03	90	66-125	
n-Propylbenzene	10.0	10.0	100	74-121	
o-Xylene	10.0	9.90	99	83-113	
p-Isopropyltoluene	10.0	9.87	99	74-120	
sec-Butylbenzene	10.0	9.36	94	70-117	
Styrene	10.0	9.91	99	79-114	
tert-Butyl alcohol	200	183	91	70-130	
tert-Butylbenzene	10.0	9.12	91	71-115	
1,1,1,2-Tetrachloroethane	10.0	9.70	97	72-116	
1,1,2,2-Tetrachloroethane	10.0	9.34	93	68-118	
Tetrachloroethene	10.0	9.55	96	79-114	
Toluene	10.0	9.57	96	84-111	
trans-1,2-Dichloroethene	10.0	9.15	92	83-117	
trans-1,3-Dichloropropene	10.0	9.55	95	58-117	
1,2,3-Trichlorobenzene	10.0	8.58	86	54-126	
1,2,4-Trichlorobenzene	10.0	8.86	89	48-135	
1,1,1-Trichloroethane	10.0	10.0	100	74-118	
Trichloroethene	10.0	9.86	99	76-117	
Trichlorofluoromethane	10.0	9.39	94	49-157	
1,2,3-Trichloropropane	10.0	8.75	87	73-129	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.0	110	74-151	
1,2,3-Trimethylbenzene	10.0	9.74	97	70-130	
1,2,4-Trimethylbenzene	10.0	9.86	99	76-120	
Vinyl acetate	10.0	11.0	110	46-161	
Vinyl chloride	10.0	9.43	94	53-127	
Xylenes, Total	30.0	29.0	97	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC2658.D

Lab ID: 240-25728-B-9 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloroethane	3330	330 U	5030	151	21-165	
cis-1,2-Dichloroethene	3330	330 U	3290	99	70-120	
1,1-Dichloroethane	3330	330 U	3470	104	79-116	
1,1-Dichloroethene	3330	330 U	3170	95	74-135	
Tetrachloroethene	3330	330 U	3440	103	70-117	
Trichloroethene	3330	8300	11700	101	66-120	
Vinyl chloride	3330	330 U	3160	95	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2300.D

Lab ID: 240-25728-B-11 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloroethane	3330	330 U	3070	92	21-165	
cis-1,2-Dichloroethene	3330	330 U	3240	97	70-120	
1,1-Dichloroethane	3330	330 U	3510	105	79-116	
1,1-Dichloroethene	3330	330 U	2640	79	74-135	
Tetrachloroethene	3330	330 U	3010	90	70-117	
Trichloroethene	3330	7900	10300	72	66-120	
Vinyl chloride	3330	330 U	2820	85	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC2659.D

Lab ID: 240-25728-B-9 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloroethane	3330	4830	145	4	30	21-165	
cis-1,2-Dichloroethene	3330	3460	104	5	30	70-120	
1,1-Dichloroethane	3330	3470	104	0	30	79-116	
1,1-Dichloroethene	3330	3060	92	3	30	74-135	
Tetrachloroethene	3330	3570	107	4	30	70-117	
Trichloroethene	3330	12300	119	5	30	66-120	
Vinyl chloride	3330	3110	93	2	30	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ2301.D

Lab ID: 240-25728-B-11 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloroethane	3330	3020	91	2	30	21-165	
cis-1,2-Dichloroethene	3330	3060	92	6	30	70-120	
1,1-Dichloroethane	3330	3240	97	8	30	79-116	
1,1-Dichloroethene	3330	3580	107	30	30	74-135	
Tetrachloroethene	3330	2970	89	1	30	70-117	
Trichloroethene	3330	10600	79	2	30	66-120	
Vinyl chloride	3330	3100	93	9	30	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: UXC2637.D Lab Sample ID: MB 240-91167/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 06/24/2013 23:49

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-91167/4	UXC2635.D	06/24/2013 23:04
MRC-SW6B-061813	240-25905-7	UXC2652.D	06/25/2013 05:23
MRC-SW7A-061813	240-25905-8	UXC2653.D	06/25/2013 05:45
MRC-SW7B-061813	240-25905-9	UXC2654.D	06/25/2013 06:08
MRC-SW8A-061813	240-25905-10	UXC2655.D	06/25/2013 06:30
MRC-SW8B-061813	240-25905-11	UXC2656.D	06/25/2013 06:52
MRC-SW9A-061813	240-25905-12	UXC2657.D	06/25/2013 07:15
	240-25728-B-9 MS	UXC2658.D	06/25/2013 08:15
	240-25728-B-9 MSD	UXC2659.D	06/25/2013 08:37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-91167/5

Matrix: Water | Lab File ID: UXC2637.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/24/2013 23:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-91167/5

Matrix: Water | Lab File ID: UXC2637.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/24/2013 23:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-91167/5

Matrix: Water | Lab File ID: UXC2637.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/24/2013 23:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91167 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
2037-26-5	Toluene-d8 (Surr)	96		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-91167/5

Matrix: Water Lab File ID: UXC2637.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/24/2013 23:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 91167 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: UXJ2279.D Lab Sample ID: MB 240-91443/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 06/26/2013 10:52

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-91443/4	UXJ2277.D	06/26/2013 10:04
MRC-SW1A-061813	240-25905-1	UXJ2284.D	06/26/2013 12:50
MRC-SW2A-061813	240-25905-2	UXJ2285.D	06/26/2013 13:14
MRC-SW5A1-061813	240-25905-3	UXJ2286.D	06/26/2013 13:37
MRC-SW5A2-061813	240-25905-4	UXJ2287.D	06/26/2013 14:01
MRC-SW5B-061813	240-25905-5	UXJ2288.D	06/26/2013 14:25
MRC-SW6A-061813	240-25905-6	UXJ2289.D	06/26/2013 14:48
MRC-SW9B-061813	240-25905-13	UXJ2290.D	06/26/2013 15:12
TB-061813	240-25905-14	UXJ2291.D	06/26/2013 15:36
	240-25728-B-11 MS	UXJ2300.D	06/26/2013 19:09
	240-25728-B-11 MSD	UXJ2301.D	06/26/2013 19:33

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-91443/5
Matrix: Water
Lab File ID: UXJ2279.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 10:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	5.0	U	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-91443/5

Matrix: Water | Lab File ID: UXJ2279.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 10:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	0.351	J	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-91443/5
Matrix: Water
Lab File ID: UXJ2279.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 10:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
2037-26-5	Toluene-d8 (Surr)	96		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-91443/5
Matrix: Water
Lab File ID: UXJ2279.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 10:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L
Number TICs Found: 0
TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I-TIC 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: BFB142A.D BFB Injection Date: 05/29/2013

Instrument ID: A3UX15 BFB Injection Time: 14:09

Analysis Batch No.: 87623

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.2	
75	30.0 - 60.0 % of mass 95	50.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.4	(0.4)1
174	50.0 - 120.00 % of mass 95	98.5	
175	5.0 - 9.0 % of mass 174	6.9	(7.0)1
176	95.0 - 101.0 % of mass 174	94.6	(96.0)1
177	5.0 - 9.0 % of mass 176	5.8	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD 240-87623/8	UXC1850.D	05/29/2013	16:47
	STD 240-87623/9	UXC1851.D	05/29/2013	17:10
	STD 240-87623/10	UXC1852.D	05/29/2013	17:32
	STD 240-87623/11	UXC1853.D	05/29/2013	17:55
	STD 240-87623/12	UXC1854.D	05/29/2013	18:17
	STD 240-87623/13	UXC1855.D	05/29/2013	18:40

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87623

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 16:47 Calibration End Date: 05/29/2013 18:40 Calibration ID: 15398

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-87623/13	UXC1855.D
Level 2	STD 240-87623/12	UXC1854.D
Level 3	STD 240-87623/11	UXC1853.D
Level 4	STD 240-87623/10	UXC1852.D
Level 5	STD 240-87623/9	UXC1851.D
Level 6	STD 240-87623/8	UXC1850.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.9233 0.7320	0.9119	0.7566	0.7227	0.7419	Ave		0.7981				12.0		15.0			
Ethyl ether	0.2594 0.2291	0.2727	0.2447	0.2478	0.2366	Ave		0.2484				6.3		15.0			
3-Chloro-1-propene	0.2084 0.1918	0.2025	0.1965	0.2015	0.1981	Ave		0.1998				2.8		15.0			
Diisopropyl ether	0.3037 0.3306	0.3059	0.3093	0.3088	0.3190	Ave		0.3129				3.2		15.0			
2-Chloro-1,3-butadiene	0.5815 0.5537	0.5502	0.5385	0.5530	0.5477	Ave		0.5541				2.6		15.0			
Ethyl-t-butyl ether (ETBE)	0.9513 0.9302	0.9358	0.9229	0.9383	0.9194	Ave		0.9330				1.2		15.0			
Ethyl acetate	0.1401 0.1452	0.1280	0.1321	0.1357	0.1461	Ave		0.1378				5.2		15.0			
Propionitrile	0.0366 0.0272	0.0413	0.0327	0.0310	0.0281	Lin1	0.0346	0.0274	NA						0.9960		0.9900
Methacrylonitrile	0.1041 0.1162	0.1308	0.1193	0.1164	0.1203	Ave		0.1179				7.3		15.0			
Isobutyl alcohol	0.0046 0.0054	0.0055	0.0054	0.0060	0.0058	Ave		0.0054	NA			9.1		15.0			
Tert-amyl-methyl ether (TAME)	0.8304 0.7974	0.8014	0.7968	0.8084	0.7980	Ave		0.8054				1.6		15.0			
n-Heptane	0.0800 0.0638	0.0609	0.0609	0.0655	0.0634	Ave		0.0657				11.0		15.0			
n-Butanol	0.0041 0.0043	0.0046	0.0049	0.0048	0.0050	Ave		0.0046	NA			7.2		15.0			
Methyl methacrylate	0.1024 0.1237	0.1076	0.1058	0.1075	0.1242	Ave		0.1119				8.5		15.0			
2-Nitropropane	0.0316 0.0322	0.0214	0.0256	0.0252	0.0288	Ave		0.0275	NA			15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87623

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 16:47 Calibration End Date: 05/29/2013 18:40 Calibration ID: 15398

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0720 0.0915	0.0869	0.0791	0.0902	0.0929	Ave		0.0854				9.6		15.0			
1,2,3-Trimethylbenzene	2.6809 3.2033	2.7136	2.8309	2.8779	3.0733	Ave		2.8967				7.1		15.0			
2-Methylnaphthalene	0.7177 0.9726	0.8685	0.8105	0.9138	1.0452	Ave		0.8881				13.0		15.0			
n-Butyl acetate	0.2484 0.2200	0.2372	0.2281	0.2197	0.2284	Ave		0.2303				4.8		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87623

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 16:47 Calibration End Date: 05/29/2013 18:40 Calibration ID: 15398

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-87623/13	UXC1855.D
Level 2	STD 240-87623/12	UXC1854.D
Level 3	STD 240-87623/11	UXC1853.D
Level 4	STD 240-87623/10	UXC1852.D
Level 5	STD 240-87623/9	UXC1851.D
Level 6	STD 240-87623/8	UXC1850.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	181084 6559954	355444	762610	1459873	3208026	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	50871 2053481	106272	246652	500528	1022938	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	40878 1719136	78917	198094	407001	856615	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	297780 14813424	596247	1558934	3118408	6895864	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	114050 4962452	214440	542720	1117051	2368332	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	186565 8336148	364730	930249	1895336	3975280	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	54938 2601849	99791	266241	548195	1263179	2.00 80.0	4.00	10.0	20.0	40.0
Propionitrile	FB	Lin1	14347 487084	32230	65844	125425	243271	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	20424 1041676	50996	120262	235109	520367	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	17891 972216	42765	107934	241916	502865	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	162867 7145994	312353	803148	1633044	3450377	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	15692 571432	23724	61392	132323	273931	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	FB	Ave	16204 776712	36164	98430	192882	431139	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	20082 1108719	41956	106636	217071	537019	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	12376 577884	16698	51577	101716	249191	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	56427 3456685	151043	329013	806110	1738012	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87623

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 16:47 Calibration End Date: 05/29/2013 18:40 Calibration ID: 15398

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	210248 12099635	471828	1177476	2573022	5751867	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	112572 7347659	302025	674247	1633951	3912482	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	FB	Ave	97416 3943528	184870	459852	887615	1975099	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: BFB142.D BFB Injection Date: 06/25/2013

Instrument ID: A3UX11 BFB Injection Time: 09:14

Analysis Batch No.: 91248

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.2	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.1	(0.1)1
174	50.0 - 120.00 % of mass 95	76.9	
175	5.0 - 9.0 % of mass 174	5.5	(7.1)1
176	95.0 - 101.0 % of mass 174	76.7	(99.7)1
177	5.0 - 9.0 % of mass 176	4.9	(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-91248/2	UXJ2244.D	06/25/2013	09:43
	STD8260 240-91248/3	UXJ2245.D	06/25/2013	10:07
	STD8260 240-91248/4	UXJ2246.D	06/25/2013	10:30
	STD8260 240-91248/5	UXJ2247.D	06/25/2013	10:54
	STD8260 240-91248/6	UXJ2248.D	06/25/2013	11:17
	STD8260 240-91248/7	UXJ2249.D	06/25/2013	11:41
	STD6 240-91248/8	UXJ2250.D	06/25/2013	12:04
	STD5 240-91248/9	UXJ2251.D	06/25/2013	12:28
	STD4 240-91248/10	UXJ2252.D	06/25/2013	12:51
	STD3 240-91248/11	UXJ2253.D	06/25/2013	13:15
	STD2 240-91248/12	UXJ2254.D	06/25/2013	13:39
	STD1 240-91248/13	UXJ2255.D	06/25/2013	14:03
	ICV 240-91248/14	UXJ2256.D	06/25/2013	14:26

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-91248/7	UXJ2249.D
Level 2	STD8260 240-91248/6	UXJ2248.D
Level 3	STD8260 240-91248/5	UXJ2247.D
Level 4	STD8260 240-91248/4	UXJ2246.D
Level 5	STD8260 240-91248/3	UXJ2245.D
Level 6	STD8260 240-91248/2	UXJ2244.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1908 0.1854	0.1666	0.1579	0.1404	0.1809	Ave		0.1703				11.0		15.0			
Chloromethane	0.3030 0.3195	0.3152	0.3075	0.3209	0.3277	Ave		0.3156			0.1000	2.9		15.0			
Vinyl chloride	0.2430 0.2326	0.2183	0.2210	0.2209	0.2269	Ave		0.2271				4.1		15.0			
Bromomethane	0.0372 0.0819	0.0628	0.0617	0.0649	0.0674	Lin1	-0.047	0.0772							0.9900		0.9900
Chloroethane	0.1080 0.1126	0.0843	0.0994	0.0988	0.1012	Ave		0.1007				9.6		15.0			
Trichlorofluoromethane	0.2069 0.2478	0.1255	0.1864	0.2073	0.2324	Lin1	-0.127	0.2409							0.9920		0.9900
Acrolein	0.0514 0.0509	0.0502	0.0521	0.0495	0.0546	Ave		0.0515				3.5		15.0			
Acetone	0.2579 0.1084	0.1477	0.1139	0.1126	0.1132	Lin1	0.2447	0.1040							0.9950		0.9900
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1099 0.1302	0.0988	0.1033	0.1121	0.1207	Ave		0.1125				10.0		15.0			
1,1-Dichloroethene	0.1910 0.1822	0.1769	0.1831	0.1631	0.1800	Ave		0.1794				5.2		15.0			
Iodomethane	0.2548 0.2640	0.2786	0.2496	0.2289	0.2571	Ave		0.2555				6.4		15.0			
Carbon disulfide	0.4115 0.4347	0.4189	0.4182	0.4129	0.4542	Ave		0.4251				3.9		15.0			
Acetonitrile	0.0381 0.0303	0.0349	0.0339	0.0325	0.0338	Ave		0.0339	NH			7.6		15.0			
Methyl acetate	0.3558 0.3083	0.3543	0.3270	0.3136	0.3151	Ave		0.3290				6.4		15.0			
Methylene Chloride	0.4948 0.2070	0.3597	0.2604	0.2136	0.2203	Lin1	0.2986	0.1993							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0237 0.0184	0.0202	0.0206	0.0199	0.0215	Ave		0.0207				8.6		15.0			
Acrylonitrile	0.1749 0.1411	0.1596	0.1504	0.1488	0.1444	Ave		0.1532				8.1		15.0			
Methyl tert-butyl ether	0.8589 0.7641	0.7905	0.7323	0.7709	0.7942	Ave		0.7851				5.4		15.0			
trans-1,2-Dichloroethene	0.3241 0.3102	0.3145	0.3071	0.3165	0.3187	Ave		0.3152				1.9		15.0			
Hexane	0.0662 0.0677	0.0620	0.0537	0.0630	0.0681	Ave		0.0635				8.5		15.0			
1,1-Dichloroethane	0.7085 0.6771	0.6562	0.6724	0.6608	0.6845	Ave		0.6766			0.1000	2.8		15.0			
Vinyl acetate	0.0500 0.0612	0.0610	0.0507	0.0534	0.0619	Ave		0.0564				9.9		15.0			
cis-1,2-Dichloroethene	0.3411 0.3471	0.3444	0.3443	0.3332	0.3436	Ave		0.3423				1.4		15.0			
2-Butanone	0.1991 0.1626	0.1743	0.1881	0.1745	0.1772	Ave		0.1793				7.1		15.0			
2,2-Dichloropropane	0.3125 0.2522	0.3291	0.3011	0.2926	0.3112	Ave		0.2998				8.8		15.0			
Bromochloromethane	0.1848 0.1856	0.1750	0.1761	0.1734	0.1874	Ave		0.1804				3.4		15.0			
Tetrahydrofuran	0.1965 0.1026	0.1202	0.1227	0.1100	0.1145	Lin1	0.0773	0.1036							0.9960		0.9900
Chloroform	0.5965 0.5654	0.5333	0.5339	0.5371	0.5643	Ave		0.5551				4.5		15.0			
1,1,1-Trichloroethane	0.4540 0.3939	0.4095	0.4088	0.4213	0.4421	Ave		0.4216				5.4		15.0			
Cyclohexane	0.6706 0.5684	0.6022	0.5519	0.5679	0.6120	Ave		0.5955				7.3		15.0			
1,1-Dichloropropene	0.4140 0.4254	0.4044	0.3960	0.4081	0.4250	Ave		0.4121				2.8		15.0			
Carbon tetrachloride	0.3859 0.3929	0.3790	0.3637	0.3821	0.4158	Ave		0.3866				4.5		15.0			
1,2-Dichloroethane	0.5540 0.5403	0.5270	0.5352	0.5428	0.5457	Ave		0.5408				1.7		15.0			
Benzene	1.3506 1.2761	1.2155	1.1853	1.1993	1.2683	Ave		1.2492				4.9		15.0			
Trichloroethene	0.3586 0.3908	0.3412	0.3610	0.3537	0.3810	Ave		0.3644				5.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.3903 0.4018	0.3686	0.3607	0.3712	0.3996	Ave		0.3820				4.6		15.0			
1,2-Dichloropropane	0.3707 0.3910	0.3924	0.3774	0.3762	0.3996	Ave		0.3846				2.9		15.0			
Dibromomethane	0.2257 0.1873	0.1743	0.1785	0.1811	0.1840	Ave		0.1885				10.0		15.0			
1,4-Dioxane	0.0020 0.0013	0.0016	0.0016	0.0015	0.0017	Ave		0.0016	NA			15.0		15.0			
Bromodichloromethane	0.3941 0.4364	0.4045	0.3909	0.4061	0.4377	Ave		0.4116				5.0		15.0			
2-Chloroethyl vinyl ether	0.1965 0.1956	0.1885	0.1766	0.1909	0.2021	Ave		0.1917				4.6		15.0			
cis-1,3-Dichloropropene	0.4443 0.5032	0.4370	0.4624	0.4588	0.4893	Ave		0.4658				5.5		15.0			
4-Methyl-2-pentanone	0.4271 0.3548	0.3620	0.3571	0.3630	0.3713	Ave		0.3726				7.3		15.0			
Toluene	1.8724 2.0603	1.9124	1.7853	1.8745	1.9979	Ave		1.9171				5.1		15.0			
trans-1,3-Dichloropropene	0.4855 0.6258	0.5442	0.5245	0.5494	0.6193	Ave		0.5581				9.8		15.0			
Ethyl methacrylate	0.4763 0.5093	0.4710	0.4664	0.4559	0.5081	Ave		0.4812				4.6		15.0			
1,1,2-Trichloroethane	0.3630 0.3613	0.3879	0.3468	0.3351	0.3701	Ave		0.3607				5.1		15.0			
1,3-Dichloropropane	0.6462 0.6448	0.6247	0.6100	0.5954	0.6437	Ave		0.6275				3.4		15.0			
Tetrachloroethene	0.3662 0.3772	0.3655	0.3121	0.3195	0.3512	Ave		0.3486				7.7		15.0			
2-Hexanone	0.3507 0.3167	0.3277	0.3058	0.3188	0.3331	Ave		0.3255				4.8		15.0			
Dibromochloromethane	0.3767 0.4652	0.4093	0.3919	0.4035	0.4458	Ave		0.4154				8.1		15.0			
1,2-Dibromoethane	0.3721 0.3646	0.3729	0.3413	0.3447	0.3614	Ave		0.3595				3.8		15.0			
Chlorobenzene	1.1829 1.2833	1.2661	1.1766	1.1518	1.2762	Ave		1.2228			0.3000	4.8		15.0			
1,1,1,2-Tetrachloroethane	0.4893 0.4837	0.4585	0.4420	0.4281	0.4698	Ave		0.4619				5.2		15.0			
Ethylbenzene	0.5973 0.6631	0.6023	0.5960	0.6174	0.6647	Ave		0.6235				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7370 0.8195	0.7692	0.7496	0.7538	0.8139	Ave		0.7738				4.5		15.0			
o-Xylene	0.6509 0.7401	0.7221	0.6867	0.6943	0.7502	Ave		0.7074				5.3		15.0			
Styrene	1.1401 1.2764	1.1768	1.1831	1.1973	1.2939	Ave		1.2113				5.0		15.0			
Bromoform	0.1674 0.2096	0.1757	0.1555	0.1746	0.1950	Ave		0.1796			0.1000	11.0		15.0			
Isopropylbenzene	1.6852 1.7885	1.6253	1.5862	1.6586	1.7516	Ave		1.6826				4.5		15.0			
1,1,2,2-Tetrachloroethane	1.0144 0.9340	0.9349	0.9383	0.9351	0.9659	Ave		0.9538			0.3000	3.4		15.0			
Bromobenzene	1.1850 1.2352	1.1409	1.1415	1.1349	1.1942	Ave		1.1720				3.4		15.0			
1,2,3-Trichloropropane	0.3517 0.3220	0.3531	0.3382	0.3294	0.3437	Ave		0.3397				3.6		15.0			
trans-1,4-Dichloro-2-butene	0.2466 0.3835	0.2674	0.2373	0.2943	0.3337	Qua	-0.116	0.2837	0.0026						1.0000		0.9900
n-Propylbenzene	1.1525 1.3324	1.1734	1.1964	1.2265	1.3318	Ave		1.2355				6.4		15.0			
2-Chlorotoluene	0.9535 1.1783	1.1300	1.0211	1.1514	1.1453	Ave		1.0966				8.1		15.0			
1,3,5-Trimethylbenzene	3.1152 3.6469	3.1659	3.4533	3.4189	3.6436	Ave		3.4073				6.7		15.0			
4-Chlorotoluene	1.1102 1.1889	0.9661	1.1438	1.1592	1.1954	Ave		1.1273				7.5		15.0			
tert-Butylbenzene	3.0142 3.2546	2.7598	2.8555	2.8616	3.0842	Ave		2.9717				6.1		15.0			
1,2,4-Trimethylbenzene	3.0850 3.5546	3.0110	3.3250	3.3746	3.4670	Ave		3.3029				6.5		15.0			
sec-Butylbenzene	3.3983 3.8304	3.4266	3.5789	3.7010	3.8990	Ave		3.6390				5.7		15.0			
1,3-Dichlorobenzene	1.6922 1.7747	1.7043	1.7151	1.6600	1.7322	Ave		1.7131				2.3		15.0			
p-Isopropyltoluene	2.7177 3.2687	2.7643	3.0009	2.9645	3.1843	Ave		2.9834				7.4		15.0			
1,4-Dichlorobenzene	1.7202 1.8161	1.7236	1.7809	1.7228	1.7720	Ave		1.7559				2.3		15.0			
n-Butylbenzene	2.3201 2.3143	1.9045	2.1514	2.0825	2.2920	Ave		2.1775				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4852 1.6352	1.4602	1.4949	1.5161	1.5458	Ave		1.5229				4.1		15.0			
1,2-Dibromo-3-Chloropropane	0.0361 0.1538	0.1216	0.1330	0.1373	0.1313	Linl	-0.099	0.1499							0.9950		0.9900
1,3,5-Trichlorobenzene	0.7670 0.9668	0.7996	0.8253	0.8012	0.9005	Ave		0.8434				8.9		15.0			
1,2,4-Trichlorobenzene	0.8235 0.8843	0.6113	0.7939	0.7903	0.8171	Ave		0.7867				12.0		15.0			
Hexachlorobutadiene	0.2288 0.3262	0.2760	0.3074	0.2986	0.3122	Ave		0.2916				12.0		15.0			
Naphthalene	2.2231 2.4920	2.0173	2.0966	2.2244	2.4317	Ave		2.2475				8.2		15.0			
1,2,3-Trichlorobenzene	0.6574 0.7919	0.6280	0.7039	0.6987	0.7587	Ave		0.7064				8.6		15.0			
Dibromofluoromethane (Surr)	0.2787 0.3038	0.3322	0.2828	0.2877	0.3023	Ave		0.2979				6.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4900 0.4032	0.3872	0.3647	0.3925	0.4095	Ave		0.4079				11.0		15.0			
Toluene-d8 (Surr)	1.4803 1.6568	1.5626	1.4768	1.5222	1.6042	Ave		1.5505				4.6		15.0			
4-Bromofluorobenzene (Surr)	0.5349 0.4481	0.4872	0.4293	0.4299	0.4525	Ave		0.4636				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-91248/7	UXJ2249.D
Level 2	STD8260 240-91248/6	UXJ2248.D
Level 3	STD8260 240-91248/5	UXJ2247.D
Level 4	STD8260 240-91248/4	UXJ2246.D
Level 5	STD8260 240-91248/3	UXJ2245.D
Level 6	STD8260 240-91248/2	UXJ2244.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	19409 857909	34808	83644	150666	398714	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	30815 1478826	65848	162908	344410	722328	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	24715 1076672	45613	117106	237067	500132	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Lin1	3784 378817	13112	32685	69691	148589	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	10989 520889	17612	52648	106058	222995	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Lin1	21044 1146994	26222	98743	222519	512322	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	52233 2357892	104860	276240	531775	1204389	10.0 400	20.0	50.0	100	200
Acetone	FB	Lin1	52466 1003500	61703	120635	241628	498960	2.00 80.0	4.00	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	11178 602404	20638	54724	120324	266021	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethene	FB	Ave	19426 843181	36950	97003	175079	396903	1.00 40.0	2.00	5.00	10.0	20.0
Iodomethane	FB	Ave	25916 1221775	58212	132256	245654	566824	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	41856 2011802	87530	221573	443139	1001300	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	38788 1404601	72837	179652	349020	744341	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	72384 2853846	148049	346455	673089	1389235	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	50331 958009	75151	137947	229293	485727	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	48169 1701800	84227	217851	427890	949062	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	35577 1305733	66672	159353	319412	636540	2.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	87364 3536400	165153	387955	827406	1750748	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	32965 1435431	65706	162707	339699	702661	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	6735 313178	12962	28450	67613	150153	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	72062 3133549	137098	356234	709191	1508922	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	5081 283022	12737	26870	57350	136564	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	34691 1606501	71953	182387	357678	757363	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	40498 1504928	72824	199344	374548	781250	2.00 80.0	4.00	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	31785 1167002	68759	159543	314015	685990	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	18793 858751	36556	93301	186113	413108	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Lin1	19982 474764	25107	65024	118098	252333	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	60668 2616606	111428	282874	576473	1243925	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	46175 1823061	85551	216561	452214	974494	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	68210 2630712	125819	292399	609544	1349193	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	42109 1968777	84498	209784	438030	936832	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	39247 1818536	79184	192697	410137	916623	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	56348 2500651	110097	283518	582607	1203019	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	137369 5905703	253947	627958	1287268	2795903	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	36474 1808645	71278	191262	379609	839964	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	39695 1859381	77008	191083	398360	880930	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	37702 1809444	81989	199940	403827	880971	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	22958 867010	36410	94556	194407	405513	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	10239 300790	16396	43123	81120	188371	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	40083 2019893	84508	207110	435837	964951	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	39974 1810680	78768	187138	409859	891192	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	45189 2328718	91304	244965	492443	1078631	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	86887 3284359	151286	378393	779288	1637113	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	139605 6749166	282740	694976	1484837	3155244	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	36199 2050119	80454	204195	435177	977971	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	35513 1668338	69642	181565	361174	802458	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	27067 1183695	57349	134987	265449	584472	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	48181 2112272	92366	237479	471603	1016511	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	27300 1235660	54045	121477	253081	554563	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	52290 2074780	96897	238094	505132	1051980	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	28088 1523788	60516	152576	319655	704010	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	27745 1194444	55127	132864	273089	570735	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	88198 4203882	187194	458042	912420	2015494	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	36485 1584509	67795	172073	339134	741895	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	44534 2172097	89049	232024	489096	1049669	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	109900 5369140	227463	583592	1194227	2570677	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	48533 2424406	106759	267310	549974	1184761	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	85004 4181169	173992	460554	948432	2043396	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	12481 686490	25973	60526	138329	307879	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	125650 5858915	240294	617471	1313809	2766181	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	26463 1009685	50343	124782	249679	518766	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	30914 1335279	61435	151802	303048	641374	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	9175 348053	19012	44972	87952	184582	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Qua	6432 414534	14397	31554	78595	179215	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	30065 1440433	63185	159102	327499	715250	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	24875 1273766	60848	135788	307442	615091	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	81267 3942452	170486	459229	912905	1956851	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	28962 1285270	52023	152108	309520	642005	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	78632 3518425	148614	379741	764094	1656387	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	80479 3842641	162144	442173	901076	1862024	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	88651 4140846	184520	475933	988216	2094002	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	44145 1918495	91775	228085	443245	930304	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	70896 3533628	148860	399068	791570	1710157	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	44876 1963277	92815	236826	460022	951651	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	60524 2501868	102555	286107	556061	1230942	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	38745 1767733	78630	198798	404812	830180	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Linl	942 166288	6549	17687	36663	70502	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	20008 1045208	43059	109757	213934	483635	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	21483 955997	32918	105572	211011	438811	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	5968 352690	14862	40885	79734	167698	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	57993 2693923	108633	278811	593943	1305995	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	17149 856115	33819	93608	186569	407471	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	28348 1406092	69399	149839	308802	666318	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	49843 1866202	80898	193208	421315	902722	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	110367 5427568	231028	574910	1205774	2533491	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	39880 1467948	72026	167116	340532	714658	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 12:04 Calibration End Date: 06/25/2013 14:03 Calibration ID: 16076

