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# Technical Memorandum for Additional Polychlorinated Biphenyl Sediment Sampling at the Middle River Complex 2323 Eastern Boulevard Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

Prepared by:

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November 2014



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# ACRONYMS AND ABBREVIATIONS

ANS	Applied NanoStructured Solutions, LLC
CFR	<i>Code of Federal Regulations</i>
FS	feasibility study
IDW	investigation-derived waste
LMCPI	LMC Properties, Inc.
Lockheed Martin	Lockheed Martin Corporation
mg/kg	milligram(s) per kilogram
MRAS	MRA Systems, Inc.
MRC	Middle River Complex
MST	Mission Systems & Training
PCBs	polychlorinated biphenyls
SRA	sediment removal action
Tetra Tech	Tetra Tech, Inc.
TCLP	toxicity characteristic leaching procedure
TSCA	Toxic Substances Control Act
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds

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# Section 1

# Introduction

Tetra Tech, Inc. (Tetra Tech) has prepared this report on behalf of Lockheed Martin Corporation (Lockheed Martin) to further characterize polychlorinated biphenyls (PCBs) in the sediment of waterways adjacent to the Middle River Complex (MRC) at 2323 Eastern Boulevard in Middle River, Maryland (see Figure 1-1). A 2012 feasibility study (FS) of possible environmental remedies for the Middle River Complex led the Maryland Department of the Environment and the United States Environmental Protection Agency (USEPA) to approve the proposed remedies for Dark Head Cove and Cow Pen Creek sediment impacted by polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons, and metals. Sediment was sampled for these constituents in September 2013 to support the remedial design to address sediment contamination. The 2013 sampling effort revealed polychlorinated biphenyl concentrations of up to 3,600 milligrams per kilogram (mg/kg) in shallow sediment near Outfall 005, the highest concentration detected to date in Dark Head Cove and Cow Pen Creek sediment.

Additional sediment sampling in 2014 delineated areas with high polychlorinated biphenyl concentrations to design an interim removal action and develop sediment management and disposal plans. Polychlorinated biphenyl concentrations in excess of 50 mg/kg require disposal in accordance with the federal Toxic Substances Control Act (TSCA) (*Code of Federal Regulations* [CFR] Title 40, Part 761). Cove-bottom sediment samples were also collected near Outfall 008 to determine if sediment was impacted there due to a cross-connection in the stormwater outfall system in Tax Block E (stormwater from the Outfall 005 system had been retrofitted to connect to the Outfall 008 system). Sediment samples were also collected in Dark Head Cove where *in situ* treatment and monitored natural-recovery will be used to achieve reduced concentrations of polychlorinated biphenyls in these sediments.

This technical memorandum is organized as follows:

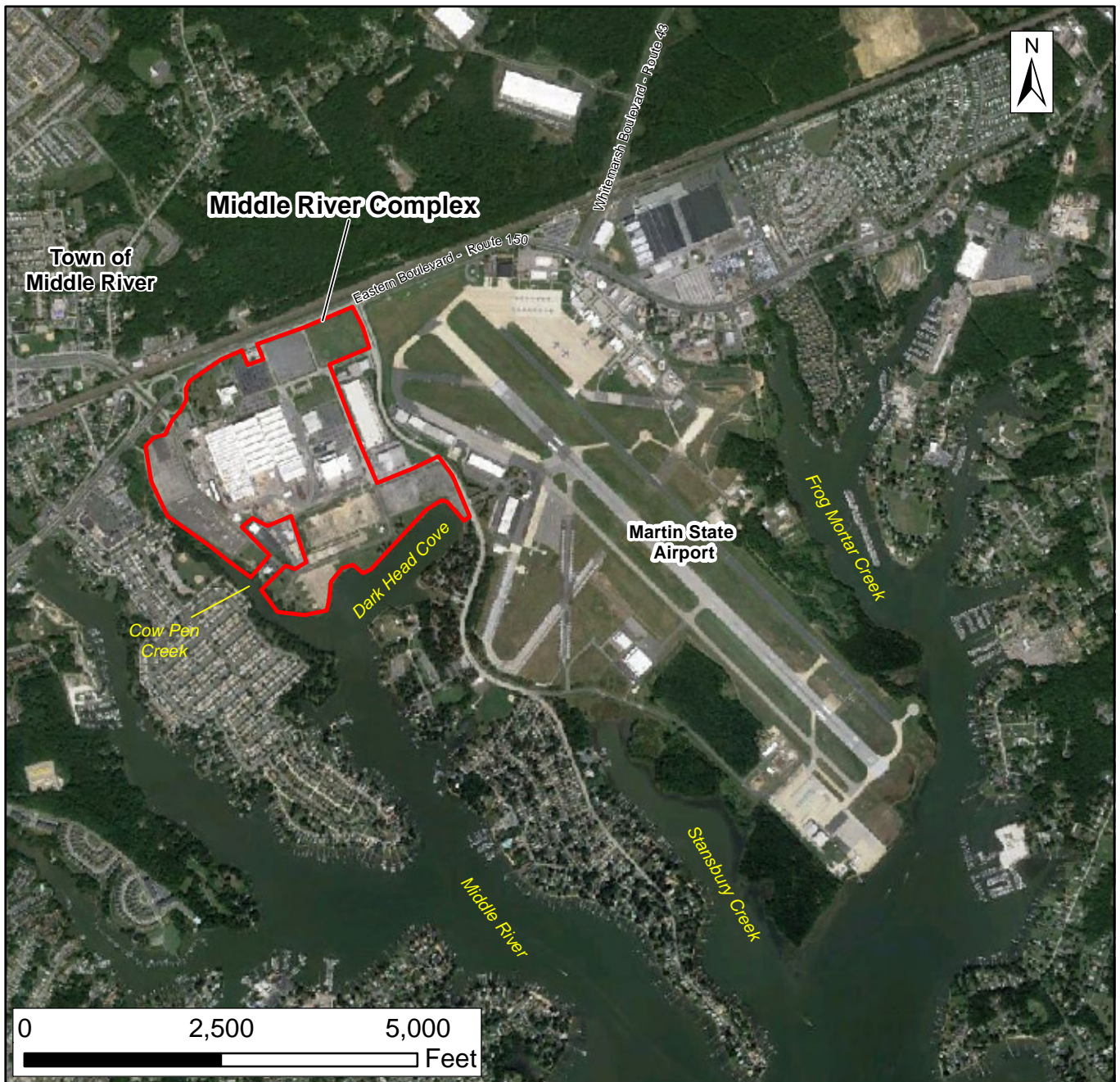
Section 2 – Site Background: Briefly describes the site history and previous investigations.

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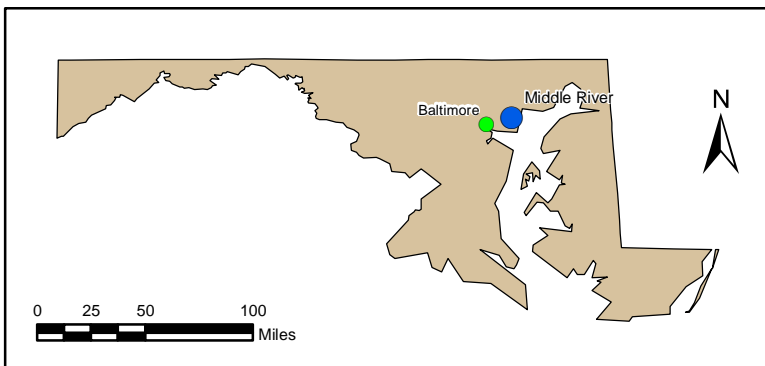
Section 3 – Investigation Approach and Methodology: Presents the technical approach to the investigation and describes the field methodology for sampling and chemical analyses.

Section 4—Results: Presents the results of the investigation program.

Section 5 – References: Cites references used in compiling this technical memorandum.



Source: Google Earth, 2013



**FIGURE 1-1**

**MIDDLE RIVER COMPLEX  
LOCATION MAP**

*Lockheed Martin Middle River Complex  
Middle River, Maryland*

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## Section 2

# Site Background

## 2.1 SITE DESCRIPTION

The Lockheed Martin Corporation (Lockheed Martin) Middle River Complex (MRC) is at 2323 Eastern Boulevard in Middle River, Maryland. A facility layout map is provided as Figure 2-1. The site is comprised of approximately 163 acres with 12 main buildings. The property includes an active industrial area and yard, perimeter parking lots, an athletic field, a vacant concrete-covered lot, a trailer and parts storage lot, and numerous grassy areas along the facility perimeter. Locked chain-link fences surround all exterior lots and the main industrial area. The site is bounded by Eastern Boulevard (Route 150) to the north, Dark Head Cove to the south, Cow Pen Creek to the west, and Martin State Airport (MSA) to the east.

The MRC is owned by LMC Properties, Inc. (LMCPI) (a Lockheed Martin subsidiary). LMCPI activities at the site are limited to facility and building management and maintenance. Two main tenants occupy the site: MRA Systems, Inc. (MRAS) (a subsidiary of General Electric Company) and the Mission Systems & Training (MST) business area of Lockheed Martin. MRAS designs, manufactures, fabricates, tests, overhauls, repairs, and maintains aeronautical structures, parts, and components for military and commercial applications. MST fabricates, assembles, tests, and otherwise supports vertical-launch systems. Historically, the property has been used for aircraft and missile-launching-systems design, development, and sales. Applied NanoStructured Solutions, LLC (ANS) (another Lockheed Martin company) occupies a small portion of the site. ANS develops and commercializes nanotechnology.

## 2.2 PREVIOUS SEDIMENT INVESTIGATIONS

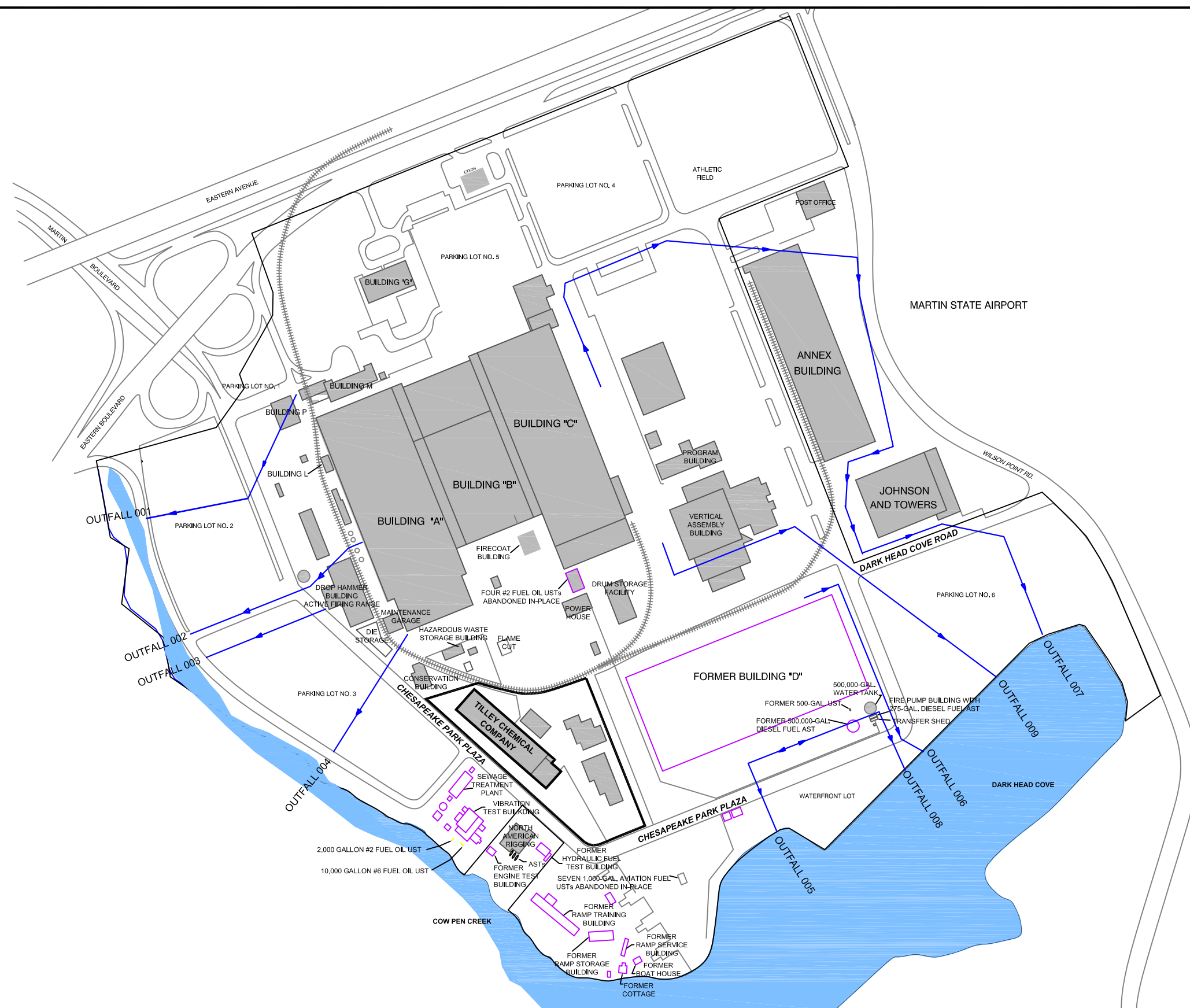
Various environmental investigations in Dark Head Cove and Cow Pen Creek from 2005 to 2012 have identified sediment contamination resulting from historical landfilling and plant activities. Historical sediment sampling locations are shown on Figure 2-2. These investigations have found elevated concentrations of polychlorinated biphenyls (PCBs), polycyclic aromatic

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hydrocarbons, and metals in these locations. A 2012 feasibility study (FS) (Tetra Tech, 2012) proposed the preferred sediment remedy of contaminant removal and *in situ* treatment/natural recovery. This preferred remedy was recently approved by the Maryland Department of the Environment and the United States Environmental Protection Agency (USEPA).