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-91248/13	UXJ2255.D
Level 2	STD2 240-91248/12	UXJ2254.D
Level 3	STD3 240-91248/11	UXJ2253.D
Level 4	STD4 240-91248/10	UXJ2252.D
Level 5	STD5 240-91248/9	UXJ2251.D
Level 6	STD6 240-91248/8	UXJ2250.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2190 0.2218	0.2116	0.2229	0.2021	0.2266	Ave		0.2173				4.1		15.0			
Ethyl ether	0.4601 0.3203	0.3777	0.3684	0.3095	0.3401	Ave		0.3627				15.0		15.0			
3-Chloro-1-propene	0.1521 0.1474	0.1417	0.1444	0.1346	0.1435	Ave		0.1440				4.1		15.0			
Diisopropyl ether	0.2731 0.2752	0.2850	0.2808	0.2593	0.2822	Ave		0.2759				3.4		15.0			
2-Chloro-1,3-butadiene	0.8414 0.7954	0.8580	0.7981	0.7653	0.8239	Ave		0.8137				4.2		15.0			
Ethyl-t-butyl ether (ETBE)	1.3789 1.1919	1.2878	1.2280	1.1588	1.2514	Ave		1.2494				6.2		15.0			
Ethyl acetate	0.4526 0.3709	0.4052	0.3785	0.3758	0.3863	Ave		0.3949				7.8		15.0			
Propionitrile	0.0487 0.0466	0.0453	0.0515	0.0458	0.0481	Ave		0.0477	NA			4.8		15.0			
Methacrylonitrile	0.3104 0.2450	0.3294	0.2742	0.2412	0.2654	Ave		0.2776				13.0		15.0			
Isobutyl alcohol	0.0165 0.0110	0.0152	0.0134	0.0119	0.0125	Lin1	0.1342	0.0113	NA						0.9960		0.9900
Tert-amyl-methyl ether (TAME)	0.8374 0.7456	0.8110	0.7526	0.7170	0.7928	Ave		0.7761				5.8		15.0			
n-Heptane	0.0609 0.0834	0.0662	0.0580	0.0762	0.0899	Lin1	-0.040	0.0849							0.9920		0.9900
n-Butanol	0.0085 0.0070	0.0104	0.0090	0.0089	0.0089	Ave		0.0088	NA			12.0		15.0			
Methyl methacrylate	0.4259 0.3740	0.3801	0.3713	0.3581	0.3952	Ave		0.3841				6.2		15.0			
2-Nitropropane	0.1382 0.1144	0.1112	0.1109	0.1079	0.1183	Ave		0.1168				9.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 12:04 Calibration End Date: 06/25/2013 14:03 Calibration ID: 16076

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.1797 0.1656	0.1778	0.1750	0.1786	0.1839	Ave		0.1768				3.5		15.0			
1,2,3-Trimethylbenzene	3.1405 3.2605	2.9460	3.0154	2.9282	3.0604	Ave		3.0585				4.1		15.0			
2-Methylnaphthalene	0.9772 1.0355	1.0067	0.9806	1.0232	1.0348	Ave		1.0097				2.6		15.0			
n-Butyl acetate	0.5958 0.5966	0.5574	0.5579	0.5414	0.6171	Ave		0.5777				5.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 12:04 Calibration End Date: 06/25/2013 14:03 Calibration ID: 16076

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-91248/13	UXJ2255.D
Level 2	STD2 240-91248/12	UXJ2254.D
Level 3	STD3 240-91248/11	UXJ2253.D
Level 4	STD4 240-91248/10	UXJ2252.D
Level 5	STD5 240-91248/9	UXJ2251.D
Level 6	STD6 240-91248/8	UXJ2250.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	22245 955683	43219	113646	212192	467248	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	46725 1379852	77152	187850	325047	701314	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	15450 635155	28948	73628	141387	295937	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	138663 5929322	291054	715990	1361353	2909824	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	85453 3426856	175246	406989	803677	1699061	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	140038 5135340	263038	626229	1216800	2580629	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	91930 3196073	165534	386007	789279	1593448	2.00 80.0	4.00	10.0	20.0	40.0
Propionitrile	FB	Ave	9883 401519	18511	52485	96204	198445	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	31521 1055448	67291	139855	253249	547224	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Lin1	24550 667651	44670	100792	180897	385909	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	85049 3212538	165645	383785	752902	1634826	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Lin1	6188 359531	13517	29564	79967	185434	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Ave	12607 423171	30431	67806	135058	274549	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	43251 1611410	77648	189359	376085	814965	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	28065 985721	45441	113129	226699	487779	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	45769 1652563	88608	217383	433580	934093	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 12:04 Calibration End Date: 06/25/2013 14:03 Calibration ID: 16076

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	79985 3253554	146849	374575	710881	1554289	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	49777 2066697	100363	243632	496805	1051133	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	FB	Ave	121010 5140694	227701	568976	1137138	2545063	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-91248/14 Calibration Date: 06/25/2013 14:26

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 09:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 11:41

Lab File ID: UXJ2256.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1703	0.1462		1.00	0.0100	-14.2	50.0
Chloromethane	Ave	0.3156	0.2781	0.1000	1.00	0.0100	-11.9	50.0
Vinyl chloride	Ave	0.2271	0.1956		1.00	0.0100	-13.9	20.0
Bromomethane	Lin1		0.0566		1.00	0.0100	-20.7 NA	50.0
Chloroethane	Ave	0.1007	0.0968		1.00	0.0100	-3.9	50.0
Trichlorofluoromethane	Lin1		0.2151		1.00	0.0100	-5.4	50.0
Acrolein	Ave	0.0515	0.0503		20.0	0.0300	-2.4	50.0
1,1-Dichloroethene	Ave	0.1794	0.1778		1.00	0.0100	-0.9	20.0
Acetone	Lin1		0.1095		10.0	0.0200	-6.5	50.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.1125	0.1118		1.00	0.0100	-0.6	50.0
Iodomethane	Ave	0.2555	0.2751		1.00	0.0100	7.7	50.0
Carbon disulfide	Ave	0.4251	0.4634		1.00	0.0100	9.0	50.0
Acetonitrile	Ave	0.0339	0.0361 NA		20.0	0.0300	6.4	50.0
Methyl acetate	Ave	0.3290	0.3071		10.0	0.0100	-6.7	50.0
Methylene Chloride	Lin1		0.2506		1.00	0.0100	10.7	50.0
tert-Butyl alcohol	Ave	0.0207	0.0201 NA		50.0	0.200	-3.0	50.0
Acrylonitrile	Ave	0.1532	0.1471		20.0	0.0300	-4.0	50.0
Methyl tert-butyl ether	Ave	0.7851	0.7545		1.00	0.0100	-3.9	50.0
trans-1,2-Dichloroethene	Ave	0.3152	0.2761		1.00	0.0100	-12.4	50.0
Hexane	Ave	0.0635	0.0597		1.00	0.0100	-6.0	20.0
1,1-Dichloroethane	Ave	0.6766	0.6442	0.1000	1.00	0.0100	-4.8	50.0
Vinyl acetate	Ave	0.0564	0.0670		2.00	0.0100	18.9	50.0
2,2-Dichloropropane	Ave	0.2998	0.2936		1.00	0.0100	-2.1	50.0
2-Butanone	Ave	0.1793	0.1588		10.0	0.0200	-11.4	50.0
cis-1,2-Dichloroethene	Ave	0.3423	0.3192		1.00	0.0100	-6.7	50.0
Bromochloromethane	Ave	0.1804	0.1713		1.00	0.0100	-5.0	50.0
Chloroform	Ave	0.5551	0.5302		1.00	0.0100	-4.5	20.0
Tetrahydrofuran	Lin1		0.1152		5.00	0.0100	3.8	50.0
1,1,1-Trichloroethane	Ave	0.4216	0.4034		1.00	0.0100	-4.3	50.0
Cyclohexane	Ave	0.5955	0.5315		1.00	0.0100	-10.7	50.0
1,1-Dichloropropene	Ave	0.4121	0.3940		1.00	0.0100	-4.4	50.0
Carbon tetrachloride	Ave	0.3866	0.3812		1.00	0.0100	-1.4	50.0
1,2-Dichloroethane	Ave	0.5408	0.5424		1.00	0.0100	0.3	50.0
Benzene	Ave	1.249	1.191		1.00	0.0100	-4.7	50.0
Trichloroethene	Ave	0.3644	0.3568		1.00	0.0100	-2.1	50.0
Methylcyclohexane	Ave	0.3820	0.3279		1.00	0.0100	-14.2	50.0
1,2-Dichloropropane	Ave	0.3846	0.3712		1.00	0.0100	-3.5	20.0
Dibromomethane	Ave	0.1885	0.1811		1.00	0.0100	-3.9	50.0
Bromodichloromethane	Ave	0.4116	0.4055		1.00	0.0100	-1.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1917	0.1851		10.0	0.0100	-3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-91248/14 Calibration Date: 06/25/2013 14:26

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 09:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 11:41

Lab File ID: UXJ2256.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.4658	0.4308		1.00	0.0100	-7.5	50.0
4-Methyl-2-pentanone	Ave	0.3726	0.3474		10.0	0.0200	-6.8	50.0
Toluene	Ave	1.917	1.790		1.00	0.0100	-6.6	20.0
trans-1,3-Dichloropropene	Ave	0.5581	0.5218		1.00	0.0100	-6.5	50.0
1,1,2-Trichloroethane	Ave	0.3607	0.3580		1.00	0.0100	-0.7	50.0
1,3-Dichloropropane	Ave	0.6275	0.6208		1.00	0.0100	-1.1	50.0
Tetrachloroethene	Ave	0.3486	0.3064		1.00	0.0100	-12.1	50.0
2-Hexanone	Ave	0.3255	0.3143		10.0	0.0200	-3.4	50.0
Dibromochloromethane	Ave	0.4154	0.4214		1.00	0.0100	1.4	50.0
1,2-Dibromoethane	Ave	0.3595	0.3541		1.00	0.0100	-1.5	50.0
Chlorobenzene	Ave	1.223	1.135	0.3000	1.00	0.0100	-7.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4619	0.4233		1.00	0.0100	-8.4	50.0
Ethylbenzene	Ave	0.6235	0.5743		1.00	0.0100	-7.9	20.0
m-Xylene & p-Xylene	Ave	0.7738	0.7245		2.00	0.0200	-6.4	50.0
o-Xylene	Ave	0.7074	0.6826		1.00	0.0100	-3.5	50.0
Styrene	Ave	1.211	1.172		1.00	0.0100	-3.2	50.0
Bromoform	Ave	0.1796	0.1757	0.1000	1.00	0.0100	-2.2	50.0
Isopropylbenzene	Ave	1.683	1.557		1.00	0.0100	-7.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9538	0.9160	0.3000	1.00	0.0100	-4.0	50.0
Bromobenzene	Ave	1.172	1.090		1.00	0.0100	-7.0	50.0
1,2,3-Trichloropropane	Ave	0.3397	0.3513		1.00	0.0100	3.4	50.0
trans-1,4-Dichloro-2-butene	Qua		0.2992		1.00	0.0200	-7.9	50.0
n-Propylbenzene	Ave	1.235	1.192		1.00	0.0100	-3.5	50.0
2-Chlorotoluene	Ave	1.097	1.085		1.00	0.0100	-1.1	50.0
1,3,5-Trimethylbenzene	Ave	3.407	3.207		1.00	0.0100	-5.9	50.0
4-Chlorotoluene	Ave	1.127	1.132		1.00	0.0100	0.4	50.0
tert-Butylbenzene	Ave	2.972	2.665		1.00	0.0100	-10.3	50.0
1,2,4-Trimethylbenzene	Ave	3.303	3.244		1.00	0.0100	-1.8	50.0
sec-Butylbenzene	Ave	3.639	3.319		1.00	0.0100	-8.8	50.0
1,3-Dichlorobenzene	Ave	1.713	1.654		1.00	0.0100	-3.5	50.0
p-Isopropyltoluene	Ave	2.983	2.875		1.00	0.0100	-3.6	50.0
1,4-Dichlorobenzene	Ave	1.756	1.656		1.00	0.0100	-5.7	50.0
n-Butylbenzene	Ave	2.177	1.975		1.00	0.0100	-9.3	50.0
1,2-Dichlorobenzene	Ave	1.523	1.434		1.00	0.0100	-5.8	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1264		2.00	0.0100	-9.0	50.0
1,2,4-Trichlorobenzene	Ave	0.7867	0.7030		1.00	0.0100	-10.6	50.0
Hexachlorobutadiene	Ave	0.2916	0.2285		1.00	0.0100	-21.6 NA	50.0
Naphthalene	Ave	2.248	2.073		1.00	0.0100	-7.8	50.0
1,2,3-Trichlorobenzene	Ave	0.7064	0.6506		1.00	0.0100	-7.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2979	0.2682		0.00751	0.00834	-10.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4079	0.3556		0.00727	0.00834	-12.8	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-91248/14 Calibration Date: 06/25/2013 14:26

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 09:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 11:41

Lab File ID: UXJ2256.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.550	1.446		0.00778	0.00834	-6.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4636	0.4530		0.00815	0.00834	-2.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-91248/14 Calibration Date: 06/25/2013 14:26

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 12:04

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 14:03

Lab File ID: UXJ2256.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3627	0.3381		2.00	0.0100	-6.8	50.0
Diisopropyl ether	Ave	0.2759	0.2715		10.0	0.0100	-1.6	50.0
Isobutyl alcohol	Lin1		0.0123	NA	50.0	0.500	5.8	50.0
Cyclohexanone	Ave	0.1768	0.0306	NA	20.0	0.200	-82.7* NA	50.0
1,2,3-Trimethylbenzene	Ave	3.059	3.038		0.00993	0.0100	-0.7	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: BFB143A.D BFB Injection Date: 06/26/2013

Instrument ID: A3UX11 BFB Injection Time: 08:46

Analysis Batch No.: 91443

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.9	
75	30.0 - 60.0 % of mass 95	46.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.6	(0.8)1
174	50.0 - 120.00 % of mass 95	72.9	
175	5.0 - 9.0 % of mass 174	6.4	(8.8)1
176	95.0 - 101.0 % of mass 174	72.6	(99.6)1
177	5.0 - 9.0 % of mass 176	5.0	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-91443/2	UXJ2275.D	06/26/2013	09:17
	CCV 240-91443/3	UXJ2276.D	06/26/2013	09:41
	LCS 240-91443/4	UXJ2277.D	06/26/2013	10:04
	MB 240-91443/5	UXJ2279.D	06/26/2013	10:52
MRC-SW1A-061813	240-25905-1	UXJ2284.D	06/26/2013	12:50
MRC-SW2A-061813	240-25905-2	UXJ2285.D	06/26/2013	13:14
MRC-SW5A1-061813	240-25905-3	UXJ2286.D	06/26/2013	13:37
MRC-SW5A2-061813	240-25905-4	UXJ2287.D	06/26/2013	14:01
MRC-SW5B-061813	240-25905-5	UXJ2288.D	06/26/2013	14:25
MRC-SW6A-061813	240-25905-6	UXJ2289.D	06/26/2013	14:48
MRC-SW9B-061813	240-25905-13	UXJ2290.D	06/26/2013	15:12
TB-061813	240-25905-14	UXJ2291.D	06/26/2013	15:36
	240-25728-B-11 MS	UXJ2300.D	06/26/2013	19:09
	240-25728-B-11 MSD	UXJ2301.D	06/26/2013	19:33

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91443/2 Calibration Date: 06/26/2013 09:17

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 09:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 11:41

Lab File ID: UXJ2275.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1703	0.1935		1.00	0.0100	13.6	50.0
Chloromethane	Ave	0.3156	0.3457	0.1000	1.00	0.0100	9.5	50.0
Vinyl chloride	Ave	0.2271	0.2254		1.00	0.0100	-0.8	20.0
Bromomethane	Lin1		0.0697		1.00	0.0100	-3.7	50.0
Chloroethane	Ave	0.1007	0.1088		1.00	0.0100	8.0	50.0
Trichlorofluoromethane	Lin1		0.2304		1.00	0.0100	0.9	50.0
Acrolein	Ave	0.0515	0.0462 NA		20.0	0.100	-10.2	50.0
Acetone	Lin1		0.1024		10.0	0.0200	-13.4	50.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.1125	0.1221		1.00	0.0100	8.5	50.0
1,1-Dichloroethene	Ave	0.1794	0.1737		1.00	0.0100	-3.2	20.0
Iodomethane	Ave	0.2555	0.2592		1.00	0.0100	1.5	50.0
Carbon disulfide	Ave	0.4251	0.4102		1.00	0.0100	-3.5	50.0
Acetonitrile	Ave	0.0339	0.0304 NA		20.0	0.100	-10.5	50.0
Methyl acetate	Ave	0.3290	0.2904		10.0	0.0200	-11.7	50.0
Methylene Chloride	Lin1		0.2326		1.00	0.0100	1.7	50.0
tert-Butyl alcohol	Ave	0.0207	0.0166		50.0	0.200	-19.8	50.0
Acrylonitrile	Ave	0.1532	0.1324		20.0	0.0200	-13.6	50.0
Methyl tert-butyl ether	Ave	0.7851	0.7261		1.00	0.0100	-7.5	50.0
trans-1,2-Dichloroethene	Ave	0.3152	0.3055		1.00	0.0100	-3.1	50.0
Hexane	Ave	0.0635	0.0651		1.00	0.0100	2.6	20.0
1,1-Dichloroethane	Ave	0.6766	0.6596	0.1000	1.00	0.0100	-2.5	50.0
Vinyl acetate	Ave	0.0564	0.0521		2.00	0.0100	-7.7	50.0
2-Butanone	Ave	0.1793	0.1615		10.0	0.0200	-9.9	50.0
cis-1,2-Dichloroethene	Ave	0.3423	0.3354		1.00	0.0100	-2.0	50.0
2,2-Dichloropropane	Ave	0.2998	0.2686		1.00	0.0100	-10.4	50.0
Bromochloromethane	Ave	0.1804	0.1779		1.00	0.0100	-1.4	50.0
Chloroform	Ave	0.5551	0.5765		1.00	0.0100	3.9	20.0
Tetrahydrofuran	Lin1		0.1060		5.00	0.0100	-5.2	50.0
1,1,1-Trichloroethane	Ave	0.4216	0.4157		1.00	0.0100	-1.4	50.0
Cyclohexane	Ave	0.5955	0.5744		1.00	0.0100	-3.6	50.0
1,1-Dichloropropene	Ave	0.4121	0.4194		1.00	0.0100	1.8	50.0
Carbon tetrachloride	Ave	0.3866	0.3945		1.00	0.0100	2.0	50.0
1,2-Dichloroethane	Ave	0.5408	0.5468		1.00	0.0100	1.1	50.0
Benzene	Ave	1.249	1.265		1.00	0.0100	1.2	50.0
Trichloroethene	Ave	0.3644	0.3817		1.00	0.0100	4.7	50.0
Methylcyclohexane	Ave	0.3820	0.3912		1.00	0.0100	2.4	50.0
1,2-Dichloropropane	Ave	0.3846	0.3719		1.00	0.0100	-3.3	20.0
Dibromomethane	Ave	0.1885	0.1761		1.00	0.0100	-6.6	50.0
1,4-Dioxane	Ave	0.0016	0.0011 NA		50.0	0.500	NA -33.0	50.0
Bromodichloromethane	Ave	0.4116	0.4220		1.00	0.0100	2.5	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91443/2 Calibration Date: 06/26/2013 09:17

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 09:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 11:41

Lab File ID: UXJ2275.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1917	0.1785		10.0	0.0200	-6.9	50.0
cis-1,3-Dichloropropene	Ave	0.4658	0.4690		1.00	0.0100	0.7	50.0
4-Methyl-2-pentanone	Ave	0.3726	0.3153		10.0	0.0200	-15.4	50.0
Toluene	Ave	1.917	1.869		1.00	0.0100	-2.5	20.0
trans-1,3-Dichloropropene	Ave	0.5581	0.5492		1.00	0.0100	-1.6	50.0
Ethyl methacrylate	Ave	0.4812	0.4354		1.00	0.0100	-9.5	50.0
1,1,2-Trichloroethane	Ave	0.3607	0.3346		1.00	0.0100	-7.2	50.0
1,3-Dichloropropane	Ave	0.6275	0.6088		1.00	0.0100	-3.0	50.0
Tetrachloroethene	Ave	0.3486	0.3392		1.00	0.0100	-2.7	50.0
2-Hexanone	Ave	0.3255	0.2611		10.0	0.0200	-19.8	50.0
Dibromochloromethane	Ave	0.4154	0.4127		1.00	0.0100	-0.6	50.0
1,2-Dibromoethane	Ave	0.3595	0.3352		1.00	0.0100	-6.8	50.0
Chlorobenzene	Ave	1.223	1.206	0.3000	1.00	0.0100	-1.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.4619	0.4471		1.00	0.0100	-3.2	50.0
Ethylbenzene	Ave	0.6235	0.5981		1.00	0.0100	-4.1	20.0
m-Xylene & p-Xylene	Ave	0.7738	0.7658		2.00	0.0200	-1.0	50.0
o-Xylene	Ave	0.7074	0.7217		1.00	0.0100	2.0	50.0
Styrene	Ave	1.211	1.200		1.00	0.0100	-0.9	50.0
Bromoform	Ave	0.1796	0.1780	0.1000	1.00	0.0100	-0.9	50.0
Isopropylbenzene	Ave	1.683	1.643		1.00	0.0100	-2.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.9538	0.8455	0.3000	1.00	0.0100	-11.3	50.0
Bromobenzene	Ave	1.172	1.123		1.00	0.0100	-4.2	50.0
1,2,3-Trichloropropane	Ave	0.3397	0.3235		1.00	0.0100	-4.8	50.0
trans-1,4-Dichloro-2-butene	Qua		0.3419		1.00	0.0100	13.0	50.0
n-Propylbenzene	Ave	1.235	1.248		1.00	0.0100	1.0	50.0
2-Chlorotoluene	Ave	1.097	1.112		1.00	0.0100	1.4	50.0
1,3,5-Trimethylbenzene	Ave	3.407	3.417		1.00	0.0100	0.3	50.0
4-Chlorotoluene	Ave	1.127	1.116		1.00	0.0100	-1.0	50.0
tert-Butylbenzene	Ave	2.972	3.083		1.00	0.0100	3.7	50.0
1,2,4-Trimethylbenzene	Ave	3.303	3.274		1.00	0.0100	-0.9	50.0
sec-Butylbenzene	Ave	3.639	3.641		1.00	0.0100	0.0	50.0
1,3-Dichlorobenzene	Ave	1.713	1.666		1.00	0.0100	-2.7	50.0
p-Isopropyltoluene	Ave	2.983	3.025		1.00	0.0100	1.4	50.0
1,4-Dichlorobenzene	Ave	1.756	1.716		1.00	0.0100	-2.3	50.0
n-Butylbenzene	Ave	2.177	2.087		1.00	0.0100	-4.2	50.0
1,2-Dichlorobenzene	Ave	1.523	1.449		1.00	0.0100	-4.8	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1058		2.00	0.0100	-22.8	50.0
1,3,5-Trichlorobenzene	Ave	0.8434	0.8127		1.00	0.0100	-3.6	50.0
1,2,4-Trichlorobenzene	Ave	0.7867	0.7784		1.00	0.0100	-1.1	50.0
Hexachlorobutadiene	Ave	0.2916	0.2923		1.00	0.0100	0.3	50.0
Naphthalene	Ave	2.248	1.926		1.00	0.0100	-14.3	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91443/2 Calibration Date: 06/26/2013 09:17