Follow-up sampling in 2013 delineated sediment impacts near Outfall 005, in support of a remedial design. The 2013 sampling found the following analytes at concentrations above the cleanup levels developed in the FS: cadmium (68 samples), lead (37 samples), benzo(a)pyrene-equivalents (36 samples), zinc (25 samples), PCBs (15 samples), arsenic (one sample), and mercury (one sample). The 2013 results also found PCB concentrations of up to 3,600 mg/kg in shallow sediment near Outfall 005 West. Additional details regarding MRC background and history, including details of previous sediment investigations and discussions of sediment contaminant distributions, are in the FS (Tetra Tech, Inc. [Tetra Tech], 2012) and in the *Sediment Remedy-Design Investigation Report* (Tetra Tech, 2014a).





**FIGURE 2-1**

**MIDDLE RIVER COMPLEX FACILITY MAP**

**LEGEND**

OUTFALL 004 NPDES PERMITTED OUTFALL

—> STORMWATER AND FLOW DIRECTION

■ EXISTING STRUCTURE

□ FORMER STRUCTURE

AST - aboveground storage tank  
 GAL - gallon  
 NPDES - National Pollutant Discharge Elimination System  
 UST - underground storage tank

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

0 200 400

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**Tetra Tech Inc.**



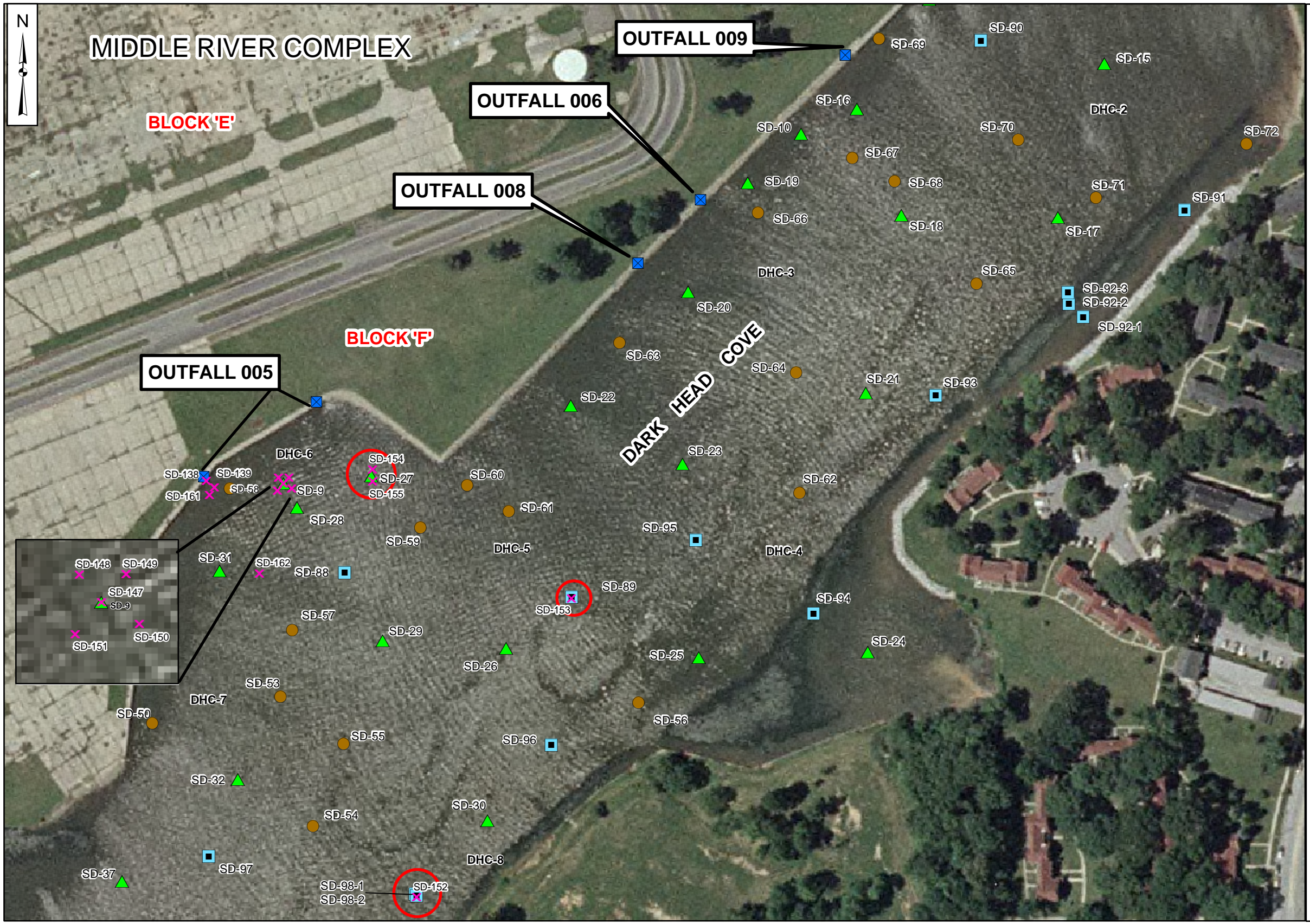
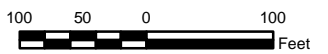


Figure 2-2  
 Historical Sediment Sampling  
 Locations in Dark Head Cove -  
 Polychlorinated Biphenyls  
 Lockheed Martin Middle River Complex  
 Middle River, Maryland

- Legend**
- ✕ Sediment Core/Sample Location - 2013
  - Delineation Sample Location - 2010
  - Sediment Sample Locations- Nov 2008
  - Storm Drain Outfall
  - ▲ Sediment Sample Location- 2005
  - Treatability Testing Sample Location- 2013



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 Approved By:



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## Section 3

# Investigation Approach and Methodology

Cove-bottom-sediment samples were collected on June 9–20, 2014 near Outfalls 005 West, 005 East, and 008 in support of a design to remediate polychlorinated biphenyl (PCB)-containing sediment. Samples were first collected on grids near the outfalls, and then in unsampled areas farther away from Outfalls 005 West and 005 East. Samples were also collected in the main channel area of Dark Head Cove (southeast of the outfalls) designated to undergo *in situ* treatment in concert with monitored natural-recovery.

This investigation was to delineate the horizontal and vertical extent of PCBs in bottom sediment near these outfalls. Specifically, the additional sediment sampling described herein helps delineate areas of sediment that, when removed, will require disposal in accordance with the federal Toxic Substances Control Act (TSCA) (i.e., sediment with PCB concentrations of 50 milligrams per kilogram [mg/kg] or more). The sampling data herein for the *in situ* treatment/monitored natural-recovery areas provide comprehensive total PCB concentrations that will be used to design and implement the sediment remediation in the main portion of Dark Head Creek.

Sediment samples were collected at various depths below the mud line from 69 sediment cores advanced using vibracore equipment. As shown in Table 3-1, four samples were collected from 45 cores at depth intervals of 0–0.5 feet (i.e., at 0–6 inches with an “SS” sample designation), 0.5–1.5 feet (i.e., at 6–18 inches with an “01” sample designation), 1.5–2.5 feet (i.e., at 18–30 inches with an “02” sample designation), and 2.5–4.33 feet (i.e., at 30–52 inches with an “03” sample designation). Samples were collected at other locations within the first sampling depth (0–0.5 feet) only, or from two or three of the sampling depths, based on data needs or because of limited sample recovery (Table 3-1). Equipment decontamination, sample handling, sample chain of custody procedures, and handling/disposal of investigation-derived wastes

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(IDW) were in accordance with the *Additional Polychlorinated Biphenyl Sediment-Sampling Work Plan* (Tetra Tech, 2014b). Sample record sheets are in Appendix A.

Sediment samples (226 environmental and nine duplicate samples) were analyzed for total PCBs by homolog groups (mono- through deca-chlorobiphenyls) using United States Environmental Protection Agency (USEPA) Method 680. Ten samples (SD-252 through SD-259, SD-275 and SD-276) were also analyzed for PCB Aroclors using USEPA Method 8082A so that concentrations detected using both methodologies could be compared and correlated during the treatment-design phase. Sampling locations are shown on Figure 3-1, and details regarding sampling and chemical analyses in Table 3-1. Samples were also collected for radiological and toxicity characteristic leaching procedure (TCLP) analyses; these results will be addressed in separate reports.

Data handling, management, and validation were in accordance with the *Work Plan for Additional Polychlorinated Biphenyl Sediment-Sampling* (Tetra Tech, 2014). All analytical results were thoroughly checked for quality and usability by qualified chemists. Data validation consisted of assessing data completeness, holding times, calibrations, laboratory- and field-blank contamination, and field-duplicate precision. This review was based on the United States Environmental Protection Agency (USEPA) Region 3 *Modifications to the National Functional Guidelines for Data Review* (USEPA, 1993 and 1994), and the specifics of the analytical methods used. Data validation found that these data are acceptable for their intended use except for four non-detect PCB-homolog results flagged as unreliable (UR) in samples SD-226-SS, SD-248-01, SD-265-02, and SD-267-SS. No other data restrictions that would limit the use of the remaining data were noted or identified. Data-validation reports, including sample chain of custody forms, are in Appendix B.

Table 3-1

Summary of Sediment Sampling and Chemical Analyses—Dark Head Cove, 2014  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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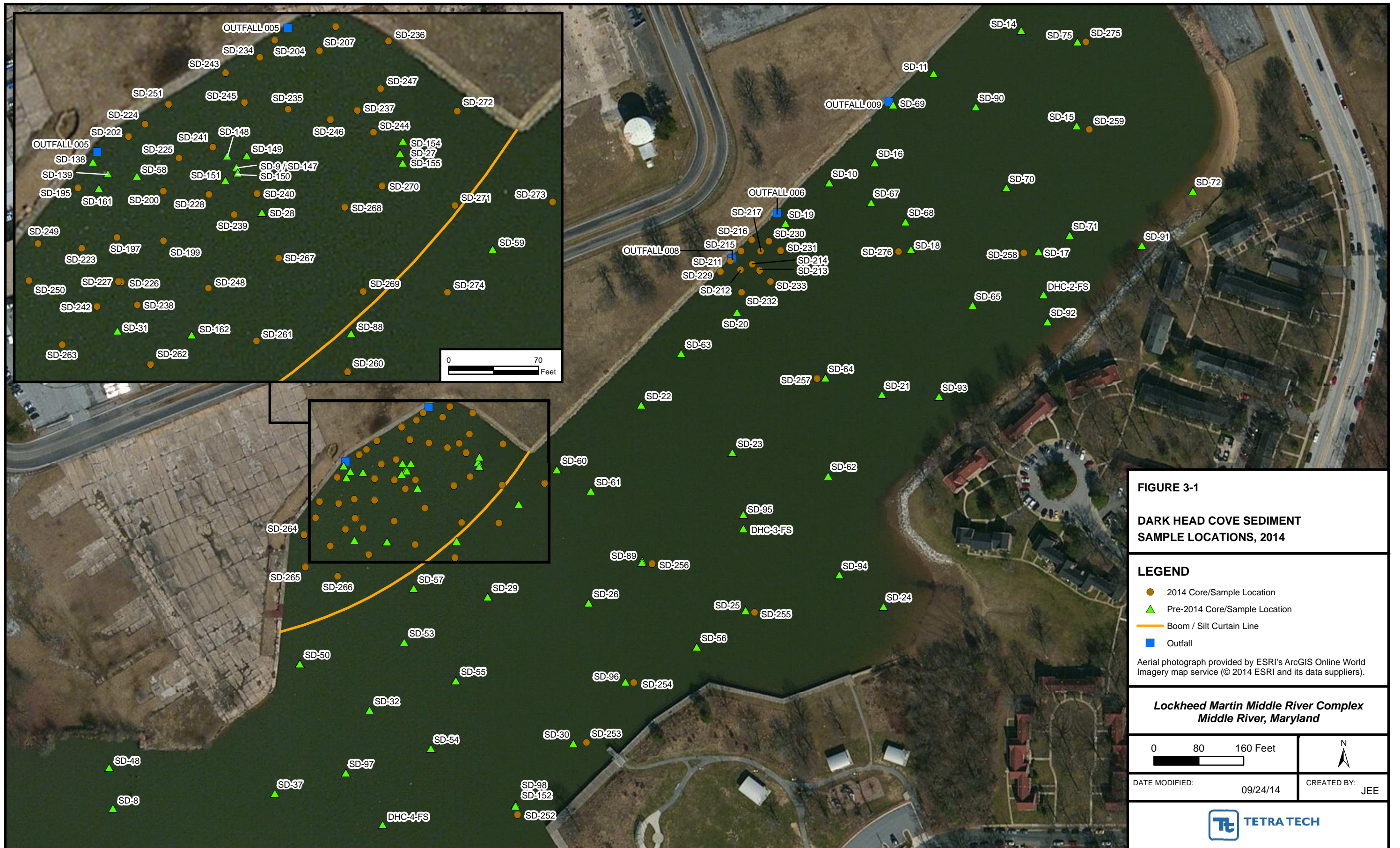
Sediment sample number	Location	Sampling depth	Sample analyses and methods	Rationale/purpose
47 core locations; 175 samples plus six duplicate samples: (SD-199-02-D, SD-237-02-D, SD-241-01-D, SD-262-SS-D, SD-270-02-D, SD272-01-D)	Dark Head Cove, Outfall 005 West and 005 East	Four samples at 37 core locations-samples were collected from depths of 0–0.5 foot, 0.5–1.5 feet, 1.5–2.5 feet, and 2.5–4.33 feet.  Samples were collected from the top three depths at SD-202, SD-204, SD-223, SD-227, SD-236, SD-271, and SD-272.  Samples were collected from bottom three depths at SD-209.  Samples were collected from top two depths at SD-234.  One sample was collected from top depth at SD-219.	<i>Laboratory analyses:</i> polychlorinated biphenyls (PCBs) by SW846 Method 680	Recent sampling near Outfall 005 West found total PCB concentrations of up to 3,600 milligrams per kilogram (mg/kg) in shallow sediment. Outfall 005 East is connected to the same storm-drain line from Tax Block E, but samples were not analyzed for PCBs during the 2013 study. Further sampling was required around both outfalls to design an interim removal action and develop disposal plans for sediment. Sample cores were advanced along an outward grid from the outfall area.
12 core locations; SD-211 through SD-217; SD-229 through SD-233; 41 samples plus one duplicate sample (SD-213-02-D)	Dark Head Cove- Outfall 008	Four samples at eight core locations-samples were collected from depths of 0–0.5 foot, 0.5–1.5 feet, 1.5–2.5 feet, and 2.5–4.33 feet.  Samples were collected from the top three depths at SD-211 and SD-216.  Samples were collected from the top two depths at SD-229.  One sample was collected from the top depth at SD-215.	<i>Laboratory analyses:</i> PCBs by SW846 Method 680	Recent sampling near Outfall 005 West found total PCB concentrations of up to 3,600 mg/kg in shallow sediment. Outfall 008 is cross-connected in Tax Block E to the same storm-drain line as the Outfall 005 system, but samples near Outfall 008 were not analyzed for PCBs during the 2013 study. Therefore, sampling was required to determine if PCB concentrations in this area are greater than 50 mg/kg.