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 09:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 11:41

Lab File ID: UXJ2275.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7064	0.6469		1.00	0.0100	-8.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2979	0.2670		0.00748	0.00834	-10.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4079	0.3644		0.00745	0.00834	-10.7	50.0
Toluene-d8 (Surr)	Ave	1.550	1.414		0.00761	0.00834	-8.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4636	0.4260		0.00766	0.00834	-8.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCV 240-91443/3 Calibration Date: 06/26/2013 09:41

Instrument ID: A3UX11 Calib Start Date: 06/25/2013 12:04

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/25/2013 14:03

Lab File ID: UXJ2276.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2173	0.2288		2.00	0.0100	5.3	50.0
Ethyl ether	Ave	0.3627	0.3462		2.00	0.0100	-4.6	50.0
3-Chloro-1-propene	Ave	0.1440	0.1437		2.00	0.0100	-0.2	50.0
Diisopropyl ether	Ave	0.2759	0.2833		10.0	0.0500	2.7	50.0
2-Chloro-1,3-butadiene	Ave	0.8137	0.8076		2.00	0.0100	-0.7	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.249	1.266		5.00	0.0100	1.3	50.0
Ethyl acetate	Ave	0.3949	0.3792		4.00	0.0200	-4.0	50.0
Propionitrile	Ave	0.0477	0.0458 NA		4.00	0.0200	-3.9	50.0
Methacrylonitrile	Ave	0.2776	0.2509		2.00	0.0100	-9.6	50.0
Isobutyl alcohol	Lin1		0.0108 NA		50.0	0.200	-10.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7761	0.7762		5.00	0.0100	0.0	50.0
n-Heptane	Lin1		0.0656		1.00	0.0100	-18.1	50.0
n-Butanol	Ave	0.0088	0.0070 NA		50.0	0.200	-20.7 NA	50.0
Methyl methacrylate	Ave	0.3841	0.3732		2.00	0.0100	-2.8	50.0
2-Nitropropane	Ave	0.1168	0.1115		2.00	0.0200	-4.5	50.0
Cyclohexanone	Ave	0.1768	0.1184		20.0	0.100	-33.0 NA	50.0
1,2,3-Trimethylbenzene	Ave	3.059	3.038		0.00993	0.0100	-0.7	50.0
2-Methylnaphthalene	Ave	1.010	0.8089		5.00	0.0200	-19.9	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: BFB156.D BFB Injection Date: 06/13/2013

Instrument ID: A3UX15 BFB Injection Time: 13:15

Analysis Batch No.: 89777

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.4	
75	30.0 - 60.0 % of mass 95	47.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	90.9	
175	5.0 - 9.0 % of mass 174	6.4	(7.0)1
176	95.0 - 101.0 % of mass 174	91.0	(100.2)1
177	5.0 - 9.0 % of mass 176	6.1	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-89777/2	UXC2257.D	06/13/2013	13:44
	STD8260 240-89777/3	UXC2258.D	06/13/2013	14:07
	STD8260 240-89777/4	UXC2259.D	06/13/2013	14:29
	STD8260 240-89777/5	UXC2260.D	06/13/2013	14:52
	STD8260 240-89777/6	UXC2261.D	06/13/2013	15:14
	STD8260 240-89777/7	UXC2262.D	06/13/2013	15:36
	ICV 240-89777/8	UXC2263.D	06/13/2013	15:59

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-89777/7	UXC2262.D
Level 2	STD8260 240-89777/6	UXC2261.D
Level 3	STD8260 240-89777/5	UXC2260.D
Level 4	STD8260 240-89777/4	UXC2259.D
Level 5	STD8260 240-89777/3	UXC2258.D
Level 6	STD8260 240-89777/2	UXC2257.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2379 0.3085	0.2816	0.3220	0.2931	0.2951	Ave		0.2897				10.0		15.0			
Chloromethane	0.2964 0.2993	0.3799	0.3430	0.2880	0.2934	Ave		0.3167			0.1000	12.0		15.0			
Vinyl chloride	0.3202 0.3605	0.3951	0.3729	0.3386	0.3397	Ave		0.3545				7.6		15.0			
Bromomethane	0.1766 0.2291	0.2486	0.2089	0.1588	0.1584	Qua	0.3116	0.0818	0.0035						0.9970		0.9900
Chloroethane	0.1491 0.2439	0.2496	0.2377	0.1987	0.1911	Qua	0.2101	0.1404	0.0024						0.9980		0.9900
Trichlorofluoromethane	0.3403 0.4940	0.4535	0.4979	0.4256	0.4506	Ave		0.4436				13.0		15.0			
Acrolein	0.0279 0.0352	0.0324	0.0345	0.0320	0.0315	Ave		0.0322	NA			7.9		15.0			
1,1-Dichloroethene	0.3027 0.3387	0.3173	0.3395	0.2754	0.3096	Ave		0.3139				7.7		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2007 0.2498	0.2445	0.2551	0.2126	0.2314	Ave		0.2324				9.4		15.0			
Acetone	0.0649 0.0692	0.0807	0.0672	0.0654	0.0611	Ave		0.0681				9.9		15.0			
Iodomethane	0.4178 0.5069	0.5498	0.5540	0.4529	0.4661	Ave		0.4913				11.0		15.0			
Carbon disulfide	0.6641 0.8757	0.7861	0.8099	0.6727	0.7521	Ave		0.7601				11.0		15.0			
Acetonitrile	0.0224 0.0222	0.0268	0.0201	0.0219	0.0197	Ave		0.0222	NA			11.0		15.0			
Methyl acetate	0.1625 0.1685	0.1760	0.1631	0.1591	0.1603	Ave		0.1649				3.8		15.0			
Methylene Chloride	0.6533 0.3304	0.5091	0.4237	0.3330	0.3155	Lin1	0.3646	0.3136							0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0121 0.0124	0.0148	0.0127	0.0128	0.0116	Ave		0.0128				8.7		15.0			
Acrylonitrile	0.0719 0.0817	0.0836	0.0808	0.0753	0.0767	Ave		0.0783				5.7		15.0			
Methyl tert-butyl ether	0.6703 0.7363	0.7277	0.7487	0.6624	0.6730	Ave		0.7031				5.5		15.0			
trans-1,2-Dichloroethene	0.3150 0.3490	0.3679	0.3561	0.3056	0.3242	Ave		0.3363				7.4		15.0			
Hexane	0.0744 0.0722	0.0654	0.0683	0.0640	0.0714	Ave		0.0693				5.9		15.0			
1,1-Dichloroethane	0.5117 0.5448	0.5602	0.5576	0.4808	0.5150	Ave		0.5283			0.1000	5.9		15.0			
Vinyl acetate	0.0285 0.0448	0.0405	0.0367	0.0413	0.0441	Ave		0.0393				15.0		15.0			
2,2-Dichloropropane	0.2453 0.2912	0.2873	0.2965	0.2529	0.2732	Ave		0.2744				7.7		15.0			
cis-1,2-Dichloroethene	0.3246 0.3650	0.3507	0.3732	0.3249	0.3365	Ave		0.3458				5.9		15.0			
2-Butanone	0.0821 0.0887	0.0906	0.0841	0.0850	0.0886	Ave		0.0865				3.8		15.0			
Bromochloromethane	0.1608 0.1666	0.1684	0.1732	0.1551	0.1588	Ave		0.1638				4.1		15.0			
Tetrahydrofuran	0.0632 0.0548	0.0599	0.0522	0.0529	0.0533	Ave		0.0560				8.0		15.0			
Chloroform	0.5062 0.5617	0.5660	0.5602	0.5029	0.5241	Ave		0.5368				5.4		15.0			
1,1,1-Trichloroethane	0.3166 0.4140	0.3825	0.4183	0.3538	0.3914	Ave		0.3794				10.0		15.0			
Cyclohexane	0.4111 0.4932	0.4584	0.4791	0.4287	0.4680	Ave		0.4564				6.8		15.0			
1,1-Dichloropropene	0.3996 0.4561	0.4244	0.4260	0.3859	0.4267	Ave		0.4198				5.8		15.0			
Carbon tetrachloride	0.2667 0.4054	0.3099	0.3614	0.3204	0.3698	Ave		0.3389				15.0		15.0			
Benzene	1.1989 1.3711	1.2642	1.2567	1.1563	1.2586	Ave		1.2510				5.8		15.0			
1,2-Dichloroethane	0.3736 0.4019	0.3732	0.3680	0.3656	0.3771	Ave		0.3766				3.5		15.0			
Trichloroethene	0.3249 0.3568	0.3367	0.3455	0.3217	0.3498	Ave		0.3393				4.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.4053 0.4859	0.4241	0.4671	0.4062	0.4672	Ave		0.4426				7.9		15.0			
1,2-Dichloropropane	0.2574 0.2848	0.2646	0.2690	0.2562	0.2761	Ave		0.2680				4.1		15.0			
Dibromomethane	0.1416 0.1586	0.1510	0.1518	0.1458	0.1537	Ave		0.1504				4.0		15.0			
1,4-Dioxane	0.0013 0.0019	0.0022	0.0014	0.0021	0.0017	Qua	0.0210	0.0016	NA 0						0.9960		0.9900
Bromodichloromethane	0.2384 0.3643	0.2729	0.2874	0.3128	0.3344	Ave		0.3017				15.0		15.0			
2-Chloroethyl vinyl ether	0.0908 0.1356	0.1018	0.1053	0.1218	0.1341	Lin1	-0.129	0.1350							0.9980		0.9900
cis-1,3-Dichloropropene	0.2754 0.4214	0.2879	0.3315	0.3577	0.3989	Lin1	-0.216	0.4130							0.9970		0.9900
4-Methyl-2-pentanone	0.1296 0.1724	0.1471	0.1474	0.1593	0.1637	Ave		0.1532				9.9		15.0			
Toluene	1.8309 2.0501	1.8082	1.9057	1.7850	1.9669	Ave		1.8911				5.4		15.0			
trans-1,3-Dichloropropene	0.3327 0.5025	0.3395	0.3906	0.4169	0.4751	Lin1	-0.261	0.4910							0.9960		0.9900
Ethyl methacrylate	0.2976 0.4018	0.3059	0.3432	0.3509	0.3874	Ave		0.3478				12.0		15.0			
1,1,2-Trichloroethane	0.2948 0.3130	0.2932	0.3104	0.3050	0.3099	Ave		0.3044				2.8		15.0			
Tetrachloroethene	0.4144 0.4117	0.3896	0.4037	0.3635	0.4009	Ave		0.3973				4.7		15.0			
1,3-Dichloropropane	0.5225 0.5637	0.5170	0.5378	0.5375	0.5596	Ave		0.5397				3.5		15.0			
2-Hexanone	0.1164 0.1589	0.1531	0.1583	0.1484	0.1599	Ave		0.1492				11.0		15.0			
Dibromochloromethane	0.2275 0.3483	0.2350	0.2750	0.2927	0.3244	Lin1	-0.179	0.3396							0.9960		0.9900
1,2-Dibromoethane	0.2768 0.3169	0.2871	0.2962	0.2994	0.3046	Ave		0.2968				4.7		15.0			
Chlorobenzene	1.1602 1.2378	1.1972	1.1938	1.1157	1.1676	Ave		1.1787			0.3000	3.5		15.0			
1,1,1,2-Tetrachloroethane	0.2957 0.4085	0.3260	0.3794	0.3677	0.3757	Ave		0.3588				11.0		15.0			
Ethylbenzene	0.5846 0.6766	0.6001	0.6586	0.5853	0.6377	Ave		0.6238				6.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	1.2959 1.2476	1.4470	1.5140	1.4244	1.5670	Ave		1.4160				8.7		15.0			
o-Xylene	0.6308 0.7969	0.7118	0.7677	0.7051	0.7141	Ave		0.7211				8.0		15.0			
Styrene	0.9177 1.3395	1.0638	1.1423	1.1159	1.1850	Ave		1.1274				12.0		15.0			
Bromoform	0.1213 0.1933	0.1311	0.1421	0.1486	0.1655	Lin1	-0.103	0.1826			0.1000				0.9900		0.9900
Isopropylbenzene	1.5591 2.0166	1.7098	1.7712	1.7110	1.7722	Ave		1.7566				8.5		15.0			
1,1,2,2-Tetrachloroethane	0.6783 0.6382	0.5817	0.6642	0.6345	0.6605	Ave		0.6429			0.3000	5.3		15.0			
Bromobenzene	0.9533 0.9652	0.8743	0.9769	0.9184	0.9845	Ave		0.9455				4.4		15.0			
1,2,3-Trichloropropane	0.2508 0.2123	0.2035	0.2180	0.2090	0.2186	Ave		0.2187				7.6		15.0			
trans-1,4-Dichloro-2-butene	0.1256 0.1521	0.1173	0.1232	0.1251	0.1496	Ave		0.1321				11.0		15.0			
n-Propylbenzene	0.9431 0.9770	0.8785	0.9294	0.9006	1.0006	Ave		0.9382				4.9		15.0			
2-Chlorotoluene	0.7984 0.8721	0.7965	0.8677	0.8268	0.8707	Ave		0.8387				4.3		15.0			
1,3,5-Trimethylbenzene	2.4513 2.9534	2.4206	2.6986	2.6125	2.8329	Ave		2.6616				7.9		15.0			
4-Chlorotoluene	2.6465 2.8537	2.4876	2.7616	2.6119	2.8176	Ave		2.6965				5.2		15.0			
tert-Butylbenzene	2.2534 2.5204	2.1131	2.3875	2.3177	2.4267	Ave		2.3365				6.1		15.0			
1,2,4-Trimethylbenzene	2.5316 2.9760	2.4782	2.7660	2.6679	2.7828	Ave		2.7004				6.7		15.0			
sec-Butylbenzene	2.9186 3.4226	2.9788	3.0768	3.0490	3.2179	Ave		3.1106				5.9		15.0			
1,3-Dichlorobenzene	1.5715 1.7436	1.6499	1.6532	1.6479	1.6690	Ave		1.6559				3.3		15.0			
p-Isopropyltoluene	2.2503 2.9617	2.4797	2.6789	2.6618	2.7599	Ave		2.6320				9.3		15.0			
1,4-Dichlorobenzene	1.6639 1.8188	1.7520	1.7061	1.6945	1.7264	Ave		1.7270				3.1		15.0			
n-Butylbenzene	1.8689 2.4418	2.0807	2.1263	2.1692	2.2578	Ave		2.1574				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4421 1.6485	1.6096	1.5753	1.5806	1.5351	Ave		1.5652				4.5		15.0			
1,2-Dibromo-3-Chloropropane	0.0847 0.0964	0.0762	0.0874	0.0904	0.0881	Ave		0.0872				7.7		15.0			
1,3,5-Trichlorobenzene	0.8647 1.0739	1.1750	0.9921	1.1171	1.0237	Ave		1.0411				10.0		15.0			
1,2,4-Trichlorobenzene	0.6023 0.8318	0.8281	0.7197	0.8939	0.7822	Ave		0.7763				13.0		15.0			
Hexachlorobutadiene	0.3542 0.3696	0.5467	0.4263	0.5047	0.3925	Qua	0.1213	0.4484	-0.002						0.9950		0.9900
Naphthalene	1.1200 1.6012	1.5911	1.4091	1.7756	1.4930	Ave		1.4983				15.0		15.0			
1,2,3-Trichlorobenzene	0.5171 0.5669	0.8029	0.6244	0.7770	0.5699	Qua	0.2676	0.6395	-0.002						0.9920		0.9900
Dibromofluoromethane (Surr)	0.2554 0.3036	0.2821	0.2996	0.2732	0.2869	Ave		0.2835				6.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3047 0.3276	0.3348	0.3122	0.3077	0.3138	Ave		0.3168				3.7		15.0			
Toluene-d8 (Surr)	1.5229 1.7648	1.5513	1.5824	1.5736	1.6532	Ave		1.6080				5.5		15.0			
4-Bromofluorobenzene (Surr)	0.4587 0.5217	0.4964	0.4737	0.4783	0.4704	Ave		0.4832				4.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-89777/7	UXC2262.D
Level 2	STD8260 240-89777/6	UXC2261.D
Level 3	STD8260 240-89777/5	UXC2260.D
Level 4	STD8260 240-89777/4	UXC2259.D
Level 5	STD8260 240-89777/3	UXC2258.D
Level 6	STD8260 240-89777/2	UXC2257.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	53808 3001470	109547	333856	708689	1464979	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	67052 2911954	147802	355614	696401	1456718	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	72423 3506803	153724	386632	818834	1686454	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Qua	39942 2229227	96714	216577	384010	786629	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Qua	33733 2372790	97128	246425	480430	948669	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	76974 4805685	176441	516251	1029052	2237020	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	63175 3421467	125946	357252	773482	1566215	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	68477 3294811	123461	351980	666017	1536951	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	45406 2430610	95135	264482	514164	1149049	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	29367 1346234	62772	139296	316347	607016	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	94498 4931528	213918	574324	1095234	2314265	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	150213 8519141	305865	839672	1626568	3734209	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	50662 2162187	104353	207950	530014	978370	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	73533 3278338	136982	338250	769653	1591469	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	147777 3214181	198081	439265	805169	1566604	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	54689 2414946	115343	264066	621426	1155567	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	32509 1589721	65045	167560	364158	761479	2.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	151625 7163279	283144	776238	1601703	3341396	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	71257 3395330	143134	369197	739051	1609822	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	16823 702678	25446	70799	154647	354272	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	115743 5300182	217959	578126	1162507	2557073	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	6440 435370	15773	38094	99972	218752	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	55498 2833198	111772	307432	611596	1356246	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	73430 3550447	136436	386942	785680	1670887	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	37136 1726376	70509	174465	411039	879518	2.00 80.0	4.00	10.0	20.0	40.0
Bromochloromethane	FB	Ave	36364 1620918	65536	179562	375131	788225	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	14287 532851	23322	54095	127863	264585	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	114511 5463992	220206	580760	1216045	2602006	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	71608 4027987	148837	433690	855498	1943347	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	92996 4797876	178335	496752	1036648	2323442	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	90399 4436949	165125	441618	933226	2118485	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	60329 3943829	120570	374673	774710	1836129	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	271195 13338724	491869	1302878	2796005	6248813	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	84499 3909781	145214	381539	884153	1872210	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	73494 3471500	131008	358242	777802	1736986	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	91686 4727522	164991	484231	982214	2319891	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	58229 2770657	102956	278861	619439	1370956	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	32021 1542580	58761	157367	352605	763003	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	14797 936847	42661	73253	248170	422657	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	53925 3543810	106184	297988	756253	1660317	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Lin1	41056 2638799	79238	218366	589190	1331702	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Lin1	62303 4099076	112009	343719	864914	1980452	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	58623 3353803	114441	305650	770246	1625474	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	261198 13802656	470763	1287591	2949703	6733022	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Lin1	47463 3383316	88392	263919	688938	1626305	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	42453 2705309	79653	231920	579838	1326204	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	42051 2107229	76333	209747	503930	1060811	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	59117 2771845	101434	272762	600605	1372492	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	74539 3795046	134597	363378	888234	1915663	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	33203 2139547	79729	213910	490338	1094769	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Lin1	32462 2344939	61171	185828	483685	1110315	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	39494 2133776	74750	200102	494750	1042593	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	165520 8333896	311688	806621	1843745	3996898	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	42180 2750423	84865	256367	607550	1286236	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	83395 4555188	156248	445010	967126	2183111	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	369733 16799032	753473	2045931	4707563	10728368	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	89994 5364969	185305	518738	1165139	2444623	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	130918 9018544	276950	771805	1843964	4056481	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Lin1	17299 1301501	34136	96004	245477	566568	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	222424 13576724	445137	1196731	2827465	6066531	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	42193 2303103	87616	225209	534189	1059493	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	59299 3482998	131689	331272	773250	1579188	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	15599 766279	30646	73924	175984	350681	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	7813 548945	17661	41761	105328	240037	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	58662 3525439	132320	315152	758287	1604961	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	49660 3147164	119967	294245	696136	1396606	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	152479 10657509	364593	915080	2199597	4543919	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	164616 10297946	374685	936422	2199016	4519439	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	140167 9095014	318274	809587	1951321	3892377	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	157472 10739305	373260	937923	2246206	4463526	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	181543 12350783	448670	1043308	2567101	5161409	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	97750 6292008	248502	560590	1387440	2677136	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	139976 10687548	373494	908381	2241058	4426852	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	103497 6563287	263891	578537	1426639	2769162	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	116248 8811538	313395	721000	1826332	3621460	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	89701 5948686	242432	534181	1330766	2462260	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	5266 347916	11475	29631	76149	141287	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	53785 3875256	176982	336419	940516	1642072	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	37464 3001545	124730	244038	752566	1254667	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 89777

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/13/2013 13:44 Calibration End Date: 06/13/2013 15:36 Calibration ID: 15690

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Qua	22033 1333579	82348	144550	424897	629575	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	69665 5778268	239644	477823	1494913	2394761	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Qua	32162 2045811	120932	211728	654188	914174	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	57777 2953962	109750	310566	660666	1424299	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	68916 3187452	130263	323639	744149	1558001	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	217250 11882027	403886	1069153	2600418	5659293	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	65432 3512716	129239	320078	790339	1610237	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-89777/8 Calibration Date: 06/13/2013 15:59

Instrument ID: A3UX15 Calib Start Date: 05/29/2013 16:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 18:40

Lab File ID: UXC2263.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2484	0.2347		2.00	0.0100	-5.5	50.0
Diisopropyl ether	Ave	0.3129	0.2619		10.0	0.0100	-16.3	50.0
Isobutyl alcohol	Ave	0.0054	0.0047 NA		50.0	0.500	-13.4	50.0
Cyclohexanone	Ave	0.0854	0.0150 NA		20.0	0.200	NA -82.4*	50.0
1,2,3-Trimethylbenzene	Ave	2.897	2.849		0.00983	0.0100	-1.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-89777/8 Calibration Date: 06/13/2013 15:59

Instrument ID: A3UX15 Calib Start Date: 06/13/2013 13:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/13/2013 15:36

Lab File ID: UXC2263.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2897	0.1839		1.00	0.0100	NA -36.5	50.0
Chloromethane	Ave	0.3167	0.2561	0.1000	1.00	0.0100	-19.1	50.0
Vinyl chloride	Ave	0.3545	0.2890		1.00	0.0100	-18.5	20.0
Bromomethane	Qua		0.1458		1.00	0.0100	-1.2	50.0
Chloroethane	Qua		0.1775		1.00	0.0100	-4.4	50.0
Trichlorofluoromethane	Ave	0.4436	0.4405		1.00	0.0100	-0.7	50.0
Acrolein	Ave	0.0322	0.0300 NA		20.0	0.0300	-7.0	50.0
1,1-Dichloroethene	Ave	0.3139	0.3044		1.00	0.0100	-3.0	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2324	0.2507		1.00	0.0100	7.9	50.0
Acetone	Ave	0.0681	0.0605		10.0	0.0200	-11.1	50.0
Iodomethane	Ave	0.4913	0.4652		1.00	0.0100	-5.3	50.0
Carbon disulfide	Ave	0.7601	0.7329		1.00	0.0100	-3.6	50.0
Acetonitrile	Ave	0.0222	0.0220		20.0	0.0300	-0.9	50.0
Methyl acetate	Ave	0.1649	0.1783 NA		10.0	0.0100	8.1	50.0
Methylene Chloride	Lin1		0.3314		1.00	0.0100	-5.9	50.0
tert-Butyl alcohol	Ave	0.0128	0.0123 NA		50.0	0.200	-3.4	50.0
Acrylonitrile	Ave	0.0783	0.0754		20.0	0.0300	-3.7	50.0
Methyl tert-butyl ether	Ave	0.7031	0.6612		1.00	0.0100	-6.0	50.0
trans-1,2-Dichloroethene	Ave	0.3363	0.3227		1.00	0.0100	-4.1	50.0
Hexane	Ave	0.0693	0.0767		1.00	0.0100	10.7	20.0
1,1-Dichloroethane	Ave	0.5283	0.5231	0.1000	1.00	0.0100	-1.0	50.0
Vinyl acetate	Ave	0.0393	0.0422 NA		2.00	0.0100	7.4	50.0
2,2-Dichloropropane	Ave	0.2744	0.2616		1.00	0.0100	-4.7	50.0
cis-1,2-Dichloroethene	Ave	0.3458	0.3356		1.00	0.0100	-3.0	50.0
2-Butanone	Ave	0.0865	0.0842		10.0	0.0200	-2.6	50.0
Bromochloromethane	Ave	0.1638	0.1557		1.00	0.0100	-5.0	50.0
Tetrahydrofuran	Ave	0.0560	0.0549		5.00	0.0100	-2.0	50.0
Chloroform	Ave	0.5368	0.5301		1.00	0.0100	-1.3	20.0
1,1,1-Trichloroethane	Ave	0.3794	0.3769		1.00	0.0100	-0.7	50.0
Cyclohexane	Ave	0.4564	0.4657		1.00	0.0100	2.0	50.0
1,1-Dichloropropene	Ave	0.4198	0.4079		1.00	0.0100	-2.8	50.0
Carbon tetrachloride	Ave	0.3389	0.3518		1.00	0.0100	3.8	50.0
Benzene	Ave	1.251	1.288		1.00	0.0100	3.0	50.0
1,2-Dichloroethane	Ave	0.3766	0.3884		1.00	0.0100	3.1	50.0
Trichloroethene	Ave	0.3393	0.3547		1.00	0.0100	4.6	50.0
Methylcyclohexane	Ave	0.4426	0.4495		1.00	0.0100	1.6	50.0
1,2-Dichloropropane	Ave	0.2680	0.2742		1.00	0.0100	2.3	20.0
Dibromomethane	Ave	0.1504	0.1537		1.00	0.0100	2.2	50.0
Bromodichloromethane	Ave	0.3017	0.3223		1.00	0.0100	6.8	50.0
2-Chloroethyl vinyl ether	Lin1		0.1277		10.0	0.0100	4.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-89777/8 Calibration Date: 06/13/2013 15:59