Table 3-1

Summary of Sediment Sampling and Chemical Analyses—Dark Head Cove, 2014  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
 Page 2 of 2

Sediment sample number	Location	Sampling depth	Sample analyses and methods	Rationale/purpose
10 core locations SD-252 through SD-259; SD-275, SD-276; 10 samples plus two duplicate samples (SD-255 and SD-257)	Dark Head Cove <i>in situ</i> remedial action areas	One sample was collected from a depth of 0–0.5 foot at each core location	<i>Laboratory analyses:</i> PCBs by SW846 Method 680 and SW846 Method 8280A	These analyses provided PCB-homolog concentrations that may be present due to dechlorination/degradation of parent Aroclor-PCBs in Dark Head Cove sediment. These samples were also analyzed for Aroclor-PCBs to assess the correlation between parent Aroclors and degradation homologs. The same PCB extraction was used in the analyses for both methods (i.e., they incorporated a shared sample preparation and extraction). This was expected to reduce possible concentration differences that could result if separate sample aliquots and extractions had been used for each analytical method.





**FIGURE 3-1**  
**DARK HEAD COVE SEDIMENT**  
**SAMPLE LOCATIONS, 2014**

**LEGEND**

- 2014 Core/Sample Location
- ▲ Pre-2014 Core/Sample Location
- Boom / Silt Curtain Line
- Outfall

Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2014 ESRI and its data suppliers).

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

0 80 160 Feet

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## Section 4

# Results

This 2014 investigation supplements and enhances existing sediment data collected during previous sediment investigations of Dark Head Cove. Polychlorinated biphenyls (PCBs) have been identified in previous studies as the primary potentially risk-contributing constituent in Dark Head Cove sediment. This and previous studies will be used to design the sediment remedial action (SRA) for this site and to plan for the proper disposal of the removed material. The 2014 sediment data in Appendix C are grouped according to sediment sample number. Appendix C also provides a statistical analysis of the sampling data and a positive-detection table summarizing the analytical results.

Nine PCB homologs were detected in this investigation (Appendix C), with tetrachlorobiphenyls and pentachlorobiphenyls detected most frequently (in 190 and 170 samples, respectively). The highest maximum homolog concentrations are tetrachlorobiphenyls (150 milligrams per kilogram [mg/kg] at SD-207-SS), hexachlorobiphenyls (78 mg/kg at SD-235-SS), and heptachlorobiphenyls (53 mg/kg at SD-235-SS). Aroclor-1260 is the only Aroclor detected in sediment samples (in 10 of 10 samples, with concentrations ranging from 0.84–1.7J mg/kg). Note that the only samples analyzed for both Aroclors and polychlorinated biphenyl homologs are the 10 samples collected in the main portion of Dark Head Cove; therefore, Aroclor analysis was not performed on sample SD-207-SS, in which polychlorinated biphenyl homologs were detected at a concentration of 150 mg/kg.

Figures 4-1 through 4-4 summarize the horizontal and vertical extent of total polychlorinated biphenyls in Dark Head Cove sediment, as compared to preliminary remediation goals developed in the feasibility study (FS) (Tetra Tech, Inc. [Tetra Tech], 2012) and the threshold (50 mg/kg) used to identify *in situ* concentrations of polychlorinated biphenyls that must be segregated and handled separately in accordance with the *Toxic Substances Control Act* (TSCA). Samples collected before 2014 are represented by a triangle, whereas samples collected in 2014 are represented by a circle. These symbols are also color-coded according to five concentration

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categories that illustrate the spatial distribution of total polychlorinated biphenyl concentrations. Details regarding the development and rationales of these concentration intervals are described in the feasibility study (Tetra Tech, 2012) and are not included herein.

Figures 4-1 through 4-4 and Table 4-1 summarize total polychlorinated biphenyl concentrations for each sampling-depth interval (i.e., 0–0.5, 0.5–1.5, 1.5–2.5, and 2.5–4.33 feet below the surface water/sediment interface). Total polychlorinated biphenyl concentrations are represented by both homologs (samples SD-195 through SD-274, collected in 2014) and Aroclors (samples SD-9 through SD-162, collected before 2014). If a sampling location had both homolog and Aroclor results (i.e., locations SD-252 through SD-259, SD-275, and SD-276), the higher of the two analyses (homolog or Aroclor) is used on the figure(s) and will be used to design the Outfall 005 sediment-removal action.

Table C-6 and Figure C-1 (Appendix C) show the total polychlorinated biphenyl results for the 10 samples analyzed for Aroclors and homologs. Aroclor concentrations are higher than total homolog concentrations in seven of 10 samples, whereas the remaining three Aroclor concentrations are lower than the total homolog concentrations. Statistical analyses indicate that total homolog concentrations are poorly predicted by Aroclor concentrations (see Figure C-1 in Appendix C). The coefficient of determination ( $R^2$ ) for the least-squares-fit equation is 0.02 in the concentration range (0.0022–1.88 mg/kg) of these samples.

Polychlorinated biphenyl concentrations greater than 50 mg/kg (denoted by magenta dots) were detected in 19 samples (17 core locations) collected in 2014. Polychlorinated biphenyl concentrations greater than 50 mg/kg were detected in 11 surface sediment samples (0–0.5 foot depth; Figure 4-1), and six deeper-sediment samples (in four samples at 0.5–1.5 feet and in two samples at 1.5–2.5 feet; see Figures 4-2 and 4-3) near Outfalls 005 East and West. All samples collected in the deepest sampling interval (2.5–4.33 feet, Figure 4-4) had polychlorinated biphenyl concentrations less than 50 mg/kg.

Polychlorinated biphenyls were detected primarily in samples collected from the eastern third of the cove that surrounds Outfall 005 East and is currently enclosed by the boom and silt curtain. Three sampling locations (SD-267, SD-269, and SD-270) in the eastern and southeastern portions of this cove (near the boom and silt curtain) also had polychlorinated biphenyl concentrations greater than 50 mg/kg. Polychlorinated biphenyl concentrations near Outfall 008



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are low, with a maximum total concentration of 2.406 mg/kg at SD-214-01 (Appendix C). Polychlorinated biphenyls were not detected in samples collected nearest the bulkhead at Outfall 008 (SD-229, SD-211, SD-215, and SD-216), but trace concentrations (0.486-2.406 mg/kg) were detected in the upper two depth-intervals (0–0.5 feet and 0.5–1.5 feet deep) farther from the bulkhead, along a line from SD-212, SD-213, SD-214, SD-217, and SD-230 (see Figures 4-1 and 4-2).

Table 4-1

**Total PCB Results for Dark Head Cove Sediment Samples  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
<b>Pre-2014 Results</b>						
DHC-2-FS	DHC-2-FS-CC1	20100825	0	0.5	0.066	FIGURE 4-1
DHC-3-FS	DHC-3-FS-CC1	20100826	0	0.5	1.63	FIGURE 4-1
DHC-4-FS	DHC-4-FS-CC1	20100910	0	0.5	0.072	FIGURE 4-1
DHC-4-FS	DHC-4-FS-CC2	20100910	0	0.5	0.114	FIGURE 4-1
DHC-4-FS	DHC-4-FS-CC3	20100825	0	0.5	0.236	FIGURE 4-1
SD-8	SD-8-031805	20050318	0	0.5	0.37	FIGURE 4-1
SD-9	SD-9-031805	20050318	0	0.5	54	FIGURE 4-1
SD-10	SD-10-031805	20050318	0	0.5	1.3	FIGURE 4-1
SD-11	SD-11-031805	20050318	0	0.5	1.4	FIGURE 4-1
SD-14	SD-14-01	20051020	1	1	--	FIGURE 4-2
SD-14	SD-14-02	20051020	2	2	--	FIGURE 4-3
SD-14	SD-14-SS	20051020	0	0.5	0.48	FIGURE 4-1
SD-15	SD-15-SS	20051021	0	0.5	1.3	FIGURE 4-1
SD-16	SD-16-01	20051020	1	1	1.4	FIGURE 4-2
SD-16	SD-16-02	20051020	2	2	--	FIGURE 4-3
SD-16	SD-16-SS	20051020	0	0.5	1.4	FIGURE 4-1
SD-17	SD-17-SS	20051021	0	0.5	1.1	FIGURE 4-1
SD-18	SD-18-SS	20051021	0	0.5	0.78	FIGURE 4-1
SD-19	SD-19-01	20051021	1	1	0.33	FIGURE 4-2
SD-19	SD-19-02	20051021	2	2	0.049	FIGURE 4-3
SD-19	SD-19-SS	20051021	0	0.5	2.8	FIGURE 4-1
SD-20	SD-20-SS	20051021	0	0.5	1.1	FIGURE 4-1
SD-21	SD-21-SS	20051021	0	0.5	0.56	FIGURE 4-1
SD-22	SD-22-SS	20051021	0	0.5	2	FIGURE 4-1
SD-23	SD-23-SS	20051021	0	0.5	0.75	FIGURE 4-1
SD-24	SD-24-SS	20051021	0	0.5	0.19	FIGURE 4-1
SD-25	SD-25-SS	20051021	0	0.5	1.3	FIGURE 4-1
SD-26	SD-26-SS	20051021	0	0.5	1.5	FIGURE 4-1
SD-27	SD-27-01	20051021	1	1	0.67	FIGURE 4-2
SD-27	SD-27-02	20051021	2	2	0.067	FIGURE 4-3
SD-27	SD-27-SS	20051021	0	0.5	20	FIGURE 4-1
SD-28	SD-28-01	20051021	1	1	0.61	FIGURE 4-2
SD-28	SD-28-02	20051021	2	2	--	FIGURE 4-3
SD-28	SD-28-SS	20051021	0	0.5	0.79	FIGURE 4-1
SD-29	SD-29-01	20051021	1	1	0.21	FIGURE 4-2
SD-29	SD-29-02	20051021	2	2	--	FIGURE 4-3
SD-29	SD-29-SS	20051021	0	0.5	2.5	FIGURE 4-1
SD-30	SD-30-SS	20051021	0	0.5	1.4	FIGURE 4-1
SD-31	SD-31-01	20051021	1	1	--	FIGURE 4-2
SD-31	SD-31-02	20051021	2	2	0.075	FIGURE 4-3
SD-31	SD-31-SS	20051021	0	0.5	0.17	FIGURE 4-1
SD-32	SD-32-SS	20051021	0	0.5	0.62	FIGURE 4-1