Instrument ID: A3UX15 Calib Start Date: 06/13/2013 13:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/13/2013 15:36

Lab File ID: UXC2263.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.3643		1.00	0.0100	-6.6	50.0
4-Methyl-2-pentanone	Ave	0.1532	0.1706		10.0	0.0200	11.4	50.0
Toluene	Ave	1.891	1.993		1.00	0.0100	5.4	20.0
trans-1,3-Dichloropropene	Lin1		0.4344		1.00	0.0100	-6.2	50.0
1,1,2-Trichloroethane	Ave	0.3044	0.3335		1.00	0.0100	9.6	50.0
Tetrachloroethene	Ave	0.3973	0.4080		1.00	0.0100	2.7	50.0
1,3-Dichloropropane	Ave	0.5397	0.5859		1.00	0.0100	8.6	50.0
2-Hexanone	Ave	0.1492	0.1593		10.0	0.0200	6.8	50.0
Dibromochloromethane	Lin1		0.3026		1.00	0.0100	-5.6	50.0
1,2-Dibromoethane	Ave	0.2968	0.3056		1.00	0.0100	2.9	50.0
Chlorobenzene	Ave	1.179	1.175	0.3000	1.00	0.0100	-0.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3588	0.3674		1.00	0.0100	2.4	50.0
Ethylbenzene	Ave	0.6238	0.6537		1.00	0.0100	4.8	20.0
m-Xylene & p-Xylene	Ave	1.416	1.546		2.00	0.0200	9.2	50.0
o-Xylene	Ave	0.7211	0.7260		1.00	0.0100	0.7	50.0
Styrene	Ave	1.127	1.188		1.00	0.0100	5.4	50.0
Bromoform	Lin1		0.1493	0.1000	1.00	0.0100	-12.6	50.0
Isopropylbenzene	Ave	1.757	1.759		1.00	0.0100	0.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6429	0.6945	0.3000	1.00	0.0100	8.0	50.0
Bromobenzene	Ave	0.9455	1.010		1.00	0.0100	6.8	50.0
1,2,3-Trichloropropane	Ave	0.2187	0.2487		1.00	0.0100	13.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1321	0.1405		1.00	0.0200	6.3	50.0
n-Propylbenzene	Ave	0.9382	1.056		1.00	0.0100	12.6	50.0
2-Chlorotoluene	Ave	0.8387	0.9132		1.00	0.0100	8.9	50.0
1,3,5-Trimethylbenzene	Ave	2.662	2.814		1.00	0.0100	5.7	50.0
4-Chlorotoluene	Ave	2.696	2.858		1.00	0.0100	6.0	50.0
tert-Butylbenzene	Ave	2.336	2.512		1.00	0.0100	7.5	50.0
1,2,4-Trimethylbenzene	Ave	2.700	2.868		1.00	0.0100	6.2	50.0
sec-Butylbenzene	Ave	3.111	3.248		1.00	0.0100	4.4	50.0
1,3-Dichlorobenzene	Ave	1.656	1.684		1.00	0.0100	1.7	50.0
p-Isopropyltoluene	Ave	2.632	2.835		1.00	0.0100	7.7	50.0
1,4-Dichlorobenzene	Ave	1.727	1.709		1.00	0.0100	-1.0	50.0
n-Butylbenzene	Ave	2.157	2.182		1.00	0.0100	1.2	50.0
1,2-Dichlorobenzene	Ave	1.565	1.574		1.00	0.0100	0.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0872	0.0850		2.00	0.0100	-2.5	50.0
1,2,4-Trichlorobenzene	Ave	0.7763	0.6992		1.00	0.0100	-9.9	50.0
Hexachlorobutadiene	Qua		0.3616		1.00	0.0100	-19.0	50.0
Naphthalene	Ave	1.498	1.451		1.00	0.0100	-3.2	50.0
1,2,3-Trichlorobenzene	Qua		0.5917		1.00	0.0100	-9.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2835	0.2682		0.00842	0.00890	-5.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3168	0.2995		0.00841	0.00890	-5.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-89777/8 Calibration Date: 06/13/2013 15:59

Instrument ID: A3UX15 Calib Start Date: 06/13/2013 13:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/13/2013 15:36

Lab File ID: UXC2263.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.608	1.620		0.00896	0.00890	0.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4832	0.4842		0.00892	0.00890	0.2	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: UXC2632.D BFB Injection Date: 06/24/2013

Instrument ID: A3UX15 BFB Injection Time: 21:58

Analysis Batch No.: 91167

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.5	
75	30.0 - 60.0 % of mass 95	50.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.5	(0.5)1
174	50.0 - 120.00 % of mass 95	88.9	
175	5.0 - 9.0 % of mass 174	6.1	(6.8)1
176	95.0 - 101.0 % of mass 174	87.2	(98.1)1
177	5.0 - 9.0 % of mass 176	5.3	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-91167/2	UXC2633.D	06/24/2013	22:20
	CCV 240-91167/3	UXC2634.D	06/24/2013	22:42
	LCS 240-91167/4	UXC2635.D	06/24/2013	23:04
	MB 240-91167/5	UXC2637.D	06/24/2013	23:49
MRC-SW6B-061813	240-25905-7	UXC2652.D	06/25/2013	05:23
MRC-SW7A-061813	240-25905-8	UXC2653.D	06/25/2013	05:45
MRC-SW7B-061813	240-25905-9	UXC2654.D	06/25/2013	06:08
MRC-SW8A-061813	240-25905-10	UXC2655.D	06/25/2013	06:30
MRC-SW8B-061813	240-25905-11	UXC2656.D	06/25/2013	06:52
MRC-SW9A-061813	240-25905-12	UXC2657.D	06/25/2013	07:15
	240-25728-B-9 MS	UXC2658.D	06/25/2013	08:15
	240-25728-B-9 MSD	UXC2659.D	06/25/2013	08:37

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91167/2 Calibration Date: 06/24/2013 22:20

Instrument ID: A3UX15 Calib Start Date: 06/13/2013 13:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/13/2013 15:36

Lab File ID: UXC2633.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2897	0.2982		1.00	0.0100	2.9	50.0
Chloromethane	Ave	0.3167	0.3985	0.1000	1.00	0.0100	25.8	50.0
Vinyl chloride	Ave	0.3545	0.3667		1.00	0.0100	3.4	20.0
Bromomethane	Qua		0.2716		1.00	0.0100	70.5*	50.0
Chloroethane	Qua		0.3151		1.00	0.0100	63.2*	50.0
Trichlorofluoromethane	Ave	0.4436	0.5945		1.00	0.0100	34.0	50.0
Acrolein	Ave	0.0322	0.0251 NA		20.0	0.100	NA -22.2	50.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2324	0.2083		1.00	0.0100	-10.4	50.0
1,1-Dichloroethene	Ave	0.3139	0.2708		1.00	0.0100	-13.7	20.0
Acetone	Ave	0.0681	0.0657		10.0	0.0200	-3.6	50.0
Iodomethane	Ave	0.4913	0.4597		1.00	0.0100	-6.4	50.0
Carbon disulfide	Ave	0.7601	0.7403		1.00	0.0100	-2.6	50.0
Acetonitrile	Ave	0.0222	0.0251 NA		20.0	0.100	13.0	50.0
Methyl acetate	Ave	0.1649	0.1896		10.0	0.0200	14.9	50.0
Methylene Chloride	Lin1		0.3839		1.00	0.0100	10.8	50.0
tert-Butyl alcohol	Ave	0.0128	0.0131		50.0	0.200	3.0	50.0
Acrylonitrile	Ave	0.0783	0.0803		20.0	0.0200	2.5	50.0
Methyl tert-butyl ether	Ave	0.7031	0.5934		1.00	0.0100	-15.6	50.0
trans-1,2-Dichloroethene	Ave	0.3363	0.3322		1.00	0.0100	-1.2	50.0
Hexane	Ave	0.0693	0.0614		1.00	0.0100	-11.4	20.0
1,1-Dichloroethane	Ave	0.5283	0.5668	0.1000	1.00	0.0100	7.3	50.0
Vinyl acetate	Ave	0.0393	0.0318		2.00	0.0100	-19.2	50.0
2,2-Dichloropropane	Ave	0.2744	0.2464		1.00	0.0100	-10.2	50.0
cis-1,2-Dichloroethene	Ave	0.3458	0.3640		1.00	0.0100	5.3	50.0
2-Butanone	Ave	0.0865	0.0930		10.0	0.0200	7.5	50.0
Bromochloromethane	Ave	0.1638	0.1752		1.00	0.0100	6.9	50.0
Tetrahydrofuran	Ave	0.0560	0.0572		5.00	0.0100	2.0	50.0
Chloroform	Ave	0.5368	0.5899		1.00	0.0100	9.9	20.0
1,1,1-Trichloroethane	Ave	0.3794	0.4153		1.00	0.0100	9.5	50.0
Cyclohexane	Ave	0.4564	0.4218		1.00	0.0100	-7.6	50.0
1,1-Dichloropropene	Ave	0.4198	0.4313		1.00	0.0100	2.8	50.0
Carbon tetrachloride	Ave	0.3389	0.3275		1.00	0.0100	-3.4	50.0
Benzene	Ave	1.251	1.396		1.00	0.0100	11.6	50.0
1,2-Dichloroethane	Ave	0.3766	0.4312		1.00	0.0100	14.5	50.0
Trichloroethene	Ave	0.3393	0.3575		1.00	0.0100	5.4	50.0
Methylcyclohexane	Ave	0.4426	0.3981		1.00	0.0100	-10.1	50.0
1,2-Dichloropropane	Ave	0.2680	0.3147		1.00	0.0100	17.4	20.0
Dibromomethane	Ave	0.1504	0.1742		1.00	0.0100	15.8	50.0
1,4-Dioxane	Qua		0.0023 NA		50.0	0.500	NA 31.4	50.0
Bromodichloromethane	Ave	0.3017	0.3577		1.00	0.0100	18.6	50.0

FORM VII 8260B

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91167/2 Calibration Date: 06/24/2013 22:20

Instrument ID: A3UX15 Calib Start Date: 06/13/2013 13:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/13/2013 15:36

Lab File ID: UXC2633.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Lin1		0.1319		10.0	0.0200	2.4	50.0
cis-1,3-Dichloropropene	Lin1		0.3924		1.00	0.0100	0.2	50.0
4-Methyl-2-pentanone	Ave	0.1532	0.1684		10.0	0.0200	9.9	50.0
Toluene	Ave	1.891	2.101		1.00	0.0100	11.1	20.0
trans-1,3-Dichloropropene	Lin1		0.4503		1.00	0.0100	-3.0	50.0
Ethyl methacrylate	Ave	0.3478	0.4042		1.00	0.0100	16.2	50.0
1,1,2-Trichloroethane	Ave	0.3044	0.3697		1.00	0.0100	NA 21.5	50.0
Tetrachloroethene	Ave	0.3973	0.4126		1.00	0.0100	3.9	50.0
1,3-Dichloropropane	Ave	0.5397	0.6589		1.00	0.0100	22.1	50.0
2-Hexanone	Ave	0.1492	0.1581		10.0	0.0200	6.0	50.0
Dibromochloromethane	Lin1		0.3391		1.00	0.0100	5.1	50.0
1,2-Dibromoethane	Ave	0.2968	0.3467		1.00	0.0100	16.8	50.0
Chlorobenzene	Ave	1.179	1.285	0.3000	1.00	0.0100	9.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3588	0.4055		1.00	0.0100	13.0	50.0
Ethylbenzene	Ave	0.6238	0.6681		1.00	0.0100	7.1	20.0
m-Xylene & p-Xylene	Ave	1.416	1.632		2.00	0.0200	15.3	50.0
o-Xylene	Ave	0.7211	0.7872		1.00	0.0100	9.2	50.0
Styrene	Ave	1.127	1.270		1.00	0.0100	12.7	50.0
Bromoform	Lin1		0.1635	0.1000	1.00	0.0100	-4.8	50.0
Isopropylbenzene	Ave	1.757	1.822		1.00	0.0100	3.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6429	0.7579	0.3000	1.00	0.0100	17.9	50.0
Bromobenzene	Ave	0.9455	1.018		1.00	0.0100	7.7	50.0
1,2,3-Trichloropropane	Ave	0.2187	0.2447		1.00	0.0100	11.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1321	0.0489 NA		1.00	0.0100	NA -63.0*	50.0
n-Propylbenzene	Ave	0.9382	0.9574		1.00	0.0100	2.0	50.0
2-Chlorotoluene	Ave	0.8387	0.9208		1.00	0.0100	9.8	50.0
1,3,5-Trimethylbenzene	Ave	2.662	2.865		1.00	0.0100	7.7	50.0
4-Chlorotoluene	Ave	2.696	2.985		1.00	0.0100	10.7	50.0
tert-Butylbenzene	Ave	2.336	2.415		1.00	0.0100	3.4	50.0
1,2,4-Trimethylbenzene	Ave	2.700	2.927		1.00	0.0100	8.4	50.0
sec-Butylbenzene	Ave	3.111	3.180		1.00	0.0100	2.2	50.0
1,3-Dichlorobenzene	Ave	1.656	1.787		1.00	0.0100	7.9	50.0
p-Isopropyltoluene	Ave	2.632	2.704		1.00	0.0100	2.7	50.0
1,4-Dichlorobenzene	Ave	1.727	1.857		1.00	0.0100	7.5	50.0
n-Butylbenzene	Ave	2.157	2.141		1.00	0.0100	-0.8	50.0
1,2-Dichlorobenzene	Ave	1.565	1.742		1.00	0.0100	11.3	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0872	0.0944		2.00	0.0100	8.3	50.0
1,3,5-Trichlorobenzene	Ave	1.041	1.117		1.00	0.0100	7.3	50.0
1,2,4-Trichlorobenzene	Ave	0.7763	0.8525		1.00	0.0100	9.8	50.0
Hexachlorobutadiene	Qua		0.4413		1.00	0.0100	0.4	50.0
Naphthalene	Ave	1.498	1.652		1.00	0.0100	10.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91167/2 Calibration Date: 06/24/2013 22:20

Instrument ID: A3UX15 Calib Start Date: 06/13/2013 13:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/13/2013 15:36

Lab File ID: UXC2633.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.7292		1.00	0.0100	14.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2835	0.2761		0.00867	0.00890	-2.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3168	0.3042		0.00855	0.00890	-4.0	50.0
Toluene-d8 (Surr)	Ave	1.608	1.589		0.00880	0.00890	-1.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4832	0.4704		0.00866	0.00890	-2.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCV 240-91167/3 Calibration Date: 06/24/2013 22:42

Instrument ID: A3UX15 Calib Start Date: 05/29/2013 16:47

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 18:40

Lab File ID: UXC2634.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.7981	0.6639		2.00	0.0100	-16.8	50.0
Ethyl ether	Ave	0.2484	0.2294		2.00	0.0100	-7.7	50.0
3-Chloro-1-propene	Ave	0.1998	0.1239		2.00	0.0100	NA -38.0	50.0
Diisopropyl ether	Ave	0.3129	0.2671		10.0	0.0500	-14.6	50.0
2-Chloro-1,3-butadiene	Ave	0.5541	0.4556		2.00	0.0100	-17.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.9330	0.5925		5.00	0.0100	-36.5	50.0
Ethyl acetate	Ave	0.1378	0.1727		4.00	0.0200	NA 25.3	50.0
Propionitrile	Lin1		0.0255	NA	4.00	0.0200	-13.5	50.0
Methacrylonitrile	Ave	0.1179	0.1159		2.00	0.0100	-1.7	50.0
Isobutyl alcohol	Ave	0.0054	0.0048	NA	50.0	0.200	-11.3	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.8054	0.5185		5.00	0.0100	-35.6	50.0
n-Heptane	Ave	0.0657	0.0666		1.00	0.0100	1.4	50.0
n-Butanol	Ave	0.0046	0.0035	NA	50.0	0.200	NA -25.1	50.0
Methyl methacrylate	Ave	0.1119	0.1540		2.00	0.0100	NA 37.6	50.0
2-Nitropropane	Ave	0.0275	0.0245	NA	2.00	0.0200	-10.8	50.0
Cyclohexanone	Ave	0.0854	0.0489	NA	20.0	0.100	NA -42.8	50.0
1,2,3-Trimethylbenzene	Ave	2.897	3.040		0.0105	0.0100	4.9	50.0
2-Methylnaphthalene	Ave	0.8881	0.4574		5.00	0.0200	NA -48.5	50.0

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: STD8260 240-91248/4 Date Analyzed: 06/25/2013 10:30

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ2246.D Heated Purge: (Y/N) N

Calibration ID: 16074

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1073308	5.47	792143	8.15	267016	10.40
UPPER LIMIT		2146616	5.97	1584286	8.65	534032	10.90
LOWER LIMIT		536654	4.97	396072	7.65	133508	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-91248/14		1039542	5.47	757589	8.15	257590	10.40
CCVIS 240-91443/2		1155709	5.47	858252	8.15	295866	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: CCVIS 240-91443/2 Date Analyzed: 06/26/2013 09:17

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ2275.D Heated Purge: (Y/N) N

Calibration ID: 16076

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1155709	5.47	858252	8.15	295866	10.40
UPPER LIMIT		2311418	5.97	1716504	8.65	591732	10.90
LOWER LIMIT		577855	4.97	429126	7.65	147933	9.90
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-91443/3		1063762	5.47	784646	8.15	262155	10.40
LCS 240-91443/4		1046761	5.47	766706	8.15	268005	10.40
MB 240-91443/5		997759	5.47	725581	8.15	246405	10.40
240-25905-1	MRC-SW1A-061813	996848	5.47	718678	8.15	254974	10.40
240-25905-2	MRC-SW2A-061813	991937	5.47	734019	8.15	244767	10.40
240-25905-3	MRC-SW5A1-061813	1028274	5.47	747350	8.15	248509	10.40
240-25905-4	MRC-SW5A2-061813	1009571	5.47	730468	8.15	235809	10.40
240-25905-5	MRC-SW5B-061813	998366	5.47	727950	8.15	249192	10.40
240-25905-6	MRC-SW6A-061813	980246	5.47	722314	8.15	243198	10.40
240-25905-13	MRC-SW9B-061813	1012945	5.47	730842	8.15	240235	10.40
240-25905-14	TB-061813	1010397	5.47	742953	8.15	241751	10.40
240-25728-B-11 MS		1001182	5.47	726446	8.15	263196	10.40
240-25728-B-11 MSD		1015467	5.47	737235	8.15	266919	10.40

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: STD8260 240-89777/4 Date Analyzed: 06/13/2013 14:29

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC2259.D Heated Purge: (Y/N) N

Calibration ID: 15690

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2418052	5.22	1652480	7.89	841935	10.12
UPPER LIMIT		4836104	5.72	3304960	8.39	1683870	10.62
LOWER LIMIT		1209026	4.72	826240	7.39	420968	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-89777/8		2387604	5.22	1596711	7.89	727956	10.12
CCVIS 240-91167/2		1579536	5.22	1077896	7.89	545198	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: CCVIS 240-91167/2 Date Analyzed: 06/24/2013 22:20

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC2633.D Heated Purge: (Y/N) N

Calibration ID: 15690

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1579536	5.22	1077896	7.89	545198	10.12
UPPER LIMIT		3159072	5.72	2155792	8.39	1090396	10.62
LOWER LIMIT		789768	4.72	538948	7.39	272599	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-91167/3		1649655	5.22	1029179	7.89	450791	10.12
LCS 240-91167/4		1528219	5.22	1030711	7.89	554254	10.12
MB 240-91167/5		1411711	5.22	941218	7.89	428396	10.12
240-25905-7	MRC-SW6B-061813	1454901	5.22	941307	7.89	381077	10.12
240-25905-8	MRC-SW7A-061813	1417557	5.22	923772	7.89	380006	10.12
240-25905-9	MRC-SW7B-061813	1355108	5.22	888992	7.89	368841	10.12
240-25905-10	MRC-SW8A-061813	1436796	5.22	926143	7.89	372980	10.12
240-25905-11	MRC-SW8B-061813	1313181	5.22	863040	7.89	374941	10.12
240-25905-12	MRC-SW9A-061813	1283234	5.22	874062	7.89	376704	10.12
240-25728-B-9 MS		1477428	5.22	1000812	7.89	529959	10.12
240-25728-B-9 MSD		1466768	5.22	1015861	7.89	534438	10.12

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Instrument ID: A3UX11 Start Date: 06/25/2013 09:14

Analysis Batch Number: 91248 End Date: 06/25/2013 20:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-91248/1		06/25/2013 09:14	1	BFB142.D	DB-624 0.18(mm)
STD8260 240-91248/2 IC		06/25/2013 09:43	1	UXJ2244.D	DB-624 0.18(mm)
STD8260 240-91248/3 IC		06/25/2013 10:07	1	UXJ2245.D	DB-624 0.18(mm)
STD8260 240-91248/4 ICIS		06/25/2013 10:30	1	UXJ2246.D	DB-624 0.18(mm)
STD8260 240-91248/5 IC		06/25/2013 10:54	1	UXJ2247.D	DB-624 0.18(mm)
STD8260 240-91248/6 IC		06/25/2013 11:17	1	UXJ2248.D	DB-624 0.18(mm)
STD8260 240-91248/7 IC		06/25/2013 11:41	1	UXJ2249.D	DB-624 0.18(mm)
STD6 240-91248/8 IC		06/25/2013 12:04	1	UXJ2250.D	DB-624 0.18(mm)
STD5 240-91248/9 IC		06/25/2013 12:28	1	UXJ2251.D	DB-624 0.18(mm)
STD4 240-91248/10 IC		06/25/2013 12:51	1	UXJ2252.D	DB-624 0.18(mm)
STD3 240-91248/11 IC		06/25/2013 13:15	1	UXJ2253.D	DB-624 0.18(mm)
STD2 240-91248/12 IC		06/25/2013 13:39	1	UXJ2254.D	DB-624 0.18(mm)
STD1 240-91248/13 IC		06/25/2013 14:03	1	UXJ2255.D	DB-624 0.18(mm)
ICV 240-91248/14		06/25/2013 14:26	1	UXJ2256.D	DB-624 0.18(mm)
ZZZZZ		06/25/2013 14:50	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 15:37	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 16:01	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 16:25	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 16:49	2.5		DB-624 0.18(mm)
ZZZZZ		06/25/2013 17:13	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 17:36	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 18:00	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 18:23	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 18:47	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 19:10	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 19:34	3.33		DB-624 0.18(mm)
ZZZZZ		06/25/2013 19:57	3.33		DB-624 0.18(mm)
ZZZZZ		06/25/2013 20:21	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 20:45	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Instrument ID: A3UX11 Start Date: 06/26/2013 08:46

Analysis Batch Number: 91443 End Date: 06/26/2013 19:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-91443/1		06/26/2013 08:46	1	BFB143A.D	DB-624 0.18(mm)
CCVIS 240-91443/2		06/26/2013 09:17	1	UXJ2275.D	DB-624 0.18(mm)
CCV 240-91443/3		06/26/2013 09:41	1	UXJ2276.D	DB-624 0.18(mm)
LCS 240-91443/4		06/26/2013 10:04	1	UXJ2277.D	DB-624 0.18(mm)
MB 240-91443/5		06/26/2013 10:52	1	UXJ2279.D	DB-624 0.18(mm)
ZZZZZ		06/26/2013 11:15	333.33		DB-624 0.18(mm)
ZZZZZ		06/26/2013 11:39	625		DB-624 0.18(mm)
ZZZZZ		06/26/2013 12:03	5000		DB-624 0.18(mm)
ZZZZZ		06/26/2013 12:26	1		DB-624 0.18(mm)
240-25905-1	MRC-SW1A-061813	06/26/2013 12:50	1	UXJ2284.D	DB-624 0.18(mm)
240-25905-2	MRC-SW2A-061813	06/26/2013 13:14	1	UXJ2285.D	DB-624 0.18(mm)
240-25905-3	MRC-SW5A1-061813	06/26/2013 13:37	1	UXJ2286.D	DB-624 0.18(mm)
240-25905-4	MRC-SW5A2-061813	06/26/2013 14:01	1	UXJ2287.D	DB-624 0.18(mm)
240-25905-5	MRC-SW5B-061813	06/26/2013 14:25	1	UXJ2288.D	DB-624 0.18(mm)
240-25905-6	MRC-SW6A-061813	06/26/2013 14:48	1	UXJ2289.D	DB-624 0.18(mm)
240-25905-13	MRC-SW9B-061813	06/26/2013 15:12	1	UXJ2290.D	DB-624 0.18(mm)
240-25905-14	TB-061813	06/26/2013 15:36	1	UXJ2291.D	DB-624 0.18(mm)
ZZZZZ		06/26/2013 15:59	1		DB-624 0.18(mm)
ZZZZZ		06/26/2013 16:23	1		DB-624 0.18(mm)
ZZZZZ		06/26/2013 16:47	1		DB-624 0.18(mm)
ZZZZZ		06/26/2013 17:10	1		DB-624 0.18(mm)
ZZZZZ		06/26/2013 17:34	1		DB-624 0.18(mm)
ZZZZZ		06/26/2013 17:58	1		DB-624 0.18(mm)
ZZZZZ		06/26/2013 18:22	1		DB-624 0.18(mm)
ZZZZZ		06/26/2013 18:45	1		DB-624 0.18(mm)
240-25728-B-11 MS		06/26/2013 19:09	333.33	UXJ2300.D	DB-624 0.18(mm)
240-25728-B-11 MSD		06/26/2013 19:33	333.33	UXJ2301.D	DB-624 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Instrument ID: A3UX15 Start Date: 05/29/2013 14:09