**Table 4-1**

**Total PCB Results for Dark Head Cove Sediment Samples  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 2 of 11**

Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-37	SD-37-SS	20051021	0	0.5	0.24	FIGURE 4-1
SD-48	SD-48-01	20081115	0.83	1.17	--	FIGURE 4-2
SD-48	SD-48-02	20081115	1.83	2.17	--	FIGURE 4-3
SD-48	SD-48-04	20081115	3.83	4.17	--	FIGURE 4-4
SD-48	SD-48-SS	20081115	0	0.5	--	FIGURE 4-1
SD-48	SD-48-SS-D	20081115	0	0.5	--	FIGURE 4-1
SD-50	SD-50-01	20081114	0.67	1.3	2.4	FIGURE 4-2
SD-50	SD-50-01-D	20081114	0.67	1.3	1.4	FIGURE 4-2
SD-50	SD-50-02	20081114	1.8	2.2	0.61	FIGURE 4-3
SD-50	SD-50-04	20081114	3.6	4	--	FIGURE 4-4
SD-50	SD-50-SS	20081114	0	0.5	2.3	FIGURE 4-1
SD-53	SD-53-01	20081114	0.83	1.2	--	FIGURE 4-2
SD-53	SD-53-02	20081114	1.8	2.2	--	FIGURE 4-3
SD-53	SD-53-04	20081114	3.5	3.8	--	FIGURE 4-4
SD-53	SD-53-SS	20081114	0	0.5	--	FIGURE 4-1
SD-53	SD-53-SS-D	20081114	0	0.5	--	FIGURE 4-1
SD-54	SD-54-01	20081114	0.83	1.17	0.11	FIGURE 4-2
SD-54	SD-54-02	20081114	1.83	2.17	--	FIGURE 4-3
SD-54	SD-54-04	20081114	3.33	3.67	--	FIGURE 4-4
SD-54	SD-54-SS	20081114	0	0.5	--	FIGURE 4-1
SD-55	SD-55-01	20081113	0.83	1.2	0.44	FIGURE 4-2
SD-55	SD-55-02	20081113	1.8	2.2	--	FIGURE 4-3
SD-55	SD-55-SS	20081113	0	0.5	0.18	FIGURE 4-1
SD-56	SD-56-01	20081113	0.83	1.2	0.31	FIGURE 4-2
SD-56	SD-56-02	20081113	1.8	2.2	0.35	FIGURE 4-3
SD-56	SD-56-04	20081113	3.7	4.3	--	FIGURE 4-4
SD-56	SD-56-04-D	20081113	3.7	4.3	--	FIGURE 4-4
SD-56	SD-56-SS	20081113	0	0.5	0.036	FIGURE 4-1
SD-57	SD-57-01	20081114	0.83	1.2	--	FIGURE 4-2
SD-57	SD-57-02	20081114	1.8	2.2	--	FIGURE 4-3
SD-57	SD-57-04	20081114	3.6	4	--	FIGURE 4-4
SD-57	SD-57-SS	20081114	0	0.5	--	FIGURE 4-1
SD-58	SD-58-01	20081114	0.83	1.2	14	FIGURE 4-2
SD-58	SD-58-02	20081114	1.8	2.2	0.79	FIGURE 4-3
SD-58	SD-58-04	20081114	3.7	4.1	--	FIGURE 4-4
SD-58	SD-58-SS	20081114	0	0.5	6.3	FIGURE 4-1
SD-59	SD-59-01	20081115	0.83	1.2	1.3	FIGURE 4-2
SD-59	SD-59-02	20081115	1.7	2.3	--	FIGURE 4-3
SD-59	SD-59-02-D	20081115	1.7	2.3	--	FIGURE 4-3
SD-59	SD-59-04	20081115	3.8	4.2	--	FIGURE 4-4
SD-59	SD-59-SS	20081115	0	0.5	4.2	FIGURE 4-1
SD-60	SD-60-01	20081112	0.83	1.2	--	FIGURE 4-2
SD-60	SD-60-02	20081112	1.8	2.2	--	FIGURE 4-3

**Table 4-1**

**Total PCB Results for Dark Head Cove Sediment Samples  
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Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-60	SD-60-04	20081112	3.2	3.5	--	FIGURE 4-4
SD-60	SD-60-SS	20081112	0	0.5	--	FIGURE 4-1
SD-61	SD-61-01	20081113	0.83	1.2	1	FIGURE 4-2
SD-61	SD-61-02	20081113	1.8	2.2	0.071	FIGURE 4-3
SD-61	SD-61-04	20081113	3.8	4.2	--	FIGURE 4-4
SD-61	SD-61-SS	20081113	0	0.5	0.37	FIGURE 4-1
SD-62	SD-62-01	20081112	0.83	1.17	--	FIGURE 4-2
SD-62	SD-62-02	20081112	1.83	2.17	0.063	FIGURE 4-3
SD-62	SD-62-04	20081112	3.83	4.17	--	FIGURE 4-4
SD-62	SD-62-SS	20081112	0	0.5	--	FIGURE 4-1
SD-63	SD-63-01	20081112	0.83	1.2	1.1	FIGURE 4-2
SD-63	SD-63-02	20081112	1.8	2.2	--	FIGURE 4-3
SD-63	SD-63-04	20081112	3.8	4.2	--	FIGURE 4-4
SD-63	SD-63-SS	20081112	0	0.5	0.56	FIGURE 4-1
SD-64	SD-64-01	20081112	0.83	1.17	0.19	FIGURE 4-2
SD-64	SD-64-02	20081112	1.83	2.17	--	FIGURE 4-3
SD-64	SD-64-04	20081112	3.83	4.17	--	FIGURE 4-4
SD-64	SD-64-SS	20081112	0	0.5	1.6	FIGURE 4-1
SD-65	SD-65-01	20081111	0.83	1.17	--	FIGURE 4-2
SD-65	SD-65-02	20081111	1.83	2.17	--	FIGURE 4-3
SD-65	SD-65-04	20081111	3.08	3.42	--	FIGURE 4-4
SD-65	SD-65-SS	20081111	0	0.5	0.13	FIGURE 4-1
SD-66	SD-66-01	20081112	0.83	1.17	0.37	FIGURE 4-2
SD-66	SD-66-02	20081112	1.83	2.17	--	FIGURE 4-3
SD-66	SD-66-04	20081112	3.25	3.58	--	FIGURE 4-4
SD-66	SD-66-SS	20081112	0	0.5	--	FIGURE 4-1
SD-67	SD-67-01	20081111	0.83	1.17	0.14	FIGURE 4-2
SD-67	SD-67-02	20081111	1.83	2.17	0.23	FIGURE 4-3
SD-67	SD-67-04	20081111	3.83	4.17	--	FIGURE 4-4
SD-67	SD-67-SS	20081111	0	0.5	0.12	FIGURE 4-1
SD-68	SD-68-01	20081112	0.67	1.33	--	FIGURE 4-2
SD-68	SD-68-01-D	20081112	0.67	1.33	--	FIGURE 4-2
SD-68	SD-68-02	20081112	1.83	2.17	--	FIGURE 4-3
SD-68	SD-68-04	20081112	3.58	3.92	--	FIGURE 4-4
SD-68	SD-68-SS	20081112	0	0.5	--	FIGURE 4-1
SD-69	SD-69-01	20081111	0.83	1.17	--	FIGURE 4-2
SD-69	SD-69-02	20081111	1.83	2.17	--	FIGURE 4-3
SD-69	SD-69-SS	20081111	0	0.5	--	FIGURE 4-1
SD-69	SD-69-SS-D	20081111	0	0.5	--	FIGURE 4-1
SD-70	SD-70-01	20081111	0.83	1.17	0.42	FIGURE 4-2
SD-70	SD-70-02	20081111	1.83	2.17	--	FIGURE 4-3
SD-70	SD-70-04	20081111	2.83	3.17	--	FIGURE 4-4
SD-70	SD-70-SS	20081111	0	0.5	0.29	FIGURE 4-1

Table 4-1

**Total PCB Results for Dark Head Cove Sediment Samples  
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Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-71	SD-71-01	20081111	0.83	1.17	0.38	FIGURE 4-2
SD-71	SD-71-02	20081111	1.83	2.17	0.028	FIGURE 4-3
SD-71	SD-71-04	20081111	3.5	3.83	--	FIGURE 4-4
SD-71	SD-71-SS	20081111	0	0.5	--	FIGURE 4-1
SD-72	SD-72-01	20081112	0.83	1.17	--	FIGURE 4-2
SD-72	SD-72-02	20081112	1.83	2.17	--	FIGURE 4-3
SD-72	SD-72-SS	20081112	0	0.5	--	FIGURE 4-1
SD-75	SD-75-01	20081112	0.83	1.17	0.16	FIGURE 4-2
SD-75	SD-75-02	20081112	1.67	2.33	--	FIGURE 4-3
SD-75	SD-75-02-D	20081112	1.67	2.33	--	FIGURE 4-3
SD-75	SD-75-04	20081112	3.5	3.83	--	FIGURE 4-4
SD-75	SD-75-SS	20081112	0	0.5	0.53	FIGURE 4-1
SD-88	SD-88-01	20100819	1	1	1.8	FIGURE 4-2
SD-88	SD-88-02	20100819	2	2	0.22	FIGURE 4-3
SD-88	SD-88-04	20100819	4	4	--	FIGURE 4-4
SD-88	SD-88-SS	20100819	0	0.5	6.6	FIGURE 4-1
SD-89	SD-89-01	20100819	1	1	1.5	FIGURE 4-2
SD-89	SD-89-02	20100819	2	2	1.3	FIGURE 4-3
SD-89	SD-89-04	20100819	4	4	0.015	FIGURE 4-4
SD-89	SD-89-SS	20100819	0	0.5	1.8	FIGURE 4-1
SD-90	SD-90-01	20100817	1	1	1	FIGURE 4-2
SD-90	SD-90-02	20100817	2	2	0.4	FIGURE 4-3
SD-90	SD-90-04	20100817	4	4	--	FIGURE 4-4
SD-90	SD-90-SS	20100817	0	0.5	0.69	FIGURE 4-1
SD-91	SD-91-01	20100817	1	1	--	FIGURE 4-2
SD-91	SD-91-SS	20100817	0	0.5	--	FIGURE 4-1
SD-92	SD-92-01	20100817	1	1	--	FIGURE 4-2
SD-92	SD-92-SS	20100817	0	0.5	--	FIGURE 4-1
SD-93	SD-93-01	20100817	1	1	0.28	FIGURE 4-2
SD-93	SD-93-02	20100817	2	2	0.15	FIGURE 4-3
SD-93	SD-93-04	20100817	4	4	--	FIGURE 4-4
SD-93	SD-93-SS	20100817	0	0.5	0.073	FIGURE 4-1
SD-94	SD-94-01	20100817	1	1	--	FIGURE 4-2
SD-94	SD-94-02	20100817	2	2	--	FIGURE 4-3
SD-94	SD-94-04	20100817	4	4	--	FIGURE 4-4
SD-94	SD-94-SS	20100817	0	0.5	0.044	FIGURE 4-1
SD-95	SD-95-01	20100817	1	1	0.61	FIGURE 4-2
SD-95	SD-95-01-D	20100817	1	1	0.38	FIGURE 4-2
SD-95	SD-95-02	20100817	2	2	0.29	FIGURE 4-3
SD-95	SD-95-04	20100817	4	4	0.012	FIGURE 4-4
SD-95	SD-95-SS	20100817	0	0.5	0.72	FIGURE 4-1
SD-96	SD-96-01	20100819	1	1	1.9	FIGURE 4-2
SD-96	SD-96-01-D	20100819	1	1	1.8	FIGURE 4-2

**Table 4-1**

**Total PCB Results for Dark Head Cove Sediment Samples  
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Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-96	SD-96-02	20100819	2	2	0.77	FIGURE 4-3
SD-96	SD-96-04	20100819	4	4	0.011	FIGURE 4-4
SD-96	SD-96-SS	20100819	0	0.5	1.8	FIGURE 4-1
SD-97	SD-97-01	20100817	1	1	0.21	FIGURE 4-2
SD-97	SD-97-02	20100817	2	2	--	FIGURE 4-3
SD-97	SD-97-04	20100817	4	4	--	FIGURE 4-4
SD-97	SD-97-SS	20100817	0	0.5	0.62	FIGURE 4-1
SD-98	SD-98-01	20100819	1	1	0.92	FIGURE 4-2
SD-98	SD-98-02	20100819	2	2	0.88	FIGURE 4-3
SD-98	SD-98-04	20100819	4	4	0.027	FIGURE 4-4
SD-98	SD-98-SS	20100819	0	0.5	2.7	FIGURE 4-1
SD-138	SD-138-01	20130920	0.5	1.5	3600	FIGURE 4-2
SD-138	SD-138-SS	20130920	0	0.5	1800	FIGURE 4-1
SD-139	SD-139-01	20130920	0.5	1.5	2100	FIGURE 4-2
SD-139	SD-139-SS	20130920	0	0.5	140	FIGURE 4-1
SD-147	SD-147-01	20130917	0.5	1.5	29	FIGURE 4-2
SD-147	SD-147-02	20130917	1.5	2.5	1.31	FIGURE 4-3
SD-147	SD-147-03	20130917	2.5	4.33	0.027	FIGURE 4-4
SD-147	SD-147-03-D	20130917	2.5	4.33	--	FIGURE 4-4
SD-147	SD-147-SS	20130917	0	0.5	9.7	FIGURE 4-1
SD-148	SD-148-01	20130919	0.5	1.5	14	FIGURE 4-2
SD-148	SD-148-02	20130919	1.5	2.5	1.6	FIGURE 4-3
SD-148	SD-148-03	20130919	2.5	4.33	0.36	FIGURE 4-4
SD-148	SD-148-SS	20130919	0	0.5	1.2	FIGURE 4-1
SD-148	SD-148-SS-D	20130919	0	0.5	1.5	FIGURE 4-1
SD-149	SD-149-01	20130919	0.5	1.5	20	FIGURE 4-2
SD-149	SD-149-02	20130919	1.5	2.5	1.18	FIGURE 4-3
SD-149	SD-149-03	20130919	2.5	4.33	27	FIGURE 4-4
SD-149	SD-149-SS	20130919	0	0.5	4.9	FIGURE 4-1
SD-150	SD-150-01	20130919	0.5	1.5	14	FIGURE 4-2
SD-150	SD-150-02	20130919	1.5	2.5	1.9	FIGURE 4-3
SD-150	SD-150-03	20130919	2.5	4.33	0.93	FIGURE 4-4
SD-150	SD-150-SS	20130919	0	0.5	0.163	FIGURE 4-1
SD-151	SD-151-01	20130920	0.5	1.5	7	FIGURE 4-2
SD-151	SD-151-02	20130920	1.5	2.5	0.5	FIGURE 4-3
SD-151	SD-151-03	20130920	2.5	4.33	--	FIGURE 4-4
SD-151	SD-151-SS	20130920	0	0.5	2.1	FIGURE 4-1
SD-152	SD-152	20130917	0	2	0.37	FIGUREs 4-1/4-2
SD-153	SD-153	20130918	0	2	1.7	FIGUREs 4-1/4-2
SD-154	SD-154	20130917	0	2	5.5	FIGUREs 4-1/4-2
SD-155	SD-155	20130917	0	2	4.7	FIGUREs 4-1/4-2
SD-161	SD-161-01	20130920	0.5	1.5	1000	FIGURE 4-2
SD-161	SD-161-02	20130920	1.5	2.5	480	FIGURE 4-3

Table 4-1

**Total PCB Results for Dark Head Cove Sediment Samples  
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Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-161	SD-161-03	20130920	2.5	4.33	20	FIGURE 4-4
SD-161	SD-161-SS	20130920	0	0.5	13	FIGURE 4-1
SD-162	SD-162-01	20130920	0.5	1.5	2.3	FIGURE 4-2
SD-162	SD-162-02	20130920	1.5	2.5	1.4	FIGURE 4-3
SD-162	SD-162-03	20130920	2.5	4.33	0.52	FIGURE 4-4
SD-162	SD-162-SS	20130920	0	0.5	2.2	FIGURE 4-1
<b>2014 Sample Results</b>						
SD-195	SD-195-SS	20140610	0	0.5	--	FIGURE 4-1
SD-197	SD-197-01	20140611	0.5	1.5	6.515	FIGURE 4-2
SD-197	SD-197-02	20140611	1.5	2.5	0.1198	FIGURE 4-3
SD-197	SD-197-03	20140611	2.5	4.33	0.0291	FIGURE 4-4
SD-197	SD-197-SS	20140611	0	0.5	0.857	FIGURE 4-1
SD-199	SD-199-01	20140611	0.5	1.5	35.508	FIGURE 4-2
SD-199	SD-199-02	20140611	1.5	2.5	0.1847	FIGURE 4-3
SD-199	SD-199-02-D	20140611	1.5	2.5	0.2112	FIGURE 4-3
SD-199	SD-199-03	20140611	2.5	4.33	--	FIGURE 4-4
SD-199	SD-199-SS	20140611	0	0.5	1.0009	FIGURE 4-1
SD-200	SD-200-01	20140610	0.5	1.5	30.21	FIGURE 4-2
SD-200	SD-200-02	20140610	1.5	2.5	0.24	FIGURE 4-3
SD-200	SD-200-03	20140610	2.5	4.33	0.0156	FIGURE 4-4
SD-200	SD-200-SS	20140610	0	0.5	5.524	FIGURE 4-1
SD-202	SD-202-01	20140610	0.5	1.5	0.2679	FIGURE 4-2
SD-202	SD-202-02	20140610	1.5	2.5	0.05864	FIGURE 4-3
SD-202	SD-202-SS	20140610	0	0.5	137.13	FIGURE 4-1
SD-204	SD-204-01	20140611	0.5	1.5	0.0855	FIGURE 4-2
SD-204	SD-204-02	20140611	1.5	2.5	0.14091	FIGURE 4-3
SD-204	SD-204-SS	20140611	0	0.5	24.3391	FIGURE 4-1
SD-207	SD-207-01	20140611	0.5	1.5	134.4	FIGURE 4-2
SD-207	SD-207-02	20140611	1.5	2.5	7.372	FIGURE 4-3
SD-207	SD-207-03	20140611	2.5	4.33	0.443	FIGURE 4-4
SD-207	SD-207-SS	20140611	0	0.5	278.2	FIGURE 4-1
SD-209	SD-209-01	20140611	0.5	1.5	0.00099	FIGURE 4-2
SD-209	SD-209-02	20140611	1.5	2.5	0.10129	FIGURE 4-3
SD-209	SD-209-03	20140611	2.5	4.33	0.00769	FIGURE 4-4
SD-211	SD-211-01	20140612	0.5	1.5	--	FIGURE 4-2
SD-211	SD-211-02	20140612	1.5	2.5	--	FIGURE 4-3
SD-211	SD-211-SS	20140612	0	0.5	--	FIGURE 4-1
SD-212	SD-212-01	20140612	0.5	1.5	2.115	FIGURE 4-2
SD-212	SD-212-02	20140612	1.5	2.5	0.136	FIGURE 4-3
SD-212	SD-212-03	20140612	2.5	4.33	--	FIGURE 4-4
SD-212	SD-212-SS	20140612	0	0.5	1.0161	FIGURE 4-1
SD-213	SD-213-01	20140612	0.5	1.5	0.486	FIGURE 4-2
SD-213	SD-213-02	20140612	1.5	2.5	0.028	FIGURE 4-3

**Table 4-1**

**Total PCB Results for Dark Head Cove Sediment Samples  
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Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-213	SD-213-02-D	20140612	1.5	2.5	0.271	FIGURE 4-3
SD-213	SD-213-03	20140612	2.5	4.33	0.0023	FIGURE 4-4
SD-213	SD-213-SS	20140612	0	0.5	1.111	FIGURE 4-1
SD-214	SD-214-01	20140612	0.5	1.5	2.406	FIGURE 4-2
SD-214	SD-214-02	20140612	1.5	2.5	0.341	FIGURE 4-3
SD-214	SD-214-03	20140612	2.5	4.33	--	FIGURE 4-4
SD-214	SD-214-SS	20140612	0	0.5	2.1277	FIGURE 4-1
SD-215	SD-215-SS	20140612	0	0.5	--	FIGURE 4-1
SD-216	SD-216-01	20140612	0.5	1.5	--	FIGURE 4-2
SD-216	SD-216-02	20140612	1.5	2.5	--	FIGURE 4-3
SD-216	SD-216-SS	20140612	0	0.5	--	FIGURE 4-1
SD-217	SD-217-01	20140612	0.5	1.5	2.066	FIGURE 4-2
SD-217	SD-217-02	20140612	1.5	2.5	0.089	FIGURE 4-3
SD-217	SD-217-03	20140612	2.5	4.33	--	FIGURE 4-4
SD-217	SD-217-SS	20140612	0	0.5	1.449	FIGURE 4-1
SD-223	SD-223-01	20140613	0.5	1.5	8.638	FIGURE 4-2
SD-223	SD-223-02	20140613	1.5	2.5	0.1305	FIGURE 4-3
SD-223	SD-223-SS	20140613	0	0.5	1.211	FIGURE 4-1
SD-224	SD-224-01	20140613	0.5	1.5	12.389	FIGURE 4-2
SD-224	SD-224-02	20140613	1.5	2.5	1.015	FIGURE 4-3
SD-224	SD-224-03	20140613	2.5	4.33	--	FIGURE 4-4
SD-224	SD-224-SS	20140613	0	0.5	2.181	FIGURE 4-1
SD-225	SD-225-01	20140613	0.5	1.5	23.68	FIGURE 4-2
SD-225	SD-225-02	20140613	1.5	2.5	0.876	FIGURE 4-3
SD-225	SD-225-03	20140613	2.5	4.33	--	FIGURE 4-4
SD-225	SD-225-SS	20140613	0	0.5	10.9	FIGURE 4-1
SD-226	SD-226-01	20140613	0.5	1.5	3.586	FIGURE 4-2
SD-226	SD-226-02	20140613	1.5	2.5	11.55	FIGURE 4-3
SD-226	SD-226-03	20140613	2.5	4.33	0.0053	FIGURE 4-4
SD-226	SD-226-SS	20140613	0	0.5	0.123	FIGURE 4-1
SD-227	SD-227-01	20140613	0.5	1.5	1.493	FIGURE 4-2
SD-227	SD-227-02	20140613	1.5	2.5	0.0095	FIGURE 4-3
SD-227	SD-227-SS	20140613	0	0.5	0.3234	FIGURE 4-1
SD-228	SD-228-01	20140613	0.5	1.5	5.3983	FIGURE 4-2
SD-228	SD-228-02	20140613	1.5	2.5	0.127	FIGURE 4-3
SD-228	SD-228-03	20140613	2.5	4.33	--	FIGURE 4-4
SD-228	SD-228-SS	20140613	0	0.5	2.207	FIGURE 4-1
SD-229	SD-229-01	20140616	0.5	1.5	--	FIGURE 4-2
SD-229	SD-229-SS	20140616	0	0.5	--	FIGURE 4-1
SD-230	SD-230-01	20140616	0.5	1.5	0.8391	FIGURE 4-2
SD-230	SD-230-02	20140616	1.5	2.5	--	FIGURE 4-3
SD-230	SD-230-03	20140616	2.5	4.33	0.206	FIGURE 4-4
SD-230	SD-230-SS	20140616	0	0.5	1.1548	FIGURE 4-1



**Table 4-1**

**Total PCB Results for Dark Head Cove Sediment Samples  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 8 of 11**

Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-231	SD-231-01	20140616	0.5	1.5	0.3715	FIGURE 4-2
SD-231	SD-231-02	20140616	1.5	2.5	0.589	FIGURE 4-3
SD-231	SD-231-03	20140616	2.5	4.33	--	FIGURE 4-4
SD-231	SD-231-SS	20140616	0	0.5	0.0667	FIGURE 4-1
SD-232	SD-232-01	20140616	0.5	1.5	1.771	FIGURE 4-2
SD-232	SD-232-02	20140616	1.5	2.5	0.0355	FIGURE 4-3
SD-232	SD-232-03	20140616	2.5	4.33	--	FIGURE 4-4
SD-232	SD-232-SS	20140616	0	0.5	0.256	FIGURE 4-1
SD-233	SD-233-01	20140616	0.5	1.5	0.462	FIGURE 4-2
SD-233	SD-233-02	20140616	1.5	2.5	0.1216	FIGURE 4-3
SD-233	SD-233-03	20140616	2.5	4.33	--	FIGURE 4-4
SD-233	SD-233-SS	20140616	0	0.5	0.278	FIGURE 4-1
SD-234	SD-234-01	20140613	0.5	1.5	0.5244	FIGURE 4-2
SD-234	SD-234-SS	20140613	0	0.5	93.832	FIGURE 4-1
SD-235	SD-235-01	20140613	0.5	1.5	47.663	FIGURE 4-2
SD-235	SD-235-02	20140613	1.5	2.5	6.358	FIGURE 4-3
SD-235	SD-235-03	20140613	2.5	4.33	0.1094	FIGURE 4-4
SD-235	SD-235-SS	20140613	0	0.5	271.5	FIGURE 4-1
SD-236	SD-236-01	20140613	0.5	1.5	0.014	FIGURE 4-2
SD-236	SD-236-02	20140613	1.5	2.5	0.00054	FIGURE 4-3
SD-236	SD-236-SS	20140613	0	0.5	--	FIGURE 4-1
SD-237	SD-237-01	20140613	0.5	1.5	46.15	FIGURE 4-2
SD-237	SD-237-02	20140613	1.5	2.5	2.543	FIGURE 4-3
SD-237	SD-237-02-D	20140613	2.5	4.33	0.358	FIGURE 4-4
SD-237	SD-237-03	20140613	2.5	4.33	0.03368	FIGURE 4-4
SD-237	SD-237-SS	20140613	0	0.5	103.3	FIGURE 4-1
SD-238	SD-238-01	20140617	0.5	1.5	0.068	FIGURE 4-2
SD-238	SD-238-02	20140617	1.5	2.5	1.44	FIGURE 4-3
SD-238	SD-238-03	20140617	2.5	4.33	0.036	FIGURE 4-4
SD-238	SD-238-SS	20140617	0	0.5	0.0563	FIGURE 4-1
SD-239	SD-239-01	20140617	0.5	1.5	2.604	FIGURE 4-2
SD-239	SD-239-02	20140617	1.5	2.5	0.0281	FIGURE 4-3
SD-239	SD-239-03	20140617	2.5	4.33	0.0193	FIGURE 4-4
SD-239	SD-239-SS	20140617	0	0.5	2.872	FIGURE 4-1
SD-240	SD-240-01	20140617	0.5	1.5	100.6	FIGURE 4-2
SD-240	SD-240-02	20140617	1.5	2.5	4.6469	FIGURE 4-3
SD-240	SD-240-03	20140617	2.5	4.33	0.608	FIGURE 4-4
SD-240	SD-240-SS	20140617	0	0.5	4.84	FIGURE 4-1
SD-241	SD-241-01	20140617	0.5	1.5	122.1	FIGURE 4-2
SD-241	SD-241-02	20140617	1.5	2.5	5.2585	FIGURE 4-3
SD-241	SD-241-02-D	20140617	1.5	2.5	16.412	FIGURE 4-3
SD-241	SD-241-03	20140617	2.5	4.33	0.3117	FIGURE 4-4
SD-241	SD-241-SS	20140617	0	0.5	6.08	FIGURE 4-1