Analysis Batch Number: 87623 End Date: 05/30/2013 01:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-87623/1		05/29/2013 14:09	1	BFB142A.D	DB-624 0.18(mm)
STD8260 240-87623/2 IC		05/29/2013 14:32	1		DB-624 0.18(mm)
STD8260 240-87623/3 IC		05/29/2013 14:55	1		DB-624 0.18(mm)
STD8260 240-87623/4 ICIS		05/29/2013 15:17	1		DB-624 0.18(mm)
STD8260 240-87623/5 IC		05/29/2013 15:40	1		DB-624 0.18(mm)
STD8260 240-87623/6 IC		05/29/2013 16:02	1		DB-624 0.18(mm)
STD8260 240-87623/7 IC		05/29/2013 16:25	1		DB-624 0.18(mm)
STD 240-87623/8 IC		05/29/2013 16:47	1	UXC1850.D	DB-624 0.18(mm)
STD 240-87623/9 IC		05/29/2013 17:10	1	UXC1851.D	DB-624 0.18(mm)
STD 240-87623/10 IC		05/29/2013 17:32	1	UXC1852.D	DB-624 0.18(mm)
STD 240-87623/11 IC		05/29/2013 17:55	1	UXC1853.D	DB-624 0.18(mm)
STD 240-87623/12 IC		05/29/2013 18:17	1	UXC1854.D	DB-624 0.18(mm)
STD 240-87623/13 IC		05/29/2013 18:40	1	UXC1855.D	DB-624 0.18(mm)
ICV 240-87623/14		05/29/2013 19:02	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 19:24	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 19:46	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 20:54	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 21:17	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 21:39	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 22:01	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 22:24	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 22:46	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 23:08	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 23:30	1		DB-624 0.18(mm)
ZZZZZ		05/29/2013 23:53	1		DB-624 0.18(mm)
ZZZZZ		05/30/2013 00:15	1		DB-624 0.18(mm)
ZZZZZ		05/30/2013 00:37	1		DB-624 0.18(mm)
ZZZZZ		05/30/2013 00:59	1		DB-624 0.18(mm)
ZZZZZ		05/30/2013 01:22	1		DB-624 0.18(mm)
ZZZZZ		05/30/2013 01:44	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Instrument ID: A3UX15 Start Date: 06/13/2013 13:15

Analysis Batch Number: 89777 End Date: 06/14/2013 00:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-89777/1		06/13/2013 13:15	1	BFB156.D	DB-624 0.18(mm)
STD8260 240-89777/2 IC		06/13/2013 13:44	1	UXC2257.D	DB-624 0.18(mm)
STD8260 240-89777/3 IC		06/13/2013 14:07	1	UXC2258.D	DB-624 0.18(mm)
STD8260 240-89777/4 ICIS		06/13/2013 14:29	1	UXC2259.D	DB-624 0.18(mm)
STD8260 240-89777/5 IC		06/13/2013 14:52	1	UXC2260.D	DB-624 0.18(mm)
STD8260 240-89777/6 IC		06/13/2013 15:14	1	UXC2261.D	DB-624 0.18(mm)
STD8260 240-89777/7 IC		06/13/2013 15:36	1	UXC2262.D	DB-624 0.18(mm)
ICV 240-89777/8		06/13/2013 15:59	1	UXC2263.D	DB-624 0.18(mm)
CCV 240-89777/9		06/13/2013 16:22	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 16:44	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 17:29	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 18:14	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 18:36	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 18:59	40		DB-624 0.18(mm)
ZZZZZ		06/13/2013 19:21	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 19:43	33.33		DB-624 0.18(mm)
ZZZZZ		06/13/2013 20:05	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 20:28	33.33		DB-624 0.18(mm)
ZZZZZ		06/13/2013 20:50	2.5		DB-624 0.18(mm)
ZZZZZ		06/13/2013 21:12	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 21:34	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 21:57	15.38		DB-624 0.18(mm)
ZZZZZ		06/13/2013 22:19	16.67		DB-624 0.18(mm)
ZZZZZ		06/13/2013 22:41	3.33		DB-624 0.18(mm)
ZZZZZ		06/13/2013 23:03	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 23:25	1		DB-624 0.18(mm)
ZZZZZ		06/13/2013 23:48	1		DB-624 0.18(mm)
ZZZZZ		06/14/2013 00:10	1		DB-624 0.18(mm)
ZZZZZ		06/14/2013 00:32	40		DB-624 0.18(mm)
ZZZZZ		06/14/2013 00:54	40		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Instrument ID: A3UX15 Start Date: 06/24/2013 21:58

Analysis Batch Number: 91167 End Date: 06/25/2013 09:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-91167/1		06/24/2013 21:58	1	UXC2632.D	DB-624 0.18(mm)
CCVIS 240-91167/2		06/24/2013 22:20	1	UXC2633.D	DB-624 0.18(mm)
CCV 240-91167/3		06/24/2013 22:42	1	UXC2634.D	DB-624 0.18(mm)
LCS 240-91167/4		06/24/2013 23:04	1	UXC2635.D	DB-624 0.18(mm)
MB 240-91167/5		06/24/2013 23:49	1	UXC2637.D	DB-624 0.18(mm)
ZZZZZ		06/25/2013 00:11	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 00:33	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 00:55	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 01:17	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 01:40	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 02:24	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 02:46	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 03:09	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 03:31	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 03:53	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 04:16	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 04:38	1		DB-624 0.18(mm)
ZZZZZ		06/25/2013 05:01	1		DB-624 0.18(mm)
240-25905-7	MRC-SW6B-061813	06/25/2013 05:23	1	UXC2652.D	DB-624 0.18(mm)
240-25905-8	MRC-SW7A-061813	06/25/2013 05:45	1	UXC2653.D	DB-624 0.18(mm)
240-25905-9	MRC-SW7B-061813	06/25/2013 06:08	1	UXC2654.D	DB-624 0.18(mm)
240-25905-10	MRC-SW8A-061813	06/25/2013 06:30	1	UXC2655.D	DB-624 0.18(mm)
240-25905-11	MRC-SW8B-061813	06/25/2013 06:52	1	UXC2656.D	DB-624 0.18(mm)
240-25905-12	MRC-SW9A-061813	06/25/2013 07:15	1	UXC2657.D	DB-624 0.18(mm)
240-25728-B-9 MS		06/25/2013 08:15	333.33	UXC2658.D	DB-624 0.18(mm)
240-25728-B-9 MSD		06/25/2013 08:37	333.33	UXC2659.D	DB-624 0.18(mm)
ZZZZZ		06/25/2013 09:00	333.33		DB-624 0.18(mm)

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 240-91167/4
Matrix: Water
Lab File ID: UXC2635.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/24/2013 23:04
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91167
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	18.5		5.0	1.1
71-43-2	Benzene	10.9		1.0	0.13
108-86-1	Bromobenzene	10.3		1.0	0.13
74-97-5	Bromochloromethane	10.5		1.0	0.29
75-27-4	Bromodichloromethane	11.7		1.0	0.15
75-25-2	Bromoform	8.90		1.0	0.64
74-83-9	Bromomethane	14.2		1.0	0.41
78-93-3	2-Butanone	20.6		5.0	0.57
75-15-0	Carbon disulfide	11.2		1.0	0.13
56-23-5	Carbon tetrachloride	9.81		1.0	0.13
108-90-7	Chlorobenzene	10.6		1.0	0.15
75-00-3	Chloroethane	14.4		1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	9.57	J	10	0.99
67-66-3	Chloroform	10.7		1.0	0.16
74-87-3	Chloromethane	10.5		1.0	0.30
95-49-8	2-Chlorotoluene	10.2		1.0	0.11
106-43-4	4-Chlorotoluene	10.2		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	9.37		1.0	0.14
124-48-1	Dibromochloromethane	9.52		1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	10.5		5.0	0.67
106-93-4	1,2-Dibromoethane	11.0		1.0	0.24
74-95-3	Dibromomethane	11.2		1.0	0.28
95-50-1	1,2-Dichlorobenzene	10.6		1.0	0.13
541-73-1	1,3-Dichlorobenzene	10.4		1.0	0.14
106-46-7	1,4-Dichlorobenzene	10.2		1.0	0.13
75-71-8	Dichlorodifluoromethane	7.45		1.0	0.31
75-34-3	1,1-Dichloroethane	10.7		1.0	0.15
107-06-2	1,2-Dichloroethane	10.6		1.0	0.22
75-35-4	1,1-Dichloroethene	9.56		1.0	0.19
78-87-5	1,2-Dichloropropane	11.3		1.0	0.18
142-28-9	1,3-Dichloropropane	11.2		1.0	0.16
594-20-7	2,2-Dichloropropane	9.47		1.0	0.13
563-58-6	1,1-Dichloropropene	9.98		1.0	0.13
108-20-3	Diisopropyl ether	8.64		5.0	1.5
100-41-4	Ethylbenzene	10.8		1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 240-91167/4
Matrix: Water
Lab File ID: UXC2635.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/24/2013 23:04
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91167
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
87-68-3	Hexachlorobutadiene	10.0		1.0	0.30
591-78-6	2-Hexanone	21.3		5.0	0.41
98-82-8	Isopropylbenzene	10.6		1.0	0.13
75-09-2	Methylene Chloride	10.8		1.0	0.33
108-10-1	4-Methyl-2-pentanone	21.6		5.0	0.32
1634-04-4	Methyl tert-butyl ether	7.67		1.0	0.17
179601-23-1	m-Xylene & p-Xylene	22.7		2.0	0.24
91-20-3	Naphthalene	10.1		1.0	0.24
104-51-8	n-Butylbenzene	10.2		1.0	0.12
103-65-1	n-Propylbenzene	10.1		1.0	0.14
95-47-6	o-Xylene	10.8		1.0	0.14
99-87-6	p-Isopropyltoluene	10.4		1.0	0.12
135-98-8	sec-Butylbenzene	10.1		1.0	0.13
100-42-5	Styrene	11.5		1.0	0.11
75-65-0	tert-Butyl alcohol	192		20	3.9
98-06-6	tert-Butylbenzene	10.0		1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	11.4		1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	10.2		1.0	0.18
127-18-4	Tetrachloroethene	10.5		1.0	0.29
108-88-3	Toluene	10.7		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.85		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	9.13		1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	10.7		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	9.82		1.0	0.15
71-55-6	1,1,1-Trichloroethane	11.0		1.0	0.22
79-01-6	Trichloroethene	11.1		1.0	0.17
75-69-4	Trichlorofluoromethane	12.7		1.0	0.21
96-18-4	1,2,3-Trichloropropane	10.2		1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	10.5		1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	9.93		5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	10.4		1.0	0.12
108-05-4	Vinyl acetate	9.21		2.0	0.19
75-01-4	Vinyl chloride	9.00		1.0	0.22
1330-20-7	Xylenes, Total	33.5		2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 240-91167/4
Matrix: Water
Lab File ID: UXC2635.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/24/2013 23:04
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91167
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		66-117
1868-53-7	Dibromofluoromethane (Surr)	101		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
2037-26-5	Toluene-d8 (Surr)	102		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-91443/4

Matrix: Water | Lab File ID: UXJ2277.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 10:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	15.6		5.0	1.1
71-43-2	Benzene	9.75		1.0	0.13
108-86-1	Bromobenzene	9.45		1.0	0.13
74-97-5	Bromochloromethane	9.70		1.0	0.29
75-27-4	Bromodichloromethane	10.0		1.0	0.15
75-25-2	Bromoform	9.41		1.0	0.64
74-83-9	Bromomethane	8.43		1.0	0.41
78-93-3	2-Butanone	18.5		5.0	0.57
75-15-0	Carbon disulfide	9.95		1.0	0.13
56-23-5	Carbon tetrachloride	10.0		1.0	0.13
108-90-7	Chlorobenzene	9.57		1.0	0.15
75-00-3	Chloroethane	9.34		1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	9.52	J	10	0.99
67-66-3	Chloroform	9.66		1.0	0.16
74-87-3	Chloromethane	8.93		1.0	0.30
95-49-8	2-Chlorotoluene	9.85		1.0	0.11
106-43-4	4-Chlorotoluene	9.74		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	9.76		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	9.39		1.0	0.14
124-48-1	Dibromochloromethane	9.71		1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	7.96		5.0	0.67
106-93-4	1,2-Dibromoethane	9.50		1.0	0.24
74-95-3	Dibromomethane	9.64		1.0	0.28
95-50-1	1,2-Dichlorobenzene	9.39		1.0	0.13
541-73-1	1,3-Dichlorobenzene	9.53		1.0	0.14
106-46-7	1,4-Dichlorobenzene	9.49		1.0	0.13
75-71-8	Dichlorodifluoromethane	8.41		1.0	0.31
75-34-3	1,1-Dichloroethane	10.2		1.0	0.15
107-06-2	1,2-Dichloroethane	10.0		1.0	0.22
75-35-4	1,1-Dichloroethene	9.41		1.0	0.19
78-87-5	1,2-Dichloropropane	9.94		1.0	0.18
142-28-9	1,3-Dichloropropane	9.42		1.0	0.16
594-20-7	2,2-Dichloropropane	9.58		1.0	0.13
563-58-6	1,1-Dichloropropene	9.62		1.0	0.13
108-20-3	Diisopropyl ether	10.4		5.0	1.5
100-41-4	Ethylbenzene	9.81		1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 240-91443/4
Matrix: Water
Lab File ID: UXJ2277.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 10:04
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
87-68-3	Hexachlorobutadiene	8.71		1.0	0.30
591-78-6	2-Hexanone	17.7		5.0	0.41
98-82-8	Isopropylbenzene	9.51		1.0	0.13
75-09-2	Methylene Chloride	9.81		1.0	0.33
108-10-1	4-Methyl-2-pentanone	18.2		5.0	0.32
1634-04-4	Methyl tert-butyl ether	9.63		1.0	0.17
179601-23-1	m-Xylene & p-Xylene	19.1		2.0	0.24
91-20-3	Naphthalene	8.83		1.0	0.24
104-51-8	n-Butylbenzene	9.03		1.0	0.12
103-65-1	n-Propylbenzene	10.0		1.0	0.14
95-47-6	o-Xylene	9.90		1.0	0.14
99-87-6	p-Isopropyltoluene	9.87		1.0	0.12
135-98-8	sec-Butylbenzene	9.36		1.0	0.13
100-42-5	Styrene	9.91		1.0	0.11
75-65-0	tert-Butyl alcohol	183		20	3.9
98-06-6	tert-Butylbenzene	9.12		1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	9.70		1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	9.34		1.0	0.18
127-18-4	Tetrachloroethene	9.55		1.0	0.29
108-88-3	Toluene	9.57		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.15		1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	9.55		1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	8.58		1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	8.86		1.0	0.15
71-55-6	1,1,1-Trichloroethane	10.0		1.0	0.22
79-01-6	Trichloroethene	9.86		1.0	0.17
75-69-4	Trichlorofluoromethane	9.39		1.0	0.21
96-18-4	1,2,3-Trichloropropane	8.75		1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	11.0		1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	9.74		5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	9.86		1.0	0.12
108-05-4	Vinyl acetate	11.0		2.0	0.19
75-01-4	Vinyl chloride	9.43		1.0	0.22
1330-20-7	Xylenes, Total	29.0		2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 240-91443/4
Matrix: Water
Lab File ID: UXJ2277.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 10:04
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		66-117
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
2037-26-5	Toluene-d8 (Surr)	96		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: 240-25728-B-9 MS
Matrix: Water
Lab File ID: UXC2658.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/25/2013 08:15
Soil Aliquot Vol:
Dilution Factor: 333.33
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91167
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-00-3	Chloroethane	5030		330	97
156-59-2	cis-1,2-Dichloroethene	3290		330	57
75-34-3	1,1-Dichloroethane	3470		330	50
75-35-4	1,1-Dichloroethene	3170		330	63
127-18-4	Tetrachloroethene	3440		330	97
79-01-6	Trichloroethene	11700		330	57
75-01-4	Vinyl chloride	3160		330	73

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		66-117
1868-53-7	Dibromofluoromethane (Surr)	98		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
2037-26-5	Toluene-d8 (Surr)	100		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: 240-25728-B-11 MS
Matrix: Water
Lab File ID: UXJ2300.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 19:09
Soil Aliquot Vol:
Dilution Factor: 333.33
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-00-3	Chloroethane	3070		330	97
156-59-2	cis-1,2-Dichloroethene	3240		330	57
75-34-3	1,1-Dichloroethane	3510		330	50
75-35-4	1,1-Dichloroethene	2640		330	63
127-18-4	Tetrachloroethene	3010		330	97
79-01-6	Trichloroethene	10300		330	57
75-01-4	Vinyl chloride	2820		330	73

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		66-117
1868-53-7	Dibromofluoromethane (Surr)	99		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
2037-26-5	Toluene-d8 (Surr)	99		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: 240-25728-B-9 MSD
Matrix: Water
Lab File ID: UXC2659.D
Analysis Method: 8260B
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/25/2013 08:37
Soil Aliquot Vol:
Dilution Factor: 333.33
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91167
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-00-3	Chloroethane	4830		330	97
156-59-2	cis-1,2-Dichloroethene	3460		330	57
75-34-3	1,1-Dichloroethane	3470		330	50
75-35-4	1,1-Dichloroethene	3060		330	63
127-18-4	Tetrachloroethene	3570		330	97
79-01-6	Trichloroethene	12300		330	57
75-01-4	Vinyl chloride	3110		330	73

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		66-117
1868-53-7	Dibromofluoromethane (Surr)	100		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
2037-26-5	Toluene-d8 (Surr)	103		74-115

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-25728-B-11 MSD

Matrix: Water | Lab File ID: UXJ2301.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 19:33

Soil Aliquot Vol: | Dilution Factor: 333.33

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-00-3	Chloroethane	3020		330	97
156-59-2	cis-1,2-Dichloroethene	3060		330	57
75-34-3	1,1-Dichloroethane	3240		330	50
75-35-4	1,1-Dichloroethene	3580		330	63
127-18-4	Tetrachloroethene	2970		330	97
79-01-6	Trichloroethene	10600		330	57
75-01-4	Vinyl chloride	3100		330	73

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		66-117
1868-53-7	Dibromofluoromethane (Surr)	88		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
2037-26-5	Toluene-d8 (Surr)	95		74-115

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Sample Quantitation

Lab Name: TestAmerica Canton

Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813

Lab Sample ID: 240-25905-1

Matrix: Water

Lab File ID: UXJ2284.D

Analysis Method: 8260B

Date Collected: 06/18/2013 08:35

Sample wt/vol: 5(mL)

Date Analyzed: 06/26/2013 12:50

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: DB-624 ID: 0.18(mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 91443

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	9.3		5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
78-93-3	2-Butanone	1.7	J	5.0	0.57
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
67-66-3	Chloroform	0.18	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813 | Lab Sample ID: 240-25905-1

Matrix: Water | Lab File ID: UXJ2284.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:35

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 12:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
591-78-6	2-Hexanone	5.0	U	5.0	0.41
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.33	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID: MRC-SW1A-061813
Lab Sample ID: 240-25905-1
Matrix: Water
Lab File ID: UXJ2284.D
Analysis Method: 8260B
Date Collected: 06/18/2013 08:35
Sample wt/vol: 5(mL)
Date Analyzed: 06/26/2013 12:50
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 91443
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
2037-26-5	Toluene-d8 (Surr)	91		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: MRC-SW1A-061813 | Lab Sample ID: 240-25905-1

Matrix: Water | Lab File ID: UXJ2284.D

Analysis Method: 8260B | Date Collected: 06/18/2013 08:35

Sample wt/vol: 5(mL) | Date Analyzed: 06/26/2013 12:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 91443 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.39	5.0	T J N

TestAmerica Canton
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX11\20130626-21118.b\UXJ2284.D		
Lims ID:	240-25905-C-1	Client ID:	MRC-SW1A-061813
Inject. Date:	26-Jun-2013 12:50:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0021118-010		
Misc. Info.:	J30626A,8260LLUX11,,43582		
Operator:	43582	Instrument ID:	A3UX11
Purge Vol:	5.000 mL	ALS Bottle#:	10
Lims Batch ID:	91443	Lims Sample ID:	10
Detector:	MS SCAN		

Method:	\\Ncchrom\ChromData\A3UX11\20130626-21118.b\8260_11.m		
Last Update:	27-Jun-2013 13:26:07	Calib Date:	25-Jun-2013 14:03:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX11\20130625-21063.b\UXJ2255.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	DB-624	Column Dia:	0.18 mm
Process Host:	XAWRK014		

First Level Reviewer: williamsla Date: 27-Jun-2013 13:17:38

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.466	5.466	0.0	97	996848	10.0	
* 2 Chlorobenzene-d5	117	8.152	8.152	0.0	89	718678	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.401	10.400	0.001	95	254974	10.0	
$ 4 Dibromofluoromethane (Surr)	113	4.886	4.886	0.0	97	223779	7.54	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.182	5.182	0.0	85	284397	6.99	
$ 6 Toluene-d8 (Surr)	98	6.839	6.839	0.0	95	848032	7.61	
$ 7 4-Bromofluorobenzene (Surr)	95	9.265	9.265	0.0	84	266423	8.00	
8 Dichlorodifluoromethane	85		1.715					
9 Chloromethane	50		1.881					9
10 Vinyl chloride	62		1.987					
11 Bromomethane	94		2.307					
12 Chloroethane	64		2.390					
14 Trichlorofluoromethane	101		2.614					
17 Acetone	43	3.064	3.064	0.0	93	121066	9.32	
19 1,1-Dichloroethene	96		3.076					
18 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.076					
23 Carbon disulfide	76		3.277					9
26 Methylene Chloride	84		3.466					9
27 2-Methyl-2-propanol	59		3.514					9
29 trans-1,2-Dichloroethene	96		3.679					9
30 Methyl tert-butyl ether	73		3.679					9
32 1,1-Dichloroethane	63		4.023					9
33 Vinyl acetate	86		4.046					
34 Isopropyl ether	87		4.070					
37 Tert-butyl ethyl ether	59		4.378					9
38 2-Butanone (MEK)	43	4.508	4.496	0.012	86	30235	1.69	
40 cis-1,2-Dichloroethene	96		4.496					9
39 2,2-Dichloropropane	77		4.508					
43 Chlorobromomethane	128		4.697					
45 Chloroform	83	4.756	4.756	0.0	63	9723	0.1757	

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
46 1,1,1-Trichloroethane	97		4.934					
48 1,1-Dichloropropene	75		5.064					9
49 Carbon tetrachloride	117		5.076					
51 1,2-Dichloroethane	62		5.241					
52 Benzene	78		5.241					
53 Tert-amyl methyl ether	73		5.324					
56 Trichloroethene	130	5.774	5.786	-0.012	70	12162	0.3348	
59 1,2-Dichloropropane	63		5.975					
61 Dibromomethane	93		6.070					
63 Dichlorobromomethane	83		6.200					9
65 2-Chloroethyl vinyl ether	63		6.436					
66 cis-1,3-Dichloropropene	75		6.578					
67 4-Methyl-2-pentanone (MIBK)	43		6.709					
68 Toluene	91		6.898					9
69 trans-1,3-Dichloropropene	75		7.064					
72 Tetrachloroethene	164		7.395					
73 1,3-Dichloropropane	76		7.395					
74 2-Hexanone	43		7.454					
76 Chlorodibromomethane	129		7.608					
77 Ethylene Dibromide	107		7.726					
79 Chlorobenzene	112		8.176					
80 1,1,1,2-Tetrachloroethane	131		8.247					
81 Ethylbenzene	106		8.271					
82 m-Xylene & p-Xylene	106		8.377					
84 Styrene	104		8.768					9
83 o-Xylene	106		8.768					
85 Bromoform	173		8.957					
86 Isopropylbenzene	105		9.111					
88 1,1,2,2-Tetrachloroethane	83		9.383					
89 Bromobenzene	156		9.418					
90 1,2,3-Trichloropropane	110		9.430					
92 N-Propylbenzene	120		9.513					
93 2-Chlorotoluene	126		9.608					
95 4-Chlorotoluene	126		9.714					
96 tert-Butylbenzene	119		10.010					
97 1,2,4-Trimethylbenzene	105		10.057					9
98 sec-Butylbenzene	105		10.223					
99 1,3-Dichlorobenzene	146		10.341					
100 4-Isopropyltoluene	119		10.365					
101 1,4-Dichlorobenzene	146		10.424					
102 1,2,3-Trimethylbenzene	105		10.471					
103 n-Butylbenzene	91		10.767					9
104 1,2-Dichlorobenzene	146		10.803					
105 1,2-Dibromo-3-Chloropropane	157		11.572					
107 1,2,4-Trichlorobenzene	180		12.412					
108 Hexachlorobutadiene	225		12.590					
109 Naphthalene	128		12.672					
110 1,2,3-Trichlorobenzene	180		12.945					
S 114 Xylenes, Total	106		16.530					

$$\text{Result} = \frac{\text{Response}_{\text{analyte}}}{\text{Response}_{\text{Int. Std}}} \times \frac{\text{Amt}_{\text{Int. Std}}}{\text{I Cal RRF}}$$

$$= \frac{12162}{996848} \times \frac{10\ \text{ug/L}}{0.3644}$$

$$= 0.33 \checkmark$$

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 91248

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2013 09:43 Calibration End Date: 06/25/2013 11:41 Calibration ID: 16074