**Table 4-1**

**Total PCB Results for Dark Head Cove Sediment Samples  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 9 of 11**

Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-242	SD-242-01	20140617	0.5	1.5	1.188	FIGURE 4-2
SD-242	SD-242-02	20140617	1.5	2.5	50.3	FIGURE 4-3
SD-242	SD-242-03	20140617	2.5	4.33	12.43	FIGURE 4-4
SD-242	SD-242-SS	20140617	0	0.5	0.2283	FIGURE 4-1
SD-243	SD-243-01	20140617	0.5	1.5	0.034	FIGURE 4-2
SD-243	SD-243-02	20140617	1.5	2.5	0.0307	FIGURE 4-3
SD-243	SD-243-03	20140617	2.5	4.33	0.0035	FIGURE 4-4
SD-243	SD-243-SS	20140617	0	0.5	1.385	FIGURE 4-1
SD-244	SD-244-01	20140617	0.5	1.5	28.99	FIGURE 4-2
SD-244	SD-244-02	20140617	1.5	2.5	6.943	FIGURE 4-3
SD-244	SD-244-03	20140617	2.5	4.33	0.1359	FIGURE 4-4
SD-244	SD-244-SS	20140617	0	0.5	115.37	FIGURE 4-1
SD-245	SD-245-01	20140617	0.5	1.5	77.8	FIGURE 4-2
SD-245	SD-245-02	20140617	1.5	2.5	15.0341	FIGURE 4-3
SD-245	SD-245-03	20140617	2.5	4.33	1.087	FIGURE 4-4
SD-245	SD-245-SS	20140617	0	0.5	8.408	FIGURE 4-1
SD-246	SD-246-01	20140617	0.5	1.5	152.15	FIGURE 4-2
SD-246	SD-246-02	20140617	1.5	2.5	7.663	FIGURE 4-3
SD-246	SD-246-03	20140617	2.5	4.33	0.0201	FIGURE 4-4
SD-246	SD-246-SS	20140617	0	0.5	177.4	FIGURE 4-1
SD-247	SD-247-01	20140617	0.5	1.5	32.6378	FIGURE 4-2
SD-247	SD-247-02	20140617	1.5	2.5	4.261	FIGURE 4-3
SD-247	SD-247-03	20140617	2.5	4.33	0.094	FIGURE 4-4
SD-247	SD-247-SS	20140617	0	0.5	74.935	FIGURE 4-1
SD-248	SD-248-01	20140617	0.5	1.5	0.352	FIGURE 4-2
SD-248	SD-248-02	20140617	1.5	2.5	0.0217	FIGURE 4-3
SD-248	SD-248-03	20140617	2.5	4.33	--	FIGURE 4-4
SD-248	SD-248-SS	20140617	0	0.5	0.8939	FIGURE 4-1
SD-249	SD-249-01	20140617	0.5	1.5	97.1	FIGURE 4-2
SD-249	SD-249-02	20140617	1.5	2.5	1.755	FIGURE 4-3
SD-249	SD-249-03	20140617	2.5	4.33	1.125	FIGURE 4-4
SD-249	SD-249-SS	20140617	0	0.5	1.434	FIGURE 4-1
SD-250	SD-250-01	20140618	0.5	1.5	4.218	FIGURE 4-2
SD-250	SD-250-02	20140618	1.5	2.5	50.04	FIGURE 4-3
SD-250	SD-250-03	20140618	2.5	4.33	31.31	FIGURE 4-4
SD-250	SD-250-SS	20140618	0	0.5	1.08	FIGURE 4-1
SD-251	SD-251-01	20140618	0.5	1.5	0.0631	FIGURE 4-2
SD-251	SD-251-02	20140618	1.5	2.5	0.0134	FIGURE 4-3
SD-251	SD-251-03	20140618	2.5	4.33	0.0026	FIGURE 4-4
SD-251	SD-251-SS	20140618	0	0.5	4.279	FIGURE 4-1
SD-252	SD-252-SS	20140619	0	0.5	0.99	FIGURE 4-1
SD-252	SD-252-SS	20140619	0	0.5	0.597	FIGURE 4-1
SD-253	SD-253-SS	20140619	0	0.5	0.89	FIGURE 4-1

Table 4-1

**Total PCB Results for Dark Head Cove Sediment Samples  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 10 of 11**

Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-253	SD-253-SS	20140619	0	0.5	0.12	FIGURE 4-1
SD-254	SD-254-SS	20140619	0	0.5	0.96	FIGURE 4-1
SD-254	SD-254-SS	20140619	0	0.5	1.607	FIGURE 4-1
SD-255	SD-255-SS	20140619	0	0.5	0.84	FIGURE 4-1
SD-255	SD-255-SS	20140619	0	0.5	0.0044	FIGURE 4-1
SD-255	SD-255-SS-D	20140619	0	0.5	--	FIGURE 4-1
SD-256	SD-256-SS	20140620	0	0.5	0.92	FIGURE 4-1
SD-256	SD-256-SS	20140620	0	0.5	0.548	FIGURE 4-1
SD-257	SD-257-SS	20140620	0	0.5	1.7	FIGURE 4-1
SD-257	SD-257-SS	20140620	0	0.5	0.162	FIGURE 4-1
SD-257	SD-257-SS-D	20140620	0	0.5	1.2	FIGURE 4-1
SD-257	SD-257-SS-D	20140620	0	0.5	0.203	FIGURE 4-1
SD-258	SD-258-SS	20140620	0	0.5	1.4	FIGURE 4-1
SD-258	SD-258-SS	20140620	0	0.5	0.19	FIGURE 4-1
SD-259	SD-259-SS	20140620	0	0.5	1.1	FIGURE 4-1
SD-259	SD-259-SS	20140620	0	0.5	0.267	FIGURE 4-1
SD-260	SD-260-01	20140619	0.5	1.5	0.988	FIGURE 4-2
SD-260	SD-260-02	20140619	1.5	2.5	--	FIGURE 4-3
SD-260	SD-260-03	20140619	2.5	4.33	--	FIGURE 4-4
SD-260	SD-260-SS	20140619	0	0.5	2.372	FIGURE 4-1
SD-261	SD-261-01	20140619	0.5	1.5	4.36	FIGURE 4-2
SD-261	SD-261-02	20140619	1.5	2.5	--	FIGURE 4-3
SD-261	SD-261-03	20140619	2.5	4.33	--	FIGURE 4-4
SD-261	SD-261-SS	20140619	0	0.5	--	FIGURE 4-1
SD-262	SD-262-01	20140618	0.5	1.5	0.393	FIGURE 4-2
SD-262	SD-262-02	20140618	1.5	2.5	--	FIGURE 4-3
SD-262	SD-262-03	20140618	2.5	4.33	--	FIGURE 4-4
SD-262	SD-262-SS	20140618	0	0.5	0.778	FIGURE 4-1
SD-262	SD-262-SS-D	20140618	0	0.5	--	FIGURE 4-1
SD-263	SD-263-01	20140618	0.5	1.5	5.56	FIGURE 4-2
SD-263	SD-263-02	20140618	1.5	2.5	8.58	FIGURE 4-3
SD-263	SD-263-03	20140618	2.5	4.33	0.0391	FIGURE 4-4
SD-263	SD-263-SS	20140618	0	0.5	0.541	FIGURE 4-1
SD-264	SD-264-01	20140618	0.5	1.5	6.105	FIGURE 4-2
SD-264	SD-264-02	20140618	1.5	2.5	16.41	FIGURE 4-3
SD-264	SD-264-03	20140618	2.5	4.33	0.056	FIGURE 4-4
SD-264	SD-264-SS	20140618	0	0.5	0.355	FIGURE 4-1
SD-265	SD-265-01	20140618	0.5	1.5	0.687	FIGURE 4-2
SD-265	SD-265-02	20140618	1.5	2.5	0.4277	FIGURE 4-3
SD-265	SD-265-03	20140618	2.5	4.33	6.247	FIGURE 4-4
SD-265	SD-265-SS	20140618	0	0.5	0.737	FIGURE 4-1
SD-266	SD-266-01	20140619	0.5	1.5	2.11	FIGURE 4-2
SD-266	SD-266-02	20140619	1.5	2.5	1.756	FIGURE 4-3

**Table 4-1**

**Total PCB Results for Dark Head Cove Sediment Samples  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 11 of 11**

Core Location	Sample ID	Sample Date (yyyy/mo/day)	Sample Depth-Top (feet below mudline)	Sample Depth-Bottom (feet below mudline)	Total PCB Concentration (mg/kg)	Figure Occurrence
SD-266	SD-266-03	20140619	2.5	4.33	0.1051	FIGURE 4-4
SD-266	SD-266-SS	20140619	0	0.5	0.157	FIGURE 4-1
SD-267	SD-267-01	20140619	0.5	1.5	56.1	FIGURE 4-2
SD-267	SD-267-02	20140619	1.5	2.5	1.4342	FIGURE 4-3
SD-267	SD-267-03	20140619	2.5	4.33	0.212	FIGURE 4-4
SD-267	SD-267-SS	20140619	0	0.5	0.264	FIGURE 4-1
SD-268	SD-268-01	20140618	0.5	1.5	21.88	FIGURE 4-2
SD-268	SD-268-02	20140618	1.5	2.5	0.393	FIGURE 4-3
SD-268	SD-268-03	20140618	2.5	4.33	0.0056	FIGURE 4-4
SD-268	SD-268-SS	20140618	0	0.5	42.2	FIGURE 4-1
SD-269	SD-269-01	20140618	0.5	1.5	0.22	FIGURE 4-2
SD-269	SD-269-02	20140618	1.5	2.5	0.0561	FIGURE 4-3
SD-269	SD-269-03	20140618	2.5	4.33	--	FIGURE 4-4
SD-269	SD-269-SS	20140618	0	0.5	56.186	FIGURE 4-1
SD-270	SD-270-01	20140618	0.5	1.5	9.359	FIGURE 4-2
SD-270	SD-270-02	20140618	1.5	2.5	0.0783	FIGURE 4-3
SD-270	SD-270-02-D	20140618	1.5	2.5	0.0078	FIGURE 4-3
SD-270	SD-270-03	20140618	2.5	4.33	0.0529	FIGURE 4-4
SD-270	SD-270-SS	20140618	0	0.5	106.56	FIGURE 4-1
SD-271	SD-271-01	20140618	0.5	1.5	2.248	FIGURE 4-2
SD-271	SD-271-02	20140618	1.5	2.5	0.00479	FIGURE 4-3
SD-271	SD-271-SS	20140618	0	0.5	8.5806	FIGURE 4-1
SD-272	SD-272-01	20140619	0.5	1.5	0.0019	FIGURE 4-2
SD-272	SD-272-01-D	20140619	0.5	1.5	0.0018	FIGURE 4-2
SD-272	SD-272-02	20140619	1.5	2.5	--	FIGURE 4-3
SD-272	SD-272-SS	20140619	0	0.5	0.2421	FIGURE 4-1
SD-273	SD-273-01	20140618	0.5	1.5	4.117	FIGURE 4-2
SD-273	SD-273-02	20140618	1.5	2.5	0.012	FIGURE 4-3
SD-273	SD-273-03	20140618	2.5	4.33	0.003	FIGURE 4-4
SD-273	SD-273-SS	20140618	0	0.5	5.555	FIGURE 4-1
SD-274	SD-274-01	20140619	0.5	1.5	6.232	FIGURE 4-2
SD-274	SD-274-02	20140619	1.5	2.5	0.311	FIGURE 4-3
SD-274	SD-274-03	20140619	2.5	4.33	0.023	FIGURE 4-4
SD-274	SD-274-SS	20140619	0	0.5	11.32	FIGURE 4-1
SD-275	SD-275-SS	20140619	0	0.5	0.92	FIGURE 4-1
SD-275	SD-275-SS	20140619	0	0.5	1.04	FIGURE 4-1
SD-276	SD-276-SS	20140619	0	0.5	1.2	FIGURE 4-1
SD-276	SD-276-SS	20140619	0	0.5	1.88	FIGURE 4-1

mg/kg = milligrams per kilogram (i.e., parts per million)

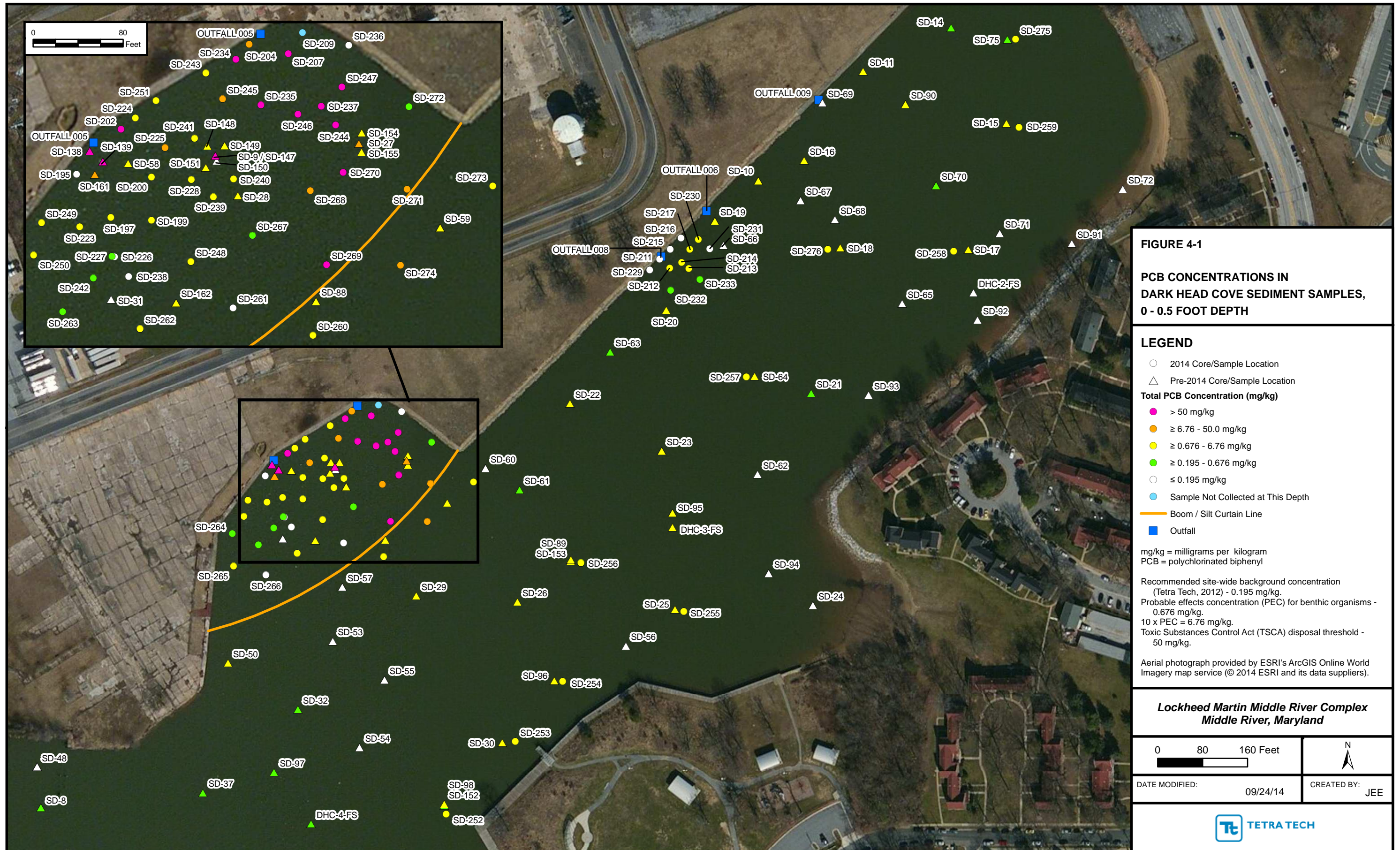
yyyy - four digit year (i.e., 2014)

mo - two digit month

PCB = polychlorinated biphenyls

Gray shading indicates total PCB concentration greater than 50 mg/kg.





**FIGURE 4-1**  
**PCB CONCENTRATIONS IN**  
**DARK HEAD COVE SEDIMENT SAMPLES,**  
**0 - 0.5 FOOT DEPTH**

**LEGEND**

- 2014 Core/Sample Location
- △ Pre-2014 Core/Sample Location

**Total PCB Concentration (mg/kg)**

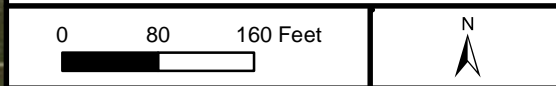
- > 50 mg/kg
- ≥ 6.76 - 50.0 mg/kg
- ≥ 0.676 - 6.76 mg/kg
- ≥ 0.195 - 0.676 mg/kg
- ≤ 0.195 mg/kg
- Sample Not Collected at This Depth
- Boom / Silt Curtain Line
- Outfall

mg/kg = milligrams per kilogram  
 PCB = polychlorinated biphenyl

Recommended site-wide background concentration (Tetra Tech, 2012) - 0.195 mg/kg.  
 Probable effects concentration (PEC) for benthic organisms - 0.676 mg/kg.  
 10 x PEC = 6.76 mg/kg.  
 Toxic Substances Control Act (TSCA) disposal threshold - 50 mg/kg.

Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2014 ESRI and its data suppliers).

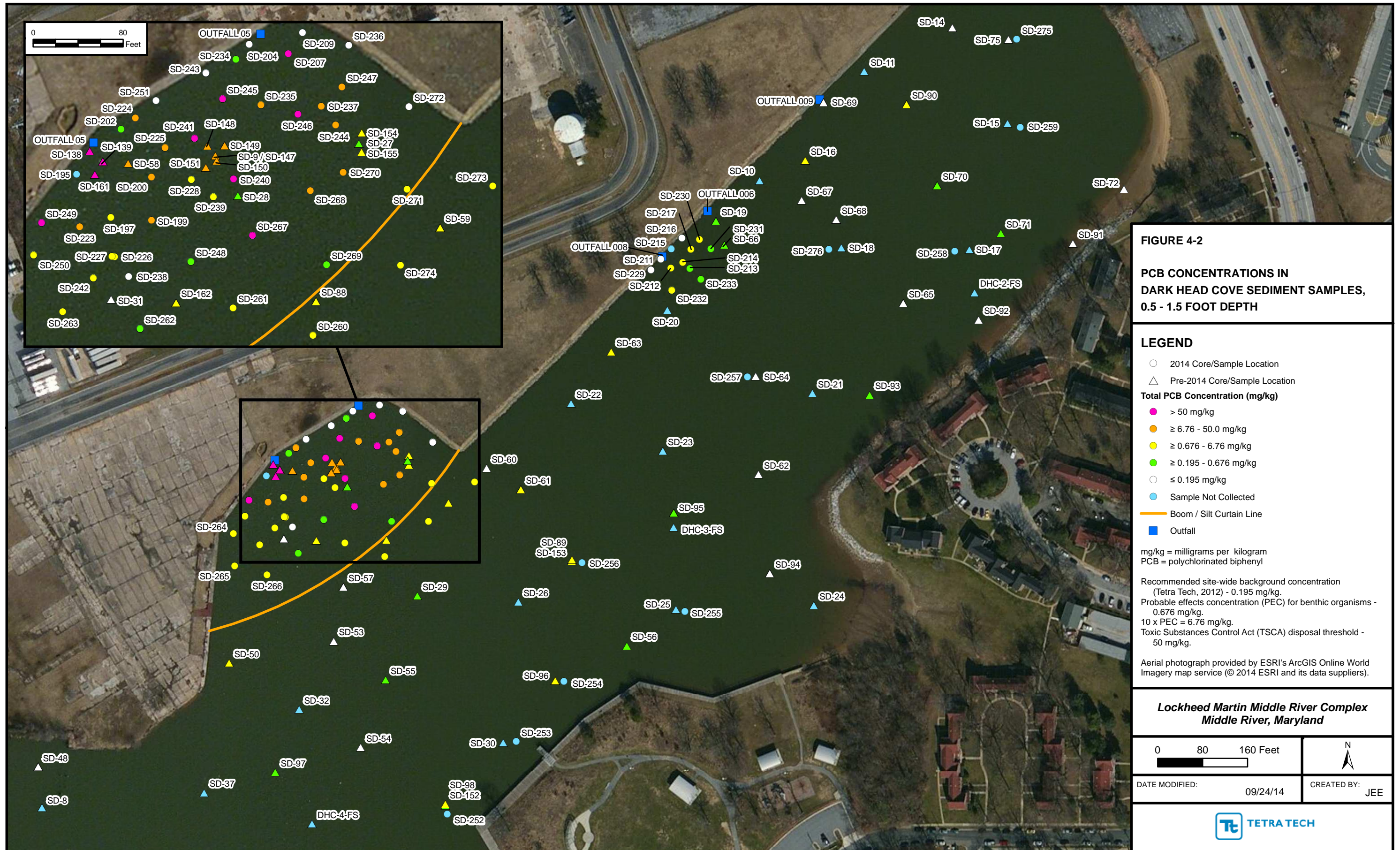
**Lockheed Martin Middle River Complex**  
**Middle River, Maryland**



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**FIGURE 4-2**  
**PCB CONCENTRATIONS IN DARK HEAD COVE SEDIMENT SAMPLES, 0.5 - 1.5 FOOT DEPTH**

**LEGEND**

- 2014 Core/Sample Location
- △ Pre-2014 Core/Sample Location

**Total PCB Concentration (mg/kg)**

- > 50 mg/kg
- ≥ 6.76 - 50.0 mg/kg
- ≥ 0.676 - 6.76 mg/kg
- ≥ 0.195 - 0.676 mg/kg
- ≤ 0.195 mg/kg
- Sample Not Collected
- Boom / Silt Curtain Line
- Outfall

mg/kg = milligrams per kilogram  
 PCB = polychlorinated biphenyl

Recommended site-wide background concentration (Tetra Tech, 2012) - 0.195 mg/kg.  
 Probable effects concentration (PEC) for benthic organisms - 0.676 mg/kg.  
 10 x PEC = 6.76 mg/kg.  
 Toxic Substances Control Act (TSCA) disposal threshold - 50 mg/kg.

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

0 80 160 Feet	N
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**FIGURE 4-3**  
**PCB CONCENTRATIONS IN**  
**DARK HEAD COVE SEDIMENT SAMPLES,**  
**1.5 - 2.5 FOOT DEPTH**

**LEGEND**

- 2014 Core/Sample Location
- △ Pre-2014 Core/Sample Location

**Total PCB Concentration (mg/kg)**

- > 50 mg/kg
- ≥ 6.76 - 50.0 mg/kg
- ≥ 0.676 - 6.76 mg/kg
- ≥ 0.195 - 0.676 mg/kg
- ≤ 0.195 mg/kg
- Sample Not Collected
- Boom / Silt Curtain Line
- Outfall

mg/kg = milligrams per kilogram  
 PCB = polychlorinated biphenyl

Recommended site-wide background concentration (Tetra Tech, 2012) - 0.195 mg/kg.  
 Probable effects concentration (PEC) for benthic organisms - 0.676 mg/kg.  
 10 x PEC = 6.76 mg/kg.  
 Toxic Substances Control Act (TSCA) disposal threshold - 50 mg/kg.

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

0 80 160 Feet

N

DATE MODIFIED: 09/24/14

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**FIGURE 4-4**  
**PCB CONCENTRATIONS IN**  
**DARK HEAD COVE SEDIMENT SAMPLES,**  
**2.5 - 4.33 FOOT DEPTH**

**LEGEND**

- 2014 Core/Sample Location
- △ Pre-2014 Core/Sample Location

**Total PCB Concentration (mg/kg)**

- > 50 mg/kg
- ≥ 6.76 - 50.0 mg/kg
- ≥ 0.676 - 6.76 mg/kg
- ≥ 0.195 - 0.676 mg/kg
- ≤ 0.195 mg/kg
- Sample Not Collected
- Boom / Silt Curtain Line
- Outfall

mg/kg = milligrams per kilogram  
 PCB = polychlorinated biphenyl

Recommended site-wide background concentration (Tetra Tech, 2012) - 0.195 mg/kg.  
 Probable effects concentration (PEC) for benthic organisms - 0.676 mg/kg.  
 10 x PEC = 6.76 mg/kg.  
 Toxic Substances Control Act (TSCA) disposal threshold - 50 mg/kg.

Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2014 ESRI and its data suppliers).

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

0 80 160 Feet

N

DATE MODIFIED: 09/24/14

CREATED BY: JEE





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## Section 5

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## APPENDIX A—SAMPLE RECORD SHEETS



Project Site Name: \_\_\_\_\_  
 Project No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Sample ID No.: SD-195  
 Sample Location: SD-195  
 Sampled By: S. Gerson  
 C.O.C. No.: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/10/14</u>	<u>1330</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Thorium &amp; Uranium</u>	<u>1- 40 oz Jar</u>	<input checked="" type="checkbox"/>	
<u>PCDS</u>	<u>1- 40 oz Jar</u>	<input checked="" type="checkbox"/>	

**OBSERVATIONS / NOTES:**

**MAP:**

Circle if Applicable:

MS/MSD Duplicate ID No.: \_\_\_\_\_

Signature(s): [Signature]



Project Site Name: Dark Head Core Sample ID No.: SD-196  
 Project No.: \_\_\_\_\_ Sample Location: SD-196  
 Sampled By: S. Conroy  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/10/14</u>	<u>1400</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method:	<u>1405</u>	<u>6-18"</u>		
<u>Composite</u>	<u>1410</u>	<u>18-30</u>		
Monitor Readings	<u>1415</u>	<u>30-52</u>		
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>DOBI Thoria + Uranium</u>	<u>1-4062</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_  
 Map: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): \_\_\_\_\_



Project Site Name: Dark Head Cove Sample ID No.: SD-197  
 Project No.: \_\_\_\_\_ Sample Location: SD-197  
 Sampled By: S. Gaudin  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>1030</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method:	<u>1035</u>	<u>6-18"</u>		
<u>Composite</u>	<u>1040</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1045</u>	<u>30-52"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>PCB<sub>s</sub></u>	<u>1-402 Jr</u>	<u>✓✓✓</u>	
<u>Vaniln Ithorin</u>	<u>1-402 Tr</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

Circle if Applicable: MS/MSD  Duplicate ID No.: SD-197 Signature(s): [Signature]