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0237 0.0184	0.0202	0.0206	0.0199	0.0215	Ave		0.0207				8.6		15.0			
Acrylonitrile	0.1749 0.1411	0.1596	0.1504	0.1488	0.1444	Ave		0.1532				8.1		15.0			
Methyl tert-butyl ether	0.8589 0.7641	0.7905	0.7323	0.7709	0.7942	Ave		0.7851				5.4		15.0			
trans-1,2-Dichloroethene	0.3241 0.3102	0.3145	0.3071	0.3165	0.3187	Ave		0.3152				1.9		15.0			
Hexane	0.0662 0.0677	0.0620	0.0537	0.0630	0.0681	Ave		0.0635				8.5		15.0			
1,1-Dichloroethane	0.7085 0.6771	0.6562	0.6724	0.6608	0.6845	Ave		0.6766			0.1000	2.8		15.0			
Vinyl acetate	0.0500 0.0612	0.0610	0.0507	0.0534	0.0619	Ave		0.0564				9.9		15.0			
cis-1,2-Dichloroethene	0.3411 0.3471	0.3444	0.3443	0.3332	0.3436	Ave		0.3423				1.4		15.0			
2-Butanone	0.1991 0.1626	0.1743	0.1881	0.1745	0.1772	Ave		0.1793				7.1		15.0			
2,2-Dichloropropane	0.3125 0.2522	0.3291	0.3011	0.2926	0.3112	Ave		0.2998				8.8		15.0			
Bromochloromethane	0.1848 0.1856	0.1750	0.1761	0.1734	0.1874	Ave		0.1804				3.4		15.0			
Tetrahydrofuran	0.1965 0.1026	0.1202	0.1227	0.1100	0.1145	Lin1	0.0773	0.1036							0.9960		0.9900
Chloroform	0.5965 0.5654	0.5333	0.5339	0.5371	0.5643	Ave		0.5551				4.5		15.0			
1,1,1-Trichloroethane	0.4540 0.3939	0.4095	0.4088	0.4213	0.4421	Ave		0.4216				5.4		15.0			
Cyclohexane	0.6706 0.5684	0.6022	0.5519	0.5679	0.6120	Ave		0.5955				7.3		15.0			
1,1-Dichloropropene	0.4140 0.4254	0.4044	0.3960	0.4081	0.4250	Ave		0.4121				2.8		15.0			
Carbon tetrachloride	0.3859 0.3929	0.3790	0.3637	0.3821	0.4158	Ave		0.3866				4.5		15.0			
1,2-Dichloroethane	0.5540 0.5403	0.5270	0.5352	0.5428	0.5457	Ave		0.5408				1.7		15.0			
Benzene	1.3506 1.2761	1.2155	1.1853	1.1993	1.2683	Ave		1.2492				4.9		15.0			
Trichloroethene	0.3586 0.3908	0.3412	0.3610	0.3537	0.3810	Ave		0.3644				5.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MRC-SW1A-061813	240-25905-1	66	69	75	65	96	61
MRC-SW2A-061813	240-25905-2	72	74	78	66	95	55
	MB 240-90620/15-A	60	63	70	59	77	72
	LCS 240-90620/16-A	78	78	86	73	100	82

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	21-110
NBZ = Nitrobenzene-d5 (Surr)	21-110
FBP = 2-Fluorobiphenyl (Surr)	20-110
TBP = 2,4,6-Tribromophenol (Surr)	21-110
TPH = Terphenyl-d14 (Surr)	24-110

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 30625004.D

Lab ID: LCS 240-90620/16-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	13.7	68	27-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: 30625003.D Lab Sample ID: MB 240-90620/15-A

Matrix: Water Date Extracted: 06/20/2013 08:23

Instrument ID: A4HP10 Date Analyzed: 06/25/2013 10:18

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-90620/16-A	30625004.D	06/25/2013 10:41
MRC-SW1A-061813	240-25905-1	30625024.D	06/25/2013 18:29
MRC-SW2A-061813	240-25905-2	30625025.D	06/25/2013 18:52

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-25905-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-90620/15-A
Matrix: Water
Lab File ID: 30625003.D
Analysis Method: 8270D
Date Collected:
Extract. Method: 3520C
Date Extracted: 06/20/2013 08:23
Sample wt/vol: 1000(mL)
Date Analyzed: 06/25/2013 10:18
Con. Extract Vol.: 2(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 91258
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	59		20-110
367-12-4	2-Fluorophenol (Surr)	60		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	77		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	70		21-110
4165-62-2	Phenol-d5 (Surr)	63		21-110
1718-51-0	Terphenyl-d14 (Surr)	72		24-110

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: 30529001.D DFTPP Injection Date: 05/29/2013

Instrument ID: A4HP10 DFTPP Injection Time: 13:26

Analysis Batch No.: 87604

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	45.3	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.5	
70	Less than 2.0% of mass 69	0.1	(0.3)1
127	25.0 - 75.0% of mass 198	52.0	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0- 30.0% of mass 198	23.4	
365	Greater than 0.75% of mass 198	3.1	
441	Present, but less than mass 443	12.3	
442	40.0 - 110.0% of mass 198	75.5	
443	15.0 - 24.0% of mass 442	15.5	(20.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-87604/2	30529002.D	05/29/2013	13:50
	STD4 240-87604/3	30529003.D	05/29/2013	14:13
	STD3 240-87604/4	30529004.D	05/29/2013	14:37
	STD2 240-87604/5	30529005.D	05/29/2013	15:01
	STD1 240-87604/6	30529006.D	05/29/2013	15:24
	STD9 240-87604/7	30529007.D	05/29/2013	15:48
	STD8 240-87604/8	30529008.D	05/29/2013	16:12
	STD7 240-87604/9	30529009.D	05/29/2013	16:36
	STD6 240-87604/10	30529010.D	05/29/2013	17:00
	ICV 240-87604/11	30529011.D	05/29/2013	17:23

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-87604/6	30529006.D
Level 2	STD2 240-87604/5	30529005.D
Level 3	STD3 240-87604/4	30529004.D
Level 4	STD4 240-87604/3	30529003.D
Level 5	STD5 240-87604/2	30529002.D
Level 6	STD6 240-87604/10	30529010.D
Level 7	STD7 240-87604/9	30529009.D
Level 8	STD8 240-87604/8	30529008.D
Level 9	STD9 240-87604/7	30529007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5739	0.7351 0.5764	0.6739 0.6189	0.5794 0.6237	0.5846	Ave		0.6208				9.3		20.0			
N-Nitrosodimethylamine	0.7471	0.6255 0.7694	0.7296 0.8516	0.7238 0.8526	0.7376	Ave		0.7546				9.7		20.0			
Pyridine	1.3864	1.3884 1.4299	1.4421 1.5505	1.4397 1.5594	1.3742	Ave		1.4463				5.0		20.0			
Benzaldehyde	1.1896 1.0672	1.0302 1.0661	1.0489 1.1224	1.0593 1.1101	1.0541	Ave		1.0831			0.0100	4.6		20.0			
Phenol	1.6857	1.5675 1.6967	1.6009 1.8624	1.6396 1.8618	1.6589	Ave		1.6967			0.8000	6.5		20.0			
Aniline	2.1067	1.9523 2.1643	2.0222 2.3324	2.0509 2.3522	2.0931	Ave		2.1343				6.7		20.0			
Bis(2-chloroethyl)ether	1.2950	1.3205 1.3253	1.3471 1.4295	1.2987 1.4620	1.3138	Ave		1.3490			0.7000	4.6		20.0			
2-Chlorophenol	1.3944	1.1595 1.4301	1.2370 1.5379	1.3392 1.5546	1.3794	Ave		1.3790			0.8000	9.8		20.0			
1,3-Dichlorobenzene	1.5882	1.5699 1.5958	1.5377 1.7232	1.5058 1.7330	1.5680	Ave		1.6027				5.1		20.0			
1,4-Dichlorobenzene	1.5846	1.5636 1.6444	1.5786 1.7626	1.6290 1.7645	1.6106	Ave		1.6422				4.8		20.0			
Benzyl alcohol	0.8500	0.6795 0.9005	0.7615 0.9627	0.7881 0.9551	0.8409	Ave		0.8423				12.0		20.0			
1,2-Dichlorobenzene	1.5089	1.4171 1.5530	1.5339 1.6559	1.5160 1.6869	1.4952	Ave		1.5459				5.7		20.0			
2-Methylphenol	1.2168	1.1441 1.2598	1.1455 1.3211	1.1373 1.3425	1.1667	Ave		1.2167			0.7000	6.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
bis (2-chloroisopropyl) ether	1.6248	1.5702 1.6561	1.7421 1.7399	1.7103 1.7273	1.6997	Ave		1.6838				3.7		20.0			
Indene	2.4699	2.3303 2.5298	2.3752 2.7170	2.3588 2.6391	2.4135	Ave		2.4792				5.6		20.0			
3 & 4 Methylphenol	1.2543	1.1750 1.2983	1.1463 1.3874	1.1973 1.3978	1.1954	Ave		1.2565				7.7		20.0			
N-Nitrosodi-n-propylamine	0.7950	0.7323 0.8269	0.7484 0.8710	0.8085 0.8831	0.8026	Ave		0.8085			0.5000	6.5		20.0			
Acetophenone	1.8204	1.7768 1.8451	1.7990 1.9762	1.8119 1.9741	1.7886	Ave		1.8490			0.0100	4.4		20.0			
Hexachloroethane	0.5808	0.5373 0.5881	0.5681 0.6259	0.5665 0.6372	0.5702	Ave		0.5843			0.3000	5.6		20.0			
Nitrobenzene	0.3487	0.2854 0.3439	0.2976 0.3751	0.3253 0.3756	0.3212	Ave		0.3341			0.2000	9.9		20.0			
Isophorone	0.6291	0.5805 0.6410	0.5703 0.6907	0.6211 0.7148	0.6047	Ave		0.6315			0.4000	8.0		20.0			
2-Nitrophenol	0.1653	0.1065 0.1714	0.1027 0.1870	0.1291 0.1888	0.1333	Lin1	-0.070	0.1825			0.1000				0.9930		0.9900
2,4-Dimethylphenol	0.3195	0.3019 0.3116	0.3142 0.3385	0.3106 0.3432	0.3091	Ave		0.3186			0.2000	4.6		20.0			
Benzoic acid	0.1626	0.0675 0.1790	0.0718 0.2084	0.1011 0.2032	0.1086	Lin	-0.538	0.2110							0.9910		0.9900
Bis(2-chloroethoxy)methane	0.3884	0.3933 0.3951	0.3803 0.4287	0.3833 0.4312	0.3861	Ave		0.3983			0.3000	5.1		20.0			
2,4-Dichlorophenol	0.2943	0.2265 0.2963	0.2441 0.3097	0.2679 0.3168	0.2741	Ave		0.2787			0.2000	11.0		20.0			
1,2,4-Trichlorobenzene	0.3256	0.3367 0.3142	0.3175 0.3423	0.3252 0.3438	0.3074	Ave		0.3266				4.1		20.0			
Naphthalene	1.1067 1.0611	1.0376 1.0817	0.9988 1.1687	1.0454 1.1479	1.0233	Ave		1.0746			0.7000	5.3		20.0			
4-Chloroaniline	0.4348	0.3978 0.4450	0.4122 0.4768	0.4197 0.4959	0.4115	Ave		0.4367			0.0100	7.8		20.0			
Hexachlorobutadiene	0.1741	0.1816 0.1731	0.1790 0.1900	0.1860 0.1894	0.1681	Ave		0.1802			0.0100	4.5		20.0			
Caprolactam	0.0967	0.0780 0.0905	0.0743 0.0942	0.0956 0.0973	0.0992	Ave		0.0907			0.0100	10.0		20.0			
4-Chloro-3-methylphenol	0.2766	0.2274 0.2772	0.2535 0.3071	0.2690 0.3132	0.2628	Ave		0.2733			0.2000	10.0		20.0			
2-Methylnaphthalene	0.7556 0.7104	0.6927 0.7281	0.6777 0.7856	0.7165 0.8025	0.6874	Ave		0.7285			0.4000	6.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.7411 0.6694	0.6356 0.6653	0.6216 0.7271	0.6729 0.7412	0.6441	Ave		0.6798				6.7		20.0			
Hexachlorocyclopentadiene	0.3168	0.2316 0.3374	0.2498 0.3706	0.2755 0.3732	0.2954	Ave		0.3063			0.0500	17.0		20.0			
1,2,4,5-Tetrachlorobenzene	0.5495	0.5715 0.5514	0.5099 0.5985	0.5310 0.5861	0.5409	Ave		0.5548			0.0100	5.3		20.0			
2,4,6-Trichlorophenol	0.3453	0.2674 0.3532	0.2825 0.3823	0.3038 0.3816	0.3282	Ave		0.3306			0.2000	13.0		20.0			
2,4,5-Trichlorophenol	0.3687	0.2971 0.3827	0.2996 0.4130	0.3469 0.4104	0.3471	Ave		0.3582			0.2000	12.0		20.0			
1,1'-Biphenyl	1.6712 1.5213	1.4437 1.5430	1.4738 1.6742	1.5154 1.6927	1.5178	Ave		1.5615			0.0100	6.0		20.0			
2-Chloronaphthalene	1.3216 1.1535	1.1647 1.1538	1.0777 1.2628	1.1497 1.2647	1.1713	Ave		1.1911			0.8000	6.4		20.0			
2-Nitroaniline	0.3218	0.1774 0.3189	0.1955 0.3618	0.2497 0.3532	0.2725	Lin1	-0.134	0.3476			0.0100				0.9950		0.9900
Dimethyl phthalate	1.3148	1.2443 1.3637	1.1937 1.4933	1.2909 1.4767	1.2824	Ave		1.3325			0.0100	8.0		20.0			
1,3-Dinitrobenzene	0.1935	0.0958 0.2112	0.0888 0.2375	0.1244 0.2281	0.1532	Lin	-0.243	0.2376							0.9940		0.9900
2,6-Dinitrotoluene	0.2841	0.1390 0.2945	0.1618 0.3272	0.2123 0.3258	0.2606	Lin1	-0.137	0.3185							0.9950		0.9900
Acenaphthylene	1.7898 1.9320	1.7194 1.9710	1.6579 2.1619	1.8064 2.0479	1.8337	Ave		1.8800			0.9000	8.6		20.0			
3-Nitroaniline	0.3384	0.2033 0.3388	0.2234 0.3807	0.2768 0.3675	0.3142	Lin1	-0.121	0.3655			0.0100				0.9970		0.9900
Acenaphthene	1.3384 1.1971	1.2625 1.2141	1.0901 1.3020	1.1688 1.2974	1.1466	Ave		1.2241			0.9000	6.7		20.0			
2,4-Dinitrophenol	0.1323	+++++ 0.1512	+++++ 0.1712	0.0527 0.1706	0.0810	Lin1	-0.653	0.1786			0.0100				0.9900		0.9900
4-Nitrophenol	0.1693	0.0921 0.1781	0.1123 0.1843	0.1336 0.1872	0.1504	Lin1	-0.134	0.1840							0.9970		0.9900
2,4-Dinitrotoluene	0.3845	0.1902 0.3978	0.2304 0.4342	0.2803 0.4255	0.3466	Lin1	-0.174	0.4222			0.2000				0.9960		0.9900
Dibenzofuran	1.5197 1.6833	1.7131 1.7260	1.4828 1.8562	1.6440 1.8619	1.6270	Ave		1.6793			0.8000	7.8		20.0			
2,3,4,6-Tetrachlorophenol	0.2874	0.1829 0.3108	0.1975 0.3349	0.2433 0.3326	0.2614	Lin1	-0.114	0.3254			0.0100				0.9960		0.9900
Diethyl phthalate	1.3078	1.2426 1.3089	1.1619 1.4002	1.3203 1.3787	1.2704	Ave		1.2988			0.0100	5.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chlorophenyl phenyl ether	0.6244	0.6089 0.6333	0.5547 0.6772	0.6088 0.6682	0.6180	Ave		0.6242			0.4000	6.1		20.0			
Fluorene	1.5712 1.3809	1.3475 1.3706	1.2335 1.4827	1.3281 1.5135	1.3311	Ave		1.3955			0.9000	7.6		20.0			
4-Nitroaniline	0.3451	0.1877 0.3509	0.2397 0.3625	0.2766 0.3631	0.3081	Lin1	-0.116	0.3618			0.0100				0.9990		0.9900
4,6-Dinitro-2-methylphenol	0.1211	+++++ 0.1295	0.0383 0.1442	0.0563 0.1491	0.0805	Lin	-0.516	0.1554			0.0100				0.9940		0.9900
N-Nitrosodiphenylamine	0.5786	0.5449 0.5745	0.5139 0.6284	0.5547 0.6140	0.5343	Ave		0.5679			0.0100	6.9		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.7571	0.6509 0.7645	0.6604 0.8179	0.7386 0.8407	0.7001	Ave		0.7422				9.2		20.0			
Azobenzene	0.7570	0.6509 0.7645	0.6641 0.8179	0.7386 0.8417	0.7030	Ave		0.7422				9.2		20.0			
4-Bromophenyl phenyl ether	0.2089	0.2021 0.2109	0.1740 0.2285	0.2190 0.2310	0.1963	Ave		0.2088			0.1000	8.9		20.0			
Hexachlorobenzene	0.2468 0.2129	0.2236 0.2141	0.2031 0.2325	0.2104 0.2322	0.2010	Ave		0.2196			0.1000	6.9		20.0			
Atrazine	0.2000	0.1668 0.1946	0.1671 0.2065	0.2022 0.2060	0.2012	Ave		0.1931			0.0100	8.6		20.0			
Pentachlorophenol	0.1265	0.0657 0.1302	0.0729 0.1397	0.1004 0.1426	0.1119	Lin1	-0.111	0.1387			0.0500				0.9960		0.9900
Phenanthrene	1.1089 1.1415	1.1294 1.1599	1.0736 1.2529	1.1449 1.2907	1.0877	Ave		1.1544			0.7000	6.3		20.0			
Anthracene	1.1383 1.1835	1.0256 1.2027	1.0052 1.2994	1.1497 1.2573	1.1035	Ave		1.1517			0.7000	8.5		20.0			
Carbazole	1.0453	0.9809 1.0491	0.9612 1.1522	1.0272 1.1856	0.9794	Ave		1.0476			0.0100	7.8		20.0			
Di-n-butyl phthalate	1.3765	1.0859 1.3770	1.0913 1.5302	1.2675 1.4887	1.2446	Ave		1.3077			0.0100	13.0		20.0			
Fluoranthene	1.1508 1.2631	1.1211 1.2813	1.0729 1.3941	1.1623 1.3822	1.1823	Ave		1.2233			0.6000	9.3		20.0			
Benzidine	0.4852	0.3301 0.4813	0.4001 0.5040	0.4304 0.4780	0.4148	Ave		0.4405				13.0		20.0			
Pyrene	1.1836 1.1862	1.0574 1.2170	1.0636 1.3284	1.1615 1.3443	1.1225	Ave		1.1850			0.6000	8.6		20.0			
Butyl benzyl phthalate	0.5401	0.3539 0.5523	0.4036 0.6111	0.4826 0.6156	0.5126	Ave		0.5090			0.0100	18.0		20.0			
3,3'-Dichlorobenzidine	0.3827	0.2522 0.3956	0.2964 0.4396	0.3336 0.4470	0.3540	Ave		0.3626			0.0100	19.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	 0.7692	0.5000 0.7840	0.5900 0.8692	0.7013 0.8745	0.7233	Ave		0.7264			0.0100	18.0		20.0			
Benzo[a]anthracene	1.0720 1.0801	0.9057 1.0935	1.0126 1.2098	1.0373 1.2263	1.0508	Ave		1.0765			0.8000	9.1		20.0			
Chrysene	1.0503 1.0260	1.0359 1.0332	0.9503 1.1369	0.9806 1.1537	0.9639	Ave		1.0368			0.7000	6.8		20.0			
Di-n-octyl phthalate	 1.4859	+++++ 1.6125	0.8935 1.7795	1.1536 1.8543	1.4067	Lin1	-1.198	1.7899			0.0100				0.9940		0.9900
Benzo[b]fluoranthene	0.9103 1.2318	0.9629 1.2850	0.9696 1.4397	1.1464 1.4895	1.1963	Ave		1.1813			0.7000	18.0		20.0			
Benzo[k]fluoranthene	1.3587 1.3446	1.1492 1.4255	1.3197 1.5246	1.2813 1.6037	1.3279	Ave		1.3706			0.7000	9.8		20.0			
Benzo[a]pyrene	0.8398 1.1947	0.8460 1.2555	0.9368 1.3557	1.0164 1.4647	1.1168	Ave		1.1140			0.7000	20.0		20.0			
Indeno[1,2,3-cd]pyrene	0.9076 1.3164	0.8192 1.3887	0.9914 1.4867	1.1413 1.5888	1.2055	Lin1	-0.164	1.4596			0.5000				0.9920		0.9900
Dibenz(a,h)anthracene	0.6322 1.0406	0.7064 1.1236	0.8114 1.2293	0.8852 1.3085	0.9875	Lin1	-0.144	1.1933			0.4000				0.9900		0.9900
Benzo[g,h,i]perylene	1.0152 1.0905	0.9356 1.1446	0.8050 1.2481	0.9751 1.3244	1.0179	Ave		1.0618			0.5000	15.0		20.0			
2-Fluorophenol (Surr)	 1.3023	1.3050 1.3474	1.2426 1.4407	1.2961 1.4551	1.2660	Ave		1.3319				5.8		20.0			
Phenol-d5 (Surr)	 1.6932	1.6221 1.7321	1.6171 1.8577	1.6100 1.9118	1.6588	Ave		1.7128				6.7		20.0			
Nitrobenzene-d5 (Surr)	0.2693 0.3508	0.3065 0.3566	0.2874 0.3859	0.3223 0.3853	0.3157	Ave		0.3311				12.0		20.0			
2-Fluorobiphenyl (Surr)	1.5613 1.4078	1.3961 1.4250	1.3351 1.5337	1.4112 1.5503	1.3731	Ave		1.4437				5.7		20.0			
2,4,6-Tribromophenol (Surr)	 0.1618	0.1173 0.1661	0.1128 0.1811	0.1224 0.1774	0.1419	Ave		0.1476				19.0		20.0			
Terphenyl-d14 (Surr)	1.0806 0.8268	0.8243 0.8302	0.7579 0.9106	0.7977 0.9279	0.7848	Ave		0.8601				12.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-87604/6	30529006.D
Level 2	STD2 240-87604/5	30529005.D
Level 3	STD3 240-87604/4	30529004.D
Level 4	STD4 240-87604/3	30529003.D
Level 5	STD5 240-87604/2	30529002.D
Level 6	STD6 240-87604/10	30529010.D
Level 7	STD7 240-87604/9	30529009.D
Level 8	STD8 240-87604/8	30529008.D
Level 9	STD9 240-87604/7	30529007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	337314	21115 478058	35196 681420	60521 824872	147441	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	439107	17965 638088	38103 937543	75602 1127643	186003	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	814809	39880 1185800	75313 1707008	150378 2062401	346569	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	13751 1254472	59179 1768196	109559 2471566	221286 2936151	531672	0.200 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	990695	45023 1407077	83606 2050447	171250 2462293	418347	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1238119	56074 1794889	105610 2567861	214219 3110873	527866	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	761097	37927 1099054	70352 1573818	135652 1933540	331338	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	819527	33304 1185988	64602 1693239	139883 2056035	347861	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	933400	45091 1323462	80306 1897205	157282 2291974	395441	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	931303	44910 1363721	82444 1940609	170151 2333543	406187	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCB	Ave	499544	19516 746792	39771 1059858	82314 1263101	212070	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCB	Ave	886836	40704 1287969	80110 1823064	158342 2231019	377065	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	715107	32861 1044797	59823 1454477	118788 1775503	294229	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
bis (2-chloroisopropyl) ether	DCB	Ave	954913	45101 1373418	90982 1915626	178643 2284454	428659	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Indene	DCB	Ave		133863	248099	492756	1217331		1.00	2.00	4.00	10.0
			2903230	4195938	5982703	6980664		20.0	30.0	40.0	50.0	
3 & 4 Methylphenol	DCB	Ave		33749	59865	125052	301456		0.500	1.00	2.00	5.00
			737163	1076717	1527496	1848614		10.0	15.0	20.0	25.0	
N-Nitrosodi-n-propylamine	DCB	Ave		21034	39084	84450	202420		0.500	1.00	2.00	5.00
			467224	685748	958970	1167905		10.0	15.0	20.0	25.0	
Acetophenone	DCB	Ave		51036	93954	189247	451060		0.500	1.00	2.00	5.00
			1069882	1530137	2175697	2610805		10.0	15.0	20.0	25.0	
Hexachloroethane	DCB	Ave		15433	29667	59169	143810		0.500	1.00	2.00	5.00
			341319	487685	689128	842741		10.0	15.0	20.0	25.0	
Nitrobenzene	NPT	Ave		30912	62263	130199	326042		0.500	1.00	2.00	5.00
			801826	1152750	1656614	1968051		10.0	15.0	20.0	25.0	
Isophorone	NPT	Ave		62874	119330	248622	613829		0.500	1.00	2.00	5.00
			1446683	2148637	3050432	3744901		10.0	15.0	20.0	25.0	
2-Nitrophenol	NPT	Lin1		11533	21481	51661	135326		0.500	1.00	2.00	5.00
			380060	574532	825902	989397		10.0	15.0	20.0	25.0	
2,4-Dimethylphenol	NPT	Ave		32698	65736	124311	313800		0.500	1.00	2.00	5.00
			734877	1044651	1494927	1798083		10.0	15.0	20.0	25.0	
Benzoic acid	NPT	Lin		14622	30053	80943	220415		1.00	2.00	4.00	10.0
			748039	1200297	1840749	2129046		20.0	30.0	40.0	50.0	
Bis(2-chloroethoxy)methane	NPT	Ave		42596	79563	153407	391913		0.500	1.00	2.00	5.00
			893142	1324354	1893424	2259105		10.0	15.0	20.0	25.0	
2,4-Dichlorophenol	NPT	Ave		24534	51065	107232	278287		0.500	1.00	2.00	5.00
			676893	993406	1367965	1659700		10.0	15.0	20.0	25.0	
1,2,4-Trichlorobenzene	NPT	Ave		36470	66428	130152	312066		0.500	1.00	2.00	5.00
			748727	1053301	1511901	1801334		10.0	15.0	20.0	25.0	
Naphthalene	NPT	Ave	24826	112389	208987	418451	1038729	0.100	0.500	1.00	2.00	5.00
			2440350	3625942	5161404	6013859		10.0	15.0	20.0	25.0	
4-Chloroaniline	NPT	Ave		43083	86254	167978	417695		0.500	1.00	2.00	5.00
			999873	1491633	2105843	2598045		10.0	15.0	20.0	25.0	
Hexachlorobutadiene	NPT	Ave		19665	37453	74443	170661		0.500	1.00	2.00	5.00
			400461	580257	839279	992072		10.0	15.0	20.0	25.0	
Caprolactam	NPT	Ave		16889	31108	76502	201413		1.00	2.00	4.00	10.0
			444762	607009	831921	1019525		20.0	30.0	40.0	50.0	
4-Chloro-3-methylphenol	NPT	Ave		24633	53035	107692	266815		0.500	1.00	2.00	5.00
			636047	929089	1356373	1640730		10.0	15.0	20.0	25.0	
2-Methylnaphthalene	NPT	Ave	16950	75026	141796	286788	697758	0.100	0.500	1.00	2.00	5.00
			1633749	2440787	3469665	4204601		10.0	15.0	20.0	25.0	
1-Methylnaphthalene	NPT	Ave	16624	68846	130058	269358	653864	0.100	0.500	1.00	2.00	5.00
			1539352	2230329	3211013	3883048		10.0	15.0	20.0	25.0	
Hexachlorocyclopentadiene	ANT	Ave		14149	29936	62459	163548		0.500	1.00	2.00	5.00
			411623	637154	911325	1119748		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2,4,5-Tetrachlorobenzene	ANT	Ave		34910	61101	120368	299438		0.500	1.00	2.00	5.00
			714064	1041148	1471733	1758314		10.0	15.0	20.0	25.0	
2,4,6-Trichlorophenol	ANT	Ave		16334	33854	68876	181719		0.500	1.00	2.00	5.00
			448753	666946	940124	1145012		10.0	15.0	20.0	25.0	
2,4,5-Trichlorophenol	ANT	Ave		18150	35899	78632	192154		0.500	1.00	2.00	5.00
			479058	722710	1015669	1231358		10.0	15.0	20.0	25.0	
1,1'-Biphenyl	ANT	Ave	20924	88185	176618	343532	840278	0.100	0.500	1.00	2.00	5.00
			1976758	2913763	4116836	5078595		10.0	15.0	20.0	25.0	
2-Chloronaphthalene	ANT	Ave	16547	71141	129142	260643	648481	0.100	0.500	1.00	2.00	5.00
			1498885	2178809	3105105	3794221		10.0	15.0	20.0	25.0	
2-Nitroaniline	ANT	Lin1		10834	23429	56617	150851		0.500	1.00	2.00	5.00
			418161	602157	889695	1059530		10.0	15.0	20.0	25.0	
Dimethyl phthalate	ANT	Ave		76006	143045	292651	709971		0.500	1.00	2.00	5.00
			1708440	2575035	3672032	4430463		10.0	15.0	20.0	25.0	
1,3-Dinitrobenzene	ANT	Lin		5854	10639	28206	84797		0.500	1.00	2.00	5.00
			251406	398764	583882	684479		10.0	15.0	20.0	25.0	
2,6-Dinitrotoluene	ANT	Lin1		8493	19387	48131	144294		0.500	1.00	2.00	5.00
			369125	556156	804581	977596		10.0	15.0	20.0	25.0	
Acenaphthylene	ANT	Ave	22410	105029	198673	409506	1015216	0.100	0.500	1.00	2.00	5.00
			2510450	3721856	5316016	6144079		10.0	15.0	20.0	25.0	
3-Nitroaniline	ANT	Lin1		12418	26773	62754	173932		0.500	1.00	2.00	5.00
			439683	639741	936187	1102654		10.0	15.0	20.0	25.0	
Acenaphthene	ANT	Ave	16758	77119	130627	264971	634770	0.100	0.500	1.00	2.00	5.00
			1555590	2292712	3201650	3892612		10.0	15.0	20.0	25.0	
2,4-Dinitrophenol	ANT	Lin1		+++++	+++++	23874	89696		+++++	+++++	4.00	10.0
			343789	571033	842085	1023522		20.0	30.0	40.0	50.0	
4-Nitrophenol	ANT	Lin1		11248	26925	60577	166477		1.00	2.00	4.00	10.0
			440058	672489	906213	1123035		20.0	30.0	40.0	50.0	
2,4-Dinitrotoluene	ANT	Lin1		11619	27605	63546	191883		0.500	1.00	2.00	5.00
			499676	751139	1067794	1276699		10.0	15.0	20.0	25.0	
Dibenzofuran	ANT	Ave	19028	104640	177694	372698	900775	0.100	0.500	1.00	2.00	5.00
			2187326	3259274	4564266	5586009		10.0	15.0	20.0	25.0	
2,3,4,6-Tetrachlorophenol	ANT	Lin1		11173	23673	55157	144728		0.500	1.00	2.00	5.00
			373400	586819	823426	997917		10.0	15.0	20.0	25.0	
Diethyl phthalate	ANT	Ave		75901	139230	299306	703359		0.500	1.00	2.00	5.00
			1699357	2471587	3443131	4136294		10.0	15.0	20.0	25.0	
4-Chlorophenyl phenyl ether	ANT	Ave		37196	66471	138007	342159		0.500	1.00	2.00	5.00
			811305	1195956	1665281	2004634		10.0	15.0	20.0	25.0	
Fluorene	ANT	Ave	19673	82308	147819	301079	736928	0.100	0.500	1.00	2.00	5.00
			1794348	2588179	3645795	4540743		10.0	15.0	20.0	25.0	
4-Nitroaniline	ANT	Lin1		11464	28722	62714	170555		0.500	1.00	2.00	5.00
			448383	662569	891360	1089378		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4,6-Dinitro-2-methylphenol	PHN	Lin	537839	+++++ 853721	15458 1231248	42310 1506921	154508	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
N-Nitrosodiphenylamine	PHN	Ave	2570877	114384 3787848	207311 5366515	416702 6206191	1025871	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	1681798	68324 2520169	133207 3492232	277434 4249108	672134	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	1681643	68324 2520169	133949 3492232	277435 4254337	674951	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	464068	21213 695370	35092 975516	82274 1167438	188448	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	5482 472907	23475 705699	40964 992910	79049 1173531	192993	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	888507	35023 1283233	67405 1763609	151894 2082241	386403	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pentachlorophenol	PHN	Lin1	562107	13801 858697	29397 1193077	75405 1441166	214897	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	24635 2535805	118543 3823651	216552 5349877	430074 6523476	1044260	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	25289 2629079	107649 3964629	202770 5548254	431853 6354855	1059402	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	2322179	102960 3458484	193888 4919887	385870 5992279	940286	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	3057730	113981 4539472	220124 6533749	476127 7523996	1194953	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	25566 2805987	117679 4223804	216419 5952577	436607 6986192	1135057	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	2336523	72778 3414447	165701 4591914	351447 5280016	842791	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	26684 2855961	116585 4317116	220253 6051396	474282 7424635	1140491	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	1300366	39019 1959011	83579 2783897	197061 3400200	520856	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	1843041	55604 2806660	122766 4005454	272393 4937682	719350	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	1852019	55125 2781270	122168 3959519	286376 4829986	734868	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]anthracene	CRY	Ave	24168 2600517	99860 3879120	209676 5511189	423568 6772651	1067622	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	23680 2470201	114209 3665123	196791 5179154	400389 6371891	979358	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Lin1	2986676	+++++ 4674487	154437 6792727	393462 8255771	1199777	10.0	+++++ 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzo[b]fluoranthene	PRY	Ave	16787 2475817	87788 3725022	167589 5495651	390999 6631521	1020329	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	25057 2702647	104772 4132164	228114 5819688	437014 7140044	1132583	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	15487 2401277	77135 3639476	161922 5174856	346660 6520943	952518	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Lin1	16738 2645940	74684 4025518	171363 5675215	389253 7073561	1028220	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Lin1	11659 2091653	64400 3257239	140246 4692467	301917 5825843	842244	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	18721 2191833	85300 3318062	139149 4764234	332569 5896580	868180	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	 765410	37482 1117409	64896 1586213	135380 1924406	319269	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCB	Ave	 995114	46592 1436499	84453 2045241	168162 2528385	418337	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	6040 806696	33198 1195322	60145 1704158	129001 2018579	320519	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	19549 1829327	85278 2690850	159991 3771265	319913 4651255	760183	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	 210208	7166 313642	13513 445267	27750 532182	78584	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	24362 1990693	90882 2945114	156953 4148176	325709 5124603	797364	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:
Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-87604/11 Calibration Date: 05/29/2013 17:23

Instrument ID: A4HP10 Calib Start Date: 05/29/2013 13:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 17:00

Lab File ID: 30529011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6208	0.5231		8.43	10.0	-15.7	30.0
N-Nitrosodimethylamine	Ave	0.7546	0.6958		9.22	10.0	-7.8	30.0
Pyridine	Ave	1.446	1.351		9.34	10.0	-6.6	30.0
Benzaldehyde	Ave	1.083	0.9888	0.0100	18.3	20.0	-8.7	30.0
Phenol	Ave	1.697	1.593	0.8000	9.39	10.0	-6.1	30.0
Aniline	Ave	2.134	1.946		9.12	10.0	-8.8	30.0
Bis(2-chloroethyl)ether	Ave	1.349	1.212	0.7000	8.99	10.0	-10.1	30.0
2-Chlorophenol	Ave	1.379	1.294	0.8000	9.38	10.0	-6.2	30.0
1,3-Dichlorobenzene	Ave	1.603	1.464		9.14	10.0	-8.6	30.0
1,4-Dichlorobenzene	Ave	1.642	1.497		9.12	10.0	-8.8	30.0
Benzyl alcohol	Ave	0.8423	0.8227		9.77	10.0	-2.3	30.0
1,2-Dichlorobenzene	Ave	1.546	1.380		8.93	10.0	-10.7	30.0
2-Methylphenol	Ave	1.217	1.135	0.7000	9.33	10.0	-6.7	30.0
bis (2-chloroisopropyl) ether	Ave	1.684	1.507		6.44	7.20	-10.5	30.0
Indene	Ave	2.479	2.327		18.8	20.0	-6.1	30.0
3 & 4 Methylphenol	Ave	1.256	1.212		9.65	10.0	-3.5	30.0
N-Nitrosodi-n-propylamine	Ave	0.8085	0.7475	0.5000	9.25	10.0	-7.5	30.0
Acetophenone	Ave	1.849	1.676	0.0100	9.06	10.0	-9.4	30.0
Hexachloroethane	Ave	0.5843	0.5467	0.3000	9.36	10.0	-6.4	30.0
Nitrobenzene	Ave	0.3341	0.3185	0.2000	9.53	10.0	-4.7	30.0
Isophorone	Ave	0.6315	0.6210	0.4000	9.83	10.0	-1.7	30.0
2-Nitrophenol	Lin1		0.1595	0.1000	9.12	10.0	-8.8	30.0
2,4-Dimethylphenol	Ave	0.3186	0.2877	0.2000	9.03	10.0	-9.7	30.0
Benzoic acid	Lin		0.1745		19.1	20.0	-4.6	30.0
Bis(2-chloroethoxy)methane	Ave	0.3983	0.3520	0.3000	8.84	10.0	-11.6	30.0
2,4-Dichlorophenol	Ave	0.2787	0.2653	0.2000	9.52	10.0	-4.8	30.0
1,2,4-Trichlorobenzene	Ave	0.3266	0.2969		9.09	10.0	-9.1	30.0
Naphthalene	Ave	1.075	0.9799	0.7000	9.12	10.0	-8.8	30.0
4-Chloroaniline	Ave	0.4367	0.3986	0.0100	9.13	10.0	-8.7	30.0
Hexachlorobutadiene	Ave	0.1802	0.1616	0.0100	8.97	10.0	-10.3	30.0
Caprolactam	Ave	0.0907	0.0867	0.0100	19.1	20.0	-4.5	30.0
4-Chloro-3-methylphenol	Ave	0.2733	0.2671	0.2000	9.77	10.0	-2.3	30.0
2-Methylnaphthalene	Ave	0.7285	0.6425	0.4000	8.82	10.0	-11.8	30.0
1-Methylnaphthalene	Ave	0.6798	0.6150		9.05	10.0	-9.5	30.0
Hexachlorocyclopentadiene	Ave	0.3063	0.3068	0.0500	10.0	10.0	0.1	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5548	0.4900	0.0100	8.83	10.0	-11.7	30.0
2,4,6-Trichlorophenol	Ave	0.3306	0.3261	0.2000	9.87	10.0	-1.3	30.0
2,4,5-Trichlorophenol	Ave	0.3582	0.3437	0.2000	9.60	10.0	-4.0	30.0
1,1'-Biphenyl	Ave	1.561	1.418	0.0100	9.08	10.0	-9.2	30.0
2-Chloronaphthalene	Ave	1.191	1.046	0.8000	8.78	10.0	-12.2	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-87604/11 Calibration Date: 05/29/2013 17:23

Instrument ID: A4HP10 Calib Start Date: 05/29/2013 13:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 17:00

Lab File ID: 30529011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.2919	0.0100	8.78	10.0	-12.2	30.0
Dimethyl phthalate	Ave	1.332	1.214	0.0100	9.11	10.0	-8.9	30.0
1,3-Dinitrobenzene	Lin		0.1814		8.66	10.0	-13.4	30.0
2,6-Dinitrotoluene	Lin1		0.2753		9.07	10.0	-9.3	30.0
Acenaphthylene	Ave	1.880	1.790	0.9000	9.52	10.0	-4.8	30.0
3-Nitroaniline	Lin1		0.3030	0.0100	8.62	10.0	-13.8	30.0
Acenaphthene	Ave	1.224	1.109	0.9000	9.06	10.0	-9.4	30.0
2,4-Dinitrophenol	Lin1		0.1245	0.0100	17.6	20.0	-12.0	30.0
4-Nitrophenol	Lin1		0.1557		17.7	20.0	-11.7	30.0
2,4-Dinitrotoluene	Lin1		0.3560	0.2000	8.84	10.0	-11.6	30.0
Dibenzofuran	Ave	1.679	1.522	0.8000	9.06	10.0	-9.4	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2820	0.0100	9.02	10.0	-9.8	30.0
Diethyl phthalate	Ave	1.299	1.199	0.0100	9.23	10.0	-7.7	30.0
4-Chlorophenyl phenyl ether	Ave	0.6242	0.5721	0.4000	9.17	10.0	-8.3	30.0
4-Nitroaniline	Lin1		0.2993	0.0100	8.59	10.0	-14.1	30.0
Fluorene	Ave	1.395	1.267	0.9000	9.08	10.0	-9.2	30.0
4,6-Dinitro-2-methylphenol	Lin		0.1235	0.0100	19.2	20.0	-4.0	30.0
N-Nitrosodiphenylamine	Ave	0.5679	0.5520	0.0100	19.4	20.0	-2.8	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7422	0.7295		9.83	10.0	-1.7	30.0
4-Bromophenyl phenyl ether	Ave	0.2088	0.1993	0.1000	9.55	10.0	-4.6	30.0
Hexachlorobenzene	Ave	0.2196	0.2052	0.1000	9.34	10.0	-6.6	30.0
Atrazine	Ave	0.1931	0.2011	0.0100	20.8	20.0	4.2	30.0
Pentachlorophenol	Lin1		0.1279	0.0500	19.2	20.0	-3.8	30.0
Phenanthrene	Ave	1.154	1.095	0.7000	9.49	10.0	-5.1	30.0
Anthracene	Ave	1.152	1.139	0.7000	9.89	10.0	-1.1	30.0
Carbazole	Ave	1.048	0.9726	0.0100	9.28	10.0	-7.2	30.0
Di-n-butyl phthalate	Ave	1.308	1.299	0.0100	9.93	10.0	-0.7	30.0
Fluoranthene	Ave	1.223	1.204	0.6000	9.84	10.0	-1.6	30.0
Benzidine	Ave	0.4405	0.5048		22.9	20.0	14.6	30.0
Pyrene	Ave	1.185	1.168	0.6000	9.86	10.0	-1.4	30.0
Butyl benzyl phthalate	Ave	0.5090	0.5434	0.0100	10.7	10.0	6.8	30.0
3,3'-Dichlorobenzidine	Ave	0.3626	0.3907	0.0100	21.5	20.0	7.7	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7264	0.7604	0.0100	10.5	10.0	4.7	30.0
Benzo[a]anthracene	Ave	1.076	1.068	0.8000	9.92	10.0	-0.8	30.0
Chrysene	Ave	1.037	1.048	0.7000	10.1	10.0	1.1	30.0
Di-n-octyl phthalate	Lin1		1.544	0.0100	9.30	10.0	-7.0	30.0
Benzo[b]fluoranthene	Ave	1.181	1.238	0.7000	10.5	10.0	4.8	30.0
Benzo[k]fluoranthene	Ave	1.371	1.333	0.7000	9.73	10.0	-2.7	30.0
Benzo[a]pyrene	Ave	1.114	1.173	0.7000	10.5	10.0	5.3	30.0
Indeno[1,2,3-cd]pyrene	Lin1		1.285	0.5000	8.91	10.0	-10.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: ICV 240-87604/11 Calibration Date: 05/29/2013 17:23

Instrument ID: A4HP10 Calib Start Date: 05/29/2013 13:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 17:00

Lab File ID: 30529011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibenz(a,h)anthracene	Lin1		1.089	0.4000	9.24	10.0	-7.6	30.0
Benzo[g,h,i]perylene	Ave	1.062	1.132	0.5000	10.7	10.0	6.6	30.0
2-Fluorophenol (Surr)	Ave	1.332	1.355		10.2	10.0	1.8	30.0
Phenol-d5 (Surr)	Ave	1.713	1.794		10.5	10.0	4.7	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3311	0.3659		11.1	10.0	10.5	30.0
2-Fluorobiphenyl (Surr)	Ave	1.444	1.432		9.92	10.0	-0.8	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1476	0.1709		11.6	10.0	15.8	30.0
Terphenyl-d14 (Surr)	Ave	0.8601	0.9312		10.8	10.0	8.3	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab File ID: 30625001.D DFTPP Injection Date: 06/25/2013

Instrument ID: A4HP10 DFTPP Injection Time: 09:33

Analysis Batch No.: 91258

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	41.0	
68	Less than 2.0% of mass 69	0.1	(0.3)1
69	Mass 69 relative abundance	37.3	
70	Less than 2.0% of mass 69	0.3	(0.7)1
127	25.0 - 75.0% of mass 198	50.2	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.4	
275	10.0- 30.0% of mass 198	24.0	
365	Greater than 0.75% of mass 198	3.2	
441	Present, but less than mass 443	14.9	
442	40.0 - 110.0% of mass 198	90.2	
443	15.0 - 24.0% of mass 442	18.9	(21.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-91258/2	30625002.D	06/25/2013	09:55
	MB 240-90620/15-A	30625003.D	06/25/2013	10:18
	LCS 240-90620/16-A	30625004.D	06/25/2013	10:41
MRC-SW1A-061813	240-25905-1	30625024.D	06/25/2013	18:29
MRC-SW2A-061813	240-25905-2	30625025.D	06/25/2013	18:52

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91258/2 Calibration Date: 06/25/2013 09:55

Instrument ID: A4HP10 Calib Start Date: 05/29/2013 13:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 17:00

Lab File ID: 30625002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6208	0.5925		9.54	10.0	-4.6	20.0
N-Nitrosodimethylamine	Ave	0.7546	0.8065		10.7	10.0	6.9	20.0
Pyridine	Ave	1.446	1.486		10.3	10.0	2.8	20.0
Benzaldehyde	Ave	1.083	1.008	0.0100	18.6	20.0	-6.9	20.0
Phenol	Ave	1.697	1.700	0.8000	10.0	10.0	0.2	20.0
Aniline	Ave	2.134	2.129		9.97	10.0	-0.3	20.0
Bis(2-chloroethyl)ether	Ave	1.349	1.299	0.7000	9.63	10.0	-3.7	20.0
2-Chlorophenol	Ave	1.379	1.441	0.8000	10.5	10.0	4.5	20.0
1,3-Dichlorobenzene	Ave	1.603	1.596		9.96	10.0	-0.4	20.0
1,4-Dichlorobenzene	Ave	1.642	1.617		9.85	10.0	-1.5	20.0
Benzyl alcohol	Ave	0.8423	0.8003		9.50	10.0	-5.0	20.0
1,2-Dichlorobenzene	Ave	1.546	1.507		9.75	10.0	-2.5	20.0
2-Methylphenol	Ave	1.217	1.256	0.7000	10.3	10.0	3.3	20.0
Indene	Ave	2.479	2.421		19.5	20.0	-2.3	20.0
bis (2-chloroisopropyl) ether	Ave	1.684	1.625		9.65	10.0	-3.5	20.0
3 & 4 Methylphenol	Ave	1.256	1.278		10.2	10.0	1.7	20.0
N-Nitrosodi-n-propylamine	Ave	0.8085	0.7555	0.5000	9.34	10.0	-6.6	20.0
Acetophenone	Ave	1.849	1.683	0.0100	9.10	10.0	-9.0	20.0
Hexachloroethane	Ave	0.5843	0.5740	0.3000	9.82	10.0	-1.8	20.0
Nitrobenzene	Ave	0.3341	0.3391	0.2000	10.1	10.0	1.5	20.0
Isophorone	Ave	0.6315	0.6152	0.4000	9.74	10.0	-2.6	20.0
2-Nitrophenol	Lin1		0.1950	0.1000	11.1	10.0	10.7	20.0
2,4-Dimethylphenol	Ave	0.3186	0.3126	0.2000	9.81	10.0	-1.9	20.0
Benzoic acid	Lin		0.1536		17.1	20.0	-14.4	20.0
Bis(2-chloroethoxy)methane	Ave	0.3983	0.3899	0.3000	9.79	10.0	-2.1	20.0
2,4-Dichlorophenol	Ave	0.2787	0.3038	0.2000	10.9	10.0	9.0	20.0
1,2,4-Trichlorobenzene	Ave	0.3266	0.3305		10.1	10.0	1.2	20.0
Naphthalene	Ave	1.075	1.074	0.7000	9.99	10.0	-0.0	20.0
4-Chloroaniline	Ave	0.4367	0.4318	0.0100	9.89	10.0	-1.1	20.0
Hexachlorobutadiene	Ave	0.1802	0.1732	0.0100	9.61	10.0	-3.9	20.0
Caprolactam	Ave	0.0907	0.1021	0.0100	22.5	20.0	12.6	20.0
4-Chloro-3-methylphenol	Ave	0.2733	0.2798	0.2000	10.2	10.0	2.4	20.0
2-Methylnaphthalene	Ave	0.7285	0.7104	0.4000	9.75	10.0	-2.5	20.0
1-Methylnaphthalene	Ave	0.6798	0.6450		9.49	10.0	-5.1	20.0
Hexachlorocyclopentadiene	Ave	0.3063	0.2724	0.0500	8.89	10.0	-11.1	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5548	0.5683	0.0100	10.2	10.0	2.4	20.0
2,4,6-Trichlorophenol	Ave	0.3306	0.3697	0.2000	11.2	10.0	11.8	20.0
2,4,5-Trichlorophenol	Ave	0.3582	0.3743	0.2000	10.4	10.0	4.5	20.0
1,1'-Biphenyl	Ave	1.561	1.495	0.0100	9.58	10.0	-4.2	20.0
2-Chloronaphthalene	Ave	1.191	1.150	0.8000	9.66	10.0	-3.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91258/2 Calibration Date: 06/25/2013 09:55

Instrument ID: A4HP10 Calib Start Date: 05/29/2013 13:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 17:00

Lab File ID: 30625002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.3097	0.0100	9.30	10.0	-7.0	20.0
Dimethyl phthalate	Ave	1.332	1.274	0.0100	9.56	10.0	-4.4	20.0
1,3-Dinitrobenzene	Lin		0.2227		10.4	10.0	4.0	20.0
2,6-Dinitrotoluene	Lin1		0.2936		9.65	10.0	-3.5	20.0
Acenaphthylene	Ave	1.880	1.911	0.9000	10.2	10.0	1.7	20.0
3-Nitroaniline	Lin1		0.3428	0.0100	9.71	10.0	-2.9	20.0
Acenaphthene	Ave	1.224	1.189	0.9000	9.71	10.0	-2.9	20.0
2,4-Dinitrophenol	Lin1		0.1714	0.0100	22.9	20.0	14.3	20.0
4-Nitrophenol	Lin1		0.1457		16.6	20.0	-17.2	20.0
2,4-Dinitrotoluene	Lin1		0.4049	0.2000	10.0	10.0	0.0	20.0
Dibenzofuran	Ave	1.679	1.635	0.8000	9.74	10.0	-2.6	20.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2986	0.0100	9.53	10.0	-4.7	20.0
Diethyl phthalate	Ave	1.299	1.250	0.0100	9.62	10.0	-3.8	20.0
4-Chlorophenyl phenyl ether	Ave	0.6242	0.6287	0.4000	10.1	10.0	0.7	20.0
Fluorene	Ave	1.395	1.358	0.9000	9.73	10.0	-2.7	20.0
4-Nitroaniline	Lin1		0.3359	0.0100	9.61	10.0	-3.9	20.0
4,6-Dinitro-2-methylphenol	Lin		0.1426	0.0100	21.7	20.0	8.3	20.0
N-Nitrosodiphenylamine	Ave	0.5679	0.5781	0.0100	20.4	20.0	1.8	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7422	0.7153		9.64	10.0	-3.6	20.0
4-Bromophenyl phenyl ether	Ave	0.2088	0.2171	0.1000	10.4	10.0	3.9	20.0
Hexachlorobenzene	Ave	0.2196	0.2211	0.1000	10.1	10.0	0.7	20.0
Atrazine	Ave	0.1931	0.2006	0.0100	20.8	20.0	3.9	20.0
Pentachlorophenol	Lin1		0.1335	0.0500	20.1	20.0	0.3	20.0
Phenanthrene	Ave	1.154	1.150	0.7000	9.96	10.0	-0.4	20.0
Anthracene	Ave	1.152	1.178	0.7000	10.2	10.0	2.3	20.0
Carbazole	Ave	1.048	0.9797	0.0100	9.35	10.0	-6.5	20.0
Di-n-butyl phthalate	Ave	1.308	1.314	0.0100	10.1	10.0	0.5	20.0
Fluoranthene	Ave	1.223	1.251	0.6000	10.2	10.0	2.2	20.0
Benzidine	Ave	0.4405	0.3723		16.9	20.0	-15.5	20.0
Pyrene	Ave	1.185	1.195	0.6000	10.1	10.0	0.8	20.0
Butyl benzyl phthalate	Ave	0.5090	0.5382	0.0100	10.6	10.0	5.7	20.0
3,3'-Dichlorobenzidine	Ave	0.3626	0.3781	0.0100	20.9	20.0	4.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7264	0.7502	0.0100	10.3	10.0	3.3	20.0
Benzo[a]anthracene	Ave	1.076	1.084	0.8000	10.1	10.0	0.7	20.0
Chrysene	Ave	1.037	1.016	0.7000	9.80	10.0	-2.0	20.0
Di-n-octyl phthalate	Lin1		1.433	0.0100	8.68	10.0	-13.2	20.0
Benzo[b]fluoranthene	Ave	1.181	1.199	0.7000	10.1	10.0	1.5	20.0
Benzo[k]fluoranthene	Ave	1.371	1.328	0.7000	9.69	10.0	-3.1	20.0
Benzo[a]pyrene	Ave	1.114	1.201	0.7000	10.8	10.0	7.8	20.0
Indeno[1,2,3-cd]pyrene	Lin1		1.284	0.5000	8.91	10.0	-10.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Lab Sample ID: CCVIS 240-91258/2 Calibration Date: 06/25/2013 09:55

Instrument ID: A4HP10 Calib Start Date: 05/29/2013 13:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/29/2013 17:00

Lab File ID: 30625002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibenz(a,h)anthracene	Lin1		1.095	0.4000	9.29	10.0	-7.1	20.0
Benzo[g,h,i]perylene	Ave	1.062	1.091	0.5000	10.3	10.0	2.8	20.0
2-Fluorophenol (Surr)	Ave	1.332	1.358		10.2	10.0	2.0	20.0
Phenol-d5 (Surr)	Ave	1.713	1.731		10.1	10.0	1.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3311	0.3548		10.7	10.0	7.2	20.0
2-Fluorobiphenyl (Surr)	Ave	1.444	1.374		9.52	10.0	-4.8	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1476	0.1825		12.4	10.0	NA 23.7*	20.0
Terphenyl-d14 (Surr)	Ave	0.8601	0.7908		9.19	10.0	-8.1	20.0

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: STD6 240-87604/10 Date Analyzed: 05/29/2013 17:00

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 30529010.D Heated Purge: (Y/N) N

Calibration ID: 15406

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		235087	5.90	919905	7.01	519767	8.49
UPPER LIMIT		470174	6.40	1839810	7.51	1039534	8.99
LOWER LIMIT		117544	5.40	459953	6.51	259884	7.99
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-87604/11		276591	5.90	1096327	7.01	629754	8.49
CCVIS 240-91258/2		138344	5.80	521693	6.92	291349	8.41

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: STD6 240-87604/10 Date Analyzed: 05/29/2013 17:00

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 30529010.D Heated Purge: (Y/N) N

Calibration ID: 15406

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		888580	9.76	963088	12.30	803985	14.36
UPPER LIMIT		1777160	10.26	1926176	12.80	1607970	14.86
LOWER LIMIT		444290	9.26	481544	11.80	401993	13.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-87604/11		1032158	9.76	1099044	12.30	901677	14.36
CCVIS 240-91258/2		493449	9.66	540387	12.15	476033	14.17

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: CCVIS 240-91258/2 Date Analyzed: 06/25/2013 09:55

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 30625002.D Heated Purge: (Y/N) N

Calibration ID: 15797

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		138344	5.80	521693	6.92	291349	8.41
UPPER LIMIT		276688	6.30	1043386	7.42	582698	8.91
LOWER LIMIT		69172	5.30	260847	6.42	145675	7.91
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-90620/16-A		119053	5.80	449662	6.92	266170	8.41
240-25905-1	MRC-SW1A-061813	125575	5.80	486096	6.92	289430	8.41
240-25905-2	MRC-SW2A-061813	121969	5.80	488755	6.92	285140	8.41

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Sample No.: CCVIS 240-91258/2 Date Analyzed: 06/25/2013 09:55

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 30625002.D Heated Purge: (Y/N) N

Calibration ID: 15797

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		493449	9.66	540387	12.15	476033	14.17
UPPER LIMIT		986898	10.16	1080774	12.65	952066	14.67
LOWER LIMIT		246725	9.16	270194	11.65	238017	13.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-90620/16-A		448369	9.66	486779	12.15	422154	14.17
240-25905-1	MRC-SW1A-061813	503800	9.66	558328	12.15	477434	14.17
240-25905-2	MRC-SW2A-061813	484307	9.66	539873	12.15	473187	14.17

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Instrument ID: A4HP10 Start Date: 05/29/2013 13:26

Analysis Batch Number: 87604 End Date: 05/29/2013 20:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-87604/1		05/29/2013 13:26	1	30529001.D	DB-624 0.18(mm)
STD5 240-87604/2 IC		05/29/2013 13:50	1	30529002.D	DB-624 0.18(mm)
STD4 240-87604/3 IC		05/29/2013 14:13	1	30529003.D	DB-624 0.18(mm)
STD3 240-87604/4 IC		05/29/2013 14:37	1	30529004.D	DB-624 0.18(mm)
STD2 240-87604/5 IC		05/29/2013 15:01	1	30529005.D	DB-624 0.18(mm)
STD1 240-87604/6 IC		05/29/2013 15:24	1	30529006.D	DB-624 0.18(mm)
STD9 240-87604/7 IC		05/29/2013 15:48	1	30529007.D	DB-624 0.18(mm)
STD8 240-87604/8 IC		05/29/2013 16:12	1	30529008.D	DB-624 0.18(mm)
STD7 240-87604/9 IC		05/29/2013 16:36	1	30529009.D	DB-624 0.18(mm)
STD6 240-87604/10 ICIS		05/29/2013 17:00	1	30529010.D	DB-624 0.18(mm)
ICV 240-87604/11		05/29/2013 17:23	1	30529011.D	DB-624 0.18(mm)
STD5 240-87604/12 IC		05/29/2013 17:47	1		DB-624 0.18(mm)
STD4 240-87604/13 IC		05/29/2013 18:11	1		DB-624 0.18(mm)
STD3 240-87604/14 IC		05/29/2013 18:35	1		DB-624 0.18(mm)
STD2 240-87604/15 IC		05/29/2013 18:59	1		DB-624 0.18(mm)
STD6 240-87604/16 IC		05/29/2013 19:22	1		DB-624 0.18(mm)
STD7 240-87604/17 IC		05/29/2013 19:46	1		DB-624 0.18(mm)
STD8 240-87604/18 IC		05/29/2013 20:10	1		DB-624 0.18(mm)
STD9 240-87604/19 IC		05/29/2013 20:33	1		DB-624 0.18(mm)
ICV 240-87604/20		05/29/2013 20:57	1		DB-624 0.18(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Instrument ID: A4HP10 Start Date: 06/25/2013 09:33

Analysis Batch Number: 91258 End Date: 06/25/2013 18:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-91258/1		06/25/2013 09:33	1	30625001.D	DB-624 0.18(mm)
CCVIS 240-91258/2		06/25/2013 09:55	1	30625002.D	DB-624 0.18(mm)
MB 240-90620/15-A		06/25/2013 10:18	1	30625003.D	DB-624 0.18(mm)
LCS 240-90620/16-A		06/25/2013 10:41	1	30625004.D	DB-624 0.18(mm)
240-25905-1	MRC-SW1A-061813	06/25/2013 18:29	1	30625024.D	DB-624 0.18(mm)
240-25905-2	MRC-SW2A-061813	06/25/2013 18:52	1	30625025.D	DB-624 0.18(mm)

8270D

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-25905-1

SDG No.:

Batch Number: 90620 Batch Start Date: 06/20/13 10:40 Batch Analyst: Earle, Steve

Batch Method: 3520C Batch End Date: 06/21/13 04:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	EXBNASPIKE 00002	EXBNASURR W 00001
240-25905-D-1	MRC-SW1A-061813	3520C, 8270D	T	1030 mL	2 mL	7	2		1 mL
240-25905-E-2	MRC-SW2A-061813	3520C, 8270D	T	1050 mL	2 mL	7	2		1 mL
MB 240-90620/15		3520C, 8270D		1000 mL	2 mL	7	2		1 mL
LCS 240-90620/16		3520C, 8270D		1000 mL	2 mL	7	2	1 mL	1 mL

Batch Notes	
Acid used for pH adjust Lot #	711899
Na2SO4 Lot Number	963862
Prep Solvent Lot #	1045163

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-25905-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-90620/16-A

Matrix: Water | Lab File ID: 30625004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 06/20/2013 08:23

Sample wt/vol: 1000(mL) | Date Analyzed: 06/25/2013 10:41

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 91258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	13.7		1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	73		20-110
367-12-4	2-Fluorophenol (Surr)	78		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	100		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	86		21-110
4165-62-2	Phenol-d5 (Surr)	78		21-110
1718-51-0	Terphenyl-d14 (Surr)	82		24-110

TestAmerica Canton
Target Compound Quantitation Report

Sample Quantitation

Data File:	\\NCChrom\ChromData\A4HP10\20130625-21064.b\30625004.D		
Lims ID:	LCS 240-90620/16-A	Client ID:	
Inject. Date:	25-Jun-2013 10:41:30	Dil. Factor:	1.0000
Sample Type:	LCS		
Sample ID:	240-0021064-004		
Misc. Info.:	LCS 240-90620/16-A		
Operator:	001710	Instrument ID:	A4HP10
Injection Vol:	1.0 ul	ALS Bottle#:	4
Lims Batch ID:	91258	Lims Sample ID:	4
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A4HP10\20130625-21064.b\8270_10.m		
Last Update:	25-Jun-2013 14:13:48	Calib Date:	18-Jun-2013 13:04:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCChrom\ChromData\A4HP10\20130618-20834.b\30618012.D		
Limit Group:	MSS 8270D ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Column Type:	5% phenyl	Column Dia:	0.18 mm
Process Host:	XAWRK028		

First Level Reviewer: gruberj Date: 25-Jun-2013 11:05:19

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.798	5.799	-0.001	97	119053	4.00	
* 2 Naphthalene-d8	136	6.915	6.915	0.0	99	449662	4.00	
* 3 Acenaphthene-d10	164	8.407	8.407	0.0	91	266170	4.00	
* 4 Phenanthrene-d10	188	9.659	9.659	0.0	95	448369	4.00	
* 5 Chrysene-d12	240	12.150	12.150	0.0	73	486779	4.00	
* 6 Perylene-d12	264	14.171	14.165	0.006	89	422154	4.00	
$ 7 2-Fluorophenol	112	4.535	4.535	0.0	88	308081	7.77	
$ 8 Phenol-d5	99	5.452	5.452	0.0	95	397427	7.80	
$ 9 Nitrobenzene-d5	82	6.286	6.286	0.0	86	321153	8.63	
$ 10 2-Fluorobiphenyl (Surr)	172	7.826	7.826	0.0	100	699519	7.28	
$ 11 2,4,6-Tribromophenol	330	9.071	9.071	0.0	92	98056	9.98	
$ 12 Terphenyl-d14	244	10.998	10.998	0.0	98	855245	8.17	
247 Hexadecane	57		0.000					
243 n-Decane	57		0.000					
244 n-Octadecane	57		0.000					
25 1,4-Dioxane	88	2.273	2.273	0.0	93	126202	6.83	M
26 N-Nitrosodimethylamine	74	2.708	2.702	0.006	84	179729	8.00	M
27 Pyridine	79	2.773	2.755	0.017	86	35633	0.8278	M
41 Benzaldehyde	77	5.399	5.399	0.0	90	431291	13.4	
43 Phenol	94	5.464	5.464	0.0	98	401420	7.95	
44 Aniline	93	5.493	5.493	0.0	98	412764	6.50	
45 Bis(2-chloroethyl)ether	93	5.552	5.552	0.0	97	320745	7.99	
47 2-Chlorophenol	128	5.605	5.605	0.0	94	334335	8.15	
48 1,3-Dichlorobenzene	146	5.746	5.746	0.0	97	312039	6.54	
49 1,4-Dichlorobenzene	146	5.810	5.810	0.0	95	325944	6.67	
50 Benzyl alcohol	108	5.916	5.916	0.0	92	194531	7.76	
51 1,2-Dichlorobenzene	146	5.945	5.945	0.0	97	321999	7.00	
52 2-Methylphenol	108	6.010	6.010	0.0	95	275013	7.59	
53 Indene	115	6.028	6.028	0.0	79	982925	13.3	
54 2,2'-oxybis[1-chloropropane]	45	6.033	6.034	-0.001	91	380432	7.59	

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
56 3 & 4 Methylphenol	108	6.139	6.145	-0.006	92	293901	7.86	
57 N-Nitrosodi-n-propylamine	70	6.145	6.145	0.0	86	185781	7.72	
58 Acetophenone	105	6.151	6.151	0.0	95	426948	7.76	
61 Hexachloroethane	117	6.251	6.251	0.0	97	108238	6.22	
62 Nitrobenzene	77	6.304	6.304	0.0	84	316015	8.41	
64 Isophorone	82	6.509	6.509	0.0	96	566003	7.97	
66 2-Nitrophenol	139	6.580	6.580	0.0	91	177226	9.02	
65 2,4-Dimethylphenol	107	6.603	6.603	0.0	90	207662	5.80	
70 Benzoic acid	122	6.639	6.668	-0.029	71	57034	4.96	M
69 Bis(2-chloroethoxy)methane	93	6.686	6.686	0.0	99	374087	8.36	
72 2,4-Dichlorophenol	162	6.786	6.786	0.0	89	270501	8.63	
73 1,2,4-Trichlorobenzene	180	6.862	6.862	0.0	89	263736	7.18	
74 Naphthalene	128	6.932	6.933	-0.001	97	934980	7.74	
75 4-Chloroaniline	127	6.968	6.968	0.0	84	385233	7.85	
78 Hexachlorobutadiene	225	7.032	7.032	0.0	92	121564	6.00	
83 Caprolactam	113	7.250	7.256	-0.006	79	197891	19.4	
85 4-Chloro-3-methylphenol	107	7.373	7.373	0.0	89	265774	8.65	
87 2-Methylnaphthalene	142	7.520	7.520	0.0	87	625871	7.64	
88 1-Methylnaphthalene	142	7.608	7.608	0.0	81	590160	7.72	
89 Hexachlorocyclopentadiene	237	7.649	7.649	0.0	88	14182	0.6958	
92 1,2,4,5-Tetrachlorobenzene	216	7.661	7.661	0.0	93	261668	7.09	
93 2,4,6-Trichlorophenol	196	7.755	7.755	0.0	89	191894	8.72	
94 2,4,5-Trichlorophenol	196	7.784	7.790	-0.006	96	193788	8.13	
98 1,1'-Biphenyl	154	7.914	7.914	0.0	95	767840	7.39	
100 2-Chloronaphthalene	162	7.937	7.937	0.0	95	572586	7.22	
102 2-Nitroaniline	65	8.014	8.014	0.0	88	164286	7.49	
105 Dimethyl phthalate	163	8.155	8.155	0.0	99	718040	8.10	
106 1,3-Dinitrobenzene	168	8.190	8.190	0.0	91	115520	8.33	
107 2,6-Dinitrotoluene	165	8.213	8.213	0.0	71	159230	7.94	
109 Acenaphthylene	152	8.290	8.290	0.0	93	946274	7.56	
110 3-Nitroaniline	138	8.360	8.360	0.0	97	183033	7.86	
112 Acenaphthene	153	8.437	8.437	0.0	92	628419	7.71	
111 2,4-Dinitrophenol	184	8.442	8.448	-0.006	82	145366	15.9	
113 4-Nitrophenol	109	8.484	8.484	0.0	88	160138	13.8	
114 2,4-Dinitrotoluene	165	8.554	8.554	0.0	86	219111	8.21	
116 Dibenzofuran	168	8.578	8.578	0.0	85	882069	7.89	
119 2,3,4,6-Tetrachlorophenol	232	8.677	8.678	-0.001	69	166708	8.05	
121 Diethyl phthalate	149	8.742	8.742	0.0	98	697343	8.07	
123 4-Chlorophenyl phenyl ether	204	8.854	8.854	0.0	92	332140	8.00	
126 Fluorene	166	8.865	8.866	-0.001	84	711487	7.66	
125 4-Nitroaniline	138	8.871	8.871	0.0	90	183416	7.94	
128 4,6-Dinitro-2-methylphenol	198	8.895	8.895	0.0	89	248123	17.6	
129 N-Nitrosodiphenylamine	169	8.954	8.954	0.0	98	1023579	16.1	
131 1,2-Diphenylhydrazine	77	8.989	8.989	0.0	94	648583	7.80	
132 Azobenzene	77	8.989	8.989	0.0	98	648294	7.79	
139 4-Bromophenyl phenyl ether	248	9.271	9.271	0.0	62	199247	8.51	
141 Hexachlorobenzene	284	9.330	9.330	0.0	92	200652	8.15	
142 Atrazine	200	9.388	9.389	0.0	92	364899	16.9	
144 Pentachlorophenol	266	9.488	9.494	-0.006	81	210603	14.3	
149 Phenanthrene	178	9.682	9.682	0.0	97	1053138	8.14	
150 Anthracene	178	9.723	9.723	0.0	98	1067671	8.27	
152 Carbazole	167	9.853	9.853	0.0	93	923143	7.86	

Report Date: 25-Jun-2013 14:13:51 Chrom Revision: 2.0 01-Apr-2013 21:16:10
Data File: \\NCChrom\ChromData\A4HP10\20130625-21064.b\30625004.D

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
155 Di-n-butyl phthalate	149	10.111	10.111	0.0	100	1256862	8.57	
160 Fluoranthene	202	10.681	10.687	-0.006	98	1171566	8.54	
161 Benzidine	184	10.781	10.781	0.0	97	157755	2.94	
162 Pyrene	202	10.887	10.887	0.0	95	1207457	8.37	
170 Butyl benzyl phthalate	149	11.462	11.463	-0.001	95	537895	8.68	
177 3,3'-Dichlorobenzidine	252	12.091	12.091	0.0	67	595003	13.5	
175 Bis(2-ethylhexyl) phthalate	149	12.115	12.115	0.0	95	754033	8.53	
179 Benzo[a]anthracene	228	12.138	12.138	0.0	86	1085902	8.29	
180 Chrysene	228	12.185	12.185	0.0	94	1040468	8.25	
182 Di-n-octyl phthalate	149	12.996	12.996	0.0	99	1222601	7.14	
184 Benzo[b]fluoranthene	252	13.601	13.601	0.0	89	1072681	8.60	
185 Benzo[k]fluoranthene	252	13.636	13.642	-0.006	85	1157633	8.00	
186 Benzo[a]pyrene	252	14.083	14.089	-0.006	76	993185	8.45	
190 Indeno[1,2,3-cd]pyrene	276	15.787	15.787	0.0	93	1121255	7.39	
191 Dibenz(a,h)anthracene	278	15.810	15.811	0.0	78	941124	7.59	
192 Benzo[g,h,i]perylene	276	16.204	16.204	0.0	92	961548	8.58	

QC Flag Legend

Review Flags
M - Manually Integrated

$$\text{Result} = \frac{\text{Response analyte}}{\text{Response Int. Std}} \times \frac{\text{Amt. Int. Std}}{\text{ICal RRF}}$$

$$= \frac{126202}{119053} \times \frac{4.00 \text{ ng/uL}}{0.6208}$$

$$= 6.83 \text{ ng/uL}$$ ✓

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-25905-1 Analy Batch No.: 87604

SDG No.:

Instrument ID: A4HP10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/29/2013 13:50 Calibration End Date: 05/29/2013 17:00 Calibration ID: 15406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-87604/6	30529006.D
Level 2	STD2 240-87604/5	30529005.D
Level 3	STD3 240-87604/4	30529004.D
Level 4	STD4 240-87604/3	30529003.D
Level 5	STD5 240-87604/2	30529002.D
Level 6	STD6 240-87604/10	30529010.D
Level 7	STD7 240-87604/9	30529009.D
Level 8	STD8 240-87604/8	30529008.D
Level 9	STD9 240-87604/7	30529007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5739	0.7351 0.5764	0.6739 0.6189	0.5794 0.6237	0.5846	Ave		0.6208				9.3		20.0			
N-Nitrosodimethylamine	0.7471	0.6255 0.7694	0.7296 0.8516	0.7238 0.8526	0.7376	Ave		0.7546				9.7		20.0			
Pyridine	1.3864	1.3884 1.4299	1.4421 1.5505	1.4397 1.5594	1.3742	Ave		1.4463				5.0		20.0			
Benzaldehyde	1.1896 1.0672	1.0302 1.0661	1.0489 1.1224	1.0593 1.1101	1.0541	Ave		1.0831			0.0100	4.6		20.0			
Phenol	1.6857	1.5675 1.6967	1.6009 1.8624	1.6396 1.8618	1.6589	Ave		1.6967			0.8000	6.5		20.0			
Aniline	2.1067	1.9523 2.1643	2.0222 2.3324	2.0509 2.3522	2.0931	Ave		2.1343				6.7		20.0			
Bis(2-chloroethyl)ether	1.2950	1.3205 1.3253	1.3471 1.4295	1.2987 1.4620	1.3138	Ave		1.3490			0.7000	4.6		20.0			
2-Chlorophenol	1.3944	1.1595 1.4301	1.2370 1.5379	1.3392 1.5546	1.3794	Ave		1.3790			0.8000	9.8		20.0			
1,3-Dichlorobenzene	1.5882	1.5699 1.5958	1.5377 1.7232	1.5058 1.7330	1.5680	Ave		1.6027				5.1		20.0			
1,4-Dichlorobenzene	1.5846	1.5636 1.6444	1.5786 1.7626	1.6290 1.7645	1.6106	Ave		1.6422				4.8		20.0			
Benzyl alcohol	0.8500	0.6795 0.9005	0.7615 0.9627	0.7881 0.9551	0.8409	Ave		0.8423				12.0		20.0			
1,2-Dichlorobenzene	1.5089	1.4171 1.5530	1.5339 1.6559	1.5160 1.6869	1.4952	Ave		1.5459				5.7		20.0			
2-Methylphenol	1.2168	1.1441 1.2598	1.1455 1.3211	1.1373 1.3425	1.1667	Ave		1.2167			0.7000	6.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

APPENDIX C—CHEMICAL RESULTS DATA TABLE

TABLE C-1

CHEMICAL RESULTS FOR SURFACE WATER SAMPLES - DARK HEAD COVE AND COW PEN CREEK, JUNE 2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	MRC-SW1A	MRC-SW2A	MRC-SW5A1	MRC-SW5A2	MRC-SW5B	MRC-SW6A	MRC-SW6B	MRC-SW7A
SAMPLE ID	MRC-SW1A-061813	MRC-SW2A-061813	MRC-SW5A1-061813	MRC-SW5A2-061813	MRC-SW5B-061813	MRC-SW6A-061813	MRC-SW6B-061813	MRC-SW7A-
SAMPLE DATE	20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
VOLATILES (UG/L)								
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	1.7 J	0.8 J	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	9.3	4.3 J	2 J	6.5	2.7 J	1.5 J	1.8 J	1.1 U
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 UJ	0.41 UJ
CARBON DISULFIDE	0.13 U	0.4 J	0.13 U	0.16 J	0.13 U	0.13 U	0.13 J	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	0.29 UJ
CHLOROFORM	0.18 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR SURFACE WATER SAMPLES - DARK HEAD COVE AND COW PEN CREEK, JUNE 2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	MRC-SW1A	MRC-SW2A	MRC-SW5A1	MRC-SW5A2	MRC-SW5B	MRC-SW6A	MRC-SW6B	MRC-SW7A
SAMPLE ID	MRC-SW1A-061813	MRC-SW2A-061813	MRC-SW5A1-061813	MRC-SW5A2-061813	MRC-SW5B-061813	MRC-SW6A-061813	MRC-SW6B-061813	MRC-SW7A-
SAMPLE DATE	20130618	20130618	20130618	20130618	20130618	20130618	20130618	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.17 J	0.26 J	0.35 J	0.17 U	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.33 J	0.17 U	1.1	1.9	1.5	0.46 J	0.81 J	0.7 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
TENTATIVELY IDENTIFIED COMPOUNDS-VOLATILES (UG/L)								
1-OCTYN-3-OL, 4-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	5 R	5.3 R	5.7 R	6.7 R	5.1 R	3.8 R	NA	NA
SEMIVOLATILES (UG/L)								
1,4-DIOXANE	0.48 U	0.47 U	NA	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR SURFACE WATER SAMPLES - DARK HEAD COVE AND COW PEN CREEK, JUNE 2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	MRC-SW7B	MRC-SW8A	MRC-SW8B	MRC-SW9A	MRC-SW9B
SAMPLE ID	MRC-SW7B-061813	MRC-SW8A-061813	MRC-SW8B-061813	MRC-SW9A-061813	MRC-SW9B-061813
SAMPLE DATE	20130618	20130618	20130618	20130618	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
VOLATILES (UG/L)					
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.5 J	2 J	1.5 J	2.4 J	1.1 U
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 UJ	0.41 UJ	0.41 UJ	0.41 UJ	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	0.29 UJ	0.29 UJ	0.29 UJ	0.29 UJ	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

TABLE C-1

CHEMICAL RESULTS FOR SURFACE WATER SAMPLES - DARK HEAD COVE AND COW PEN CREEK, JUNE 2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION	MRC-SW7B	MRC-SW8A	MRC-SW8B	MRC-SW9A	MRC-SW9B
SAMPLE ID	MRC-SW7B-061813	MRC-SW8A-061813	MRC-SW8B-061813	MRC-SW9A-061813	MRC-SW9B-061813
SAMPLE DATE	20130618	20130618	20130618	20130618	20130618
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.25 J	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.51 J	0.65 J	0.65 J	0.62 J	0.35 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 U
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
TENTATIVELY IDENTIFIED COMPOUN					
1-OCTYN-3-OL, 4-ETHYL-	NA	NA	NA	NA	1.2 NJ
SILANOL, TRIMETHYL-	NA	NA	NA	NA	2.6 R
SEMIVOLATILES (UG/L)					
1,4-DIOXANE	NA	NA	NA	NA	NA

TABLE C-1

CHEMICAL RESULTS FOR SURFACE WATER SAMPLES - DARK HEAD COVE AND COW PEN CREEK, JUNE 2013
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

J - Positive result is considered estimated as a result of technical noncompliance.
MRC - Middle River Complex
N/A - not analyzed
SW - surface water
R - The result is considered qualitatively or quantitatively unreliable.
U - Not detected at the detection limit shown left of the letter.
UG/L - micrograms per liter (i.e., parts per billion)
UJ -The analyte was not detected. However, the quantitation or detection limit may be inaccurate or imprecise.
UR - The non-detect result is considered qualitatively or quantitatively unreliable.