Project Site Name: Dark Head Cove Sample ID No.: SD-198  
 Project No.: \_\_\_\_\_ Sample Location: SD-198  
 Sampled By: S. Cameron  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/1/14</u>	<u>0755</u>	<u>0-6</u>	<u>Sec Log Sheets</u>	
	<u>0805</u>	<u>6-18</u>		
Method: <u>Composite</u>	<u>0805</u>	<u>18-30</u>		
Monitor Readings (Range in ppm):	<u>0810</u>	<u>30-52</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Vanilic + Phos</u>	<u>1-4 oz jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>[Signature]</u>



Project Site Name: DHC Sample ID No.: SD-199  
 Project No.: \_\_\_\_\_ Sample Location: SD-199  
 Sampled By: S. Gomez  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1110	0-6"	See Log Sheet	
Method:	1115	6-18"		
	1120	18-30"		
Monitor Readings (Range in ppm):	1125	30-52"		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
Organics + Heavy Metals PCBs	1-4oz Jar 1-4oz Jar	✓✓✓ ✓✓✓	

OBSERVATIONS / NOTES:	MAP:

MS/MSD	Duplicate ID No.: <u>RAD-DUP 02 / PCB-DUP 01</u>	Signature(s): <u>[Signature]</u>
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Project Site Name: Dark Head Cove Sample ID No.: SD-200  
 Project No.: \_\_\_\_\_ Sample Location: SD-200  
 Sampled By: S. Cannon  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/10/14</u>	<u>1550</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method:	<u>1555</u>	<u>6-18"</u>		
<u>Composite</u>	<u>1600</u>	<u>18-30</u>		
Monitor Readings	<u>1605</u>	<u>30-42</u>		
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Uranium &amp; Thorium</u>	<u>1 4oz Jar</u>	<u>✓✓✓</u>	
<u>Pb/Cd</u>	<u>1 4oz Jar</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>		<b>Signature(s):</b> <u>A C</u>
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	



Project Site Name: Denk Heat Cave Sample ID No.: SD-201  
 Project No.: \_\_\_\_\_ Sample Location: SD-201  
 Sampled By: S. Cameron  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/10/14</u>	<u>1510</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method:	<u>1515</u>	<u>6-18"</u>		
<u>Composite</u>	<u>1520</u>	<u>18-30"</u>		
Monitor Readings	<u>1525</u>	<u>30-54"</u>		
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Uranium + Thorium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____	<u>AL</u>



Project Site Name: DHC Sample ID No.: SD-202  
 Project No.: \_\_\_\_\_ Sample Location: SD-202  
 Sampled By: MM  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAVE SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
_____			
_____			

COMPOSITE SAMPLE DATA:				
Date	Depth Interval	Color	Description (Sand, Silt, Clay, etc.)	
6/10/14	0-6"			
1220	6-18"			
Method: Composite	1230	18-30"		
(Range in ppm):				

SAMPLING INFORMATION:			
Analysis	Container Requirements	Collected	Other
Thoron & Uranium	1-4oz Jar	✓✓	
PCB	1-4oz Jar	✓✓	

OBSERVATIONS / NOTES: \_\_\_\_\_ MAP: \_\_\_\_\_

MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): ll



Project Site Name: DHC Sample ID No.: SD-203  
 Project No.: \_\_\_\_\_ Sample Location: SD-203  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 C.O.C. No.: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
_____	_____	_____	_____
Time: _____	_____	_____	_____
Method: _____	_____	_____	_____
Monitor Reading (ppm): _____	_____	_____	_____

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
6/10/14	1140	0-6"	See Log Sheet	
	1145	6-18"		
Method: Composite	1150	18-30"		
Monitor Readings	1155	30-51"		
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
Thermin & Vending - ABS -	1-4oz Jar	✓✓✓	

OBSERVATIONS / NOTES:	MAP:
_____	_____
_____	_____
_____	_____

MS/MSD	Duplicate ID No.:	Signature(s): 
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Project Site Name: DHC Sample ID No.: SD-204  
 Project No.: \_\_\_\_\_ Sample Location: SD-204  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>1220</u>	<u>0-6"</u>	<u>See log sheet</u>	
Method: <u>Composite</u>	<u>1225</u>	<u>6-18"</u>		
	<u>1230</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Thorium &amp; Uranium</u>	<u>1-4oz Jv</u>	<input checked="" type="checkbox"/>	
<u>PCBs</u>	<u>1-4oz Jv</u>	<input checked="" type="checkbox"/>	

**OBSERVATIONS / NOTES:**

MAP:

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): SPC



# SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DHC  
 Project No.: \_\_\_\_\_  
 Sample ID No.: SD-205  
 Sample Location: SD-205  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
6/11/14	1525	0-6"	Sec	Log Sheets
Method: Composite	1530	6-18"		
Monitor Readings (Range in ppm):	1535	18-30"		
	1540	30-39"		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
Thorium & Uranium	1-4oz jar	✓✓✓	

**OBSERVATIONS / NOTES:** \_\_\_\_\_  
**MAP:** \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_  
 Signature(s): SPC





Project Site Name: Dart Head Cove Sample ID No.: SD-206  
 Project No.: \_\_\_\_\_ Sample Location: SD-206  
 Sampled By: S. Green  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>0810</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method:	<u>0815</u>	<u>6-18"</u>		
<u>Composite</u>	<u>0820</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0825</u>	<u>30</u>		

SAMPLE COLLECTION INFORMATION			
Analysis	Container Requirements	Collected	Other
<u>Thorium &amp; Uranium</u>	<u>1.4oz Jar</u>		

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

Circle if Applicable:	Signature(s):
MS/MSD	
Duplicate ID No.: <u>RAD: SD-DUP03</u>	



Project Site Name: DHC Sample ID No.: SD-207  
 Project No.: \_\_\_\_\_ Sample Location: SD-207  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>1448</u>	<u>0-6"</u>	<u>See log sheet</u>	
Method:	<u>1450</u>	<u>6-18"</u>		
<u>Composite</u>	<u>1455</u>	<u>18-30"</u>		
Monitor Readings	<u>1500</u>	<u>30-</u>		
(Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Uranium, Thorium</u>	<u>1-4oz Jar</u>	<u>✓</u>	
<u>ACRS</u>	<u>1-4oz Jar</u>	<u>✓</u>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_

**MAP:** \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD Duplicate ID No.: \_\_\_\_\_



Project Site Name: DHC Sample ID No.: SD-208  
 Project No.: \_\_\_\_\_ Sample Location: SD-204  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>10:00</u>	<u>0-6"</u>	<u>See</u>	<u>Log Sheet</u>
	<u>11:00</u>	<u>6-18"</u>		
	<u>4:30</u>	<u>18-30"</u>		
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Versions + Theriom</u>	<u>4oz Jc</u>	<u>✓✓</u>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): \_\_\_\_\_

MS/MSD Duplicate ID No.: \_\_\_\_\_



Project Site Name: DHC Sample ID No.: SD-2094  
 Project No.: \_\_\_\_\_ Sample Location: SD-209  
 Sampled By: SRC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>1400</u>	<u>0-8" 8-14"</u>	<u>Sce</u>	
Method:	<u>1405</u>	<u>Range 14-26</u>		<u>log sheet</u>
Composite	<u>1410</u>	<u>Range 26-40</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>ThyM &amp; Uranium</u>	<u>1-4oz Jcr</u>		
<u>PCBs</u>	<u>1-4oz Jcr</u>		

OBSERVATIONS / NOTES:	MAP:
<u>No Recovery 0-8"</u>	

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	



Project Site Name: DHC Sample ID No.: SD-210  
 Project No.: \_\_\_\_\_ Sample Location: SD-210  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>1435</u>	<u>0-6"</u>	<u>See</u>	
	<u>1440</u>	<u>6-18"</u>		<u>lay sheet</u>
Method: <u>Composite</u>	<u>1445</u>	<u>18-30"</u>		
Monitor Readings				
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thiobarbituric + Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>	<b>Signature(s):</b>
MS/MSD Duplicate ID No.:	



Project Site Name: DHC Sample ID No.: SD-211  
 Project No.: \_\_\_\_\_ Sample Location: SD-211  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>1000</u>	<u>0-6"</u>	<u>Sec</u>	<u>Lo Silt</u>
Method: <u>Composite</u>	<u>1005</u>	<u>6-18"</u>		
	<u>1010</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Vanilby &amp; Thierion</u>	<u>1-4oz Glass</u>	<u>✓✓</u>	
<u>PCOs</u>	<u>1-4oz Glass</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>RL</u>



Project Site Name: ONE Sample ID No.: SD-212  
 Project No.: \_\_\_\_\_ Sample Location: SD-212  
 Sampled By: SB  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>1410</u>	<u>0-6"</u>		
Method: <u>Composite</u>	<u>1415</u>	<u>6-18"</u>		
	<u>1420</u>	<u>18-30'</u>		
Monitor Readings (Range in ppm)	<u>1425</u>	<u>30-50'</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Thorp &amp; Hanlon</u>	<u>1-4oz Jar</u>	<u>///</u>	
<u>PCBS</u>	<u>1-4oz Jar</u>	<u>///</u>	

OBSERVATIONS / NOTES: MAP:

OBSERVATIONS / NOTES: \_\_\_\_\_  
 MAP: \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): AL  
 MS/MSD Duplicate ID No.: \_\_\_\_\_





Project Site Name: DAC Sample ID No.: SD-213  
 Project No.: \_\_\_\_\_ Sample Location: SD-213  
 Sampled By: JSC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6-12-14</u>	<u>1430</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>1435</u>	<u>6-18"</u>		
	<u>1440</u>	<u>18-30"</u>		
	<u>1445</u>	<u>30-52"</u>		
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thorium + Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:	Signature(s):
MS/MSD	<u>JSC</u>

Duplicate ID No.: RAD. SD-DUP 04 from SD-213-02  
PCB: SD-DUP 02 from SD-213-02



Project Site Name: DAC Sample ID No.: SD-214  
 Project No.: \_\_\_\_\_ Sample Location: SD-214  
 Sampled By: SBL  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>1310</u>	<u>0-6</u>	<u>See Log Sheet</u>	
Method:	<u>1315</u>	<u>6-18</u>		
<u>Composite</u>	<u>1320</u>	<u>18-30</u>		
Monitor Readings	<u>1325</u>	<u>30-52</u>		
(Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Vaniln + Tholun</u>	<u>1.4oz Jar</u>	<u>✓✓✓</u>	
<u>PCs</u>	<u>1.4oz Jar</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:**

MAP:

Circle if Applicable: MS/MSD Duplicate ID No.: MS/MSD for SD-214-01 Signature(s): [Signature]



Project Site Name: DHC  
 Project No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Sample ID No.: SD-215  
 Sample Location: SD-215  
 Sampled By: S. Gomez  
 C.O.C. No.: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>0850</u>	<u>0-6"</u>	<u>See log sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thorium &amp; Uranium</u>	<u>1-4oz Jar</u>	<input checked="" type="checkbox"/>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

Circle if Applicable:	Signature(s):
MS/MSD	<u>[Signature]</u>
Duplicate ID No.:	



Project Site Name:	<u>  DHC  </u>	Sample ID No.:	<u>  SD-216  </u>
Project No.:	<u>                    </u>	Sample Location:	<u>  SD-216  </u>
<input type="checkbox"/> Surface Soil		Sampled By:	<u>  SRL  </u>
<input type="checkbox"/> Subsurface Soil		C.O.C. No.:	<u>                    </u>
<input checked="" type="checkbox"/> Sediment		Type of Sample:	
<input type="checkbox"/> Other:	<u>                    </u>	<input type="checkbox"/> Low Concentration	
<input type="checkbox"/> QA Sample Type:	<u>                    </u>	<input type="checkbox"/> High Concentration	

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>  6/12/14  </u>	<u>  1020  </u>	<u>  0-6"  </u>	<u>          </u>	<u>          </u>
Method: <u>  Composite  </u>	<u>  1025  </u>	<u>  6-18"  </u>	<u>  See Log Sheet  </u>	<u>          </u>
	<u>  1030  </u>	<u>  18-28"  </u>		
Monitor Readings (Range in ppm):	<u>  <math>\pm</math>  </u>			

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>  Thorium + Uranium  </u>	<u>  1-4oz Jar  </u>	<u>  ✓✓✓  </u>	
<u>  PCBs  </u>	<u>  1-4oz Jar  </u>	<u>  ✓✓✓  </u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:	Signature(s):
<input type="checkbox"/> MS/MSD      Duplicate ID No.: <u>                    </u>	<u>                    </u>





Project Site Name: DHC Sample ID No.: SD-217  
 Project No.: \_\_\_\_\_ Sample Location: SD-217  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>1220</u>	<u>0-6</u>	<u>Sec Log Sheet</u>	
Method: <u>Composite</u>	<u>1225</u>	<u>6-18</u>		
	<u>1230</u>	<u>18-30</u>		
Monitor Readings (Range in ppm):	<u>1235</u>	<u>30-51</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Vanadium + Thionin PCB</u>	<u>1-4oz Jar</u>	<u>✓✓✓✓</u>	
	<u>1-4oz Jar</u>	<u>✓✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_

Signature(s): \_\_\_\_\_



Project Site Name: Dark Hawk Cove  
Project No.: \_\_\_\_\_

Sample ID No.: SD-218  
Sample Location: SD-218  
Sampled By: S. Green  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/10/14</u>	<u>1010</u>	<u>0-6"</u>	<u>Sec</u>	<u>Lug Sheet</u>
Method:	<u>1012</u>	<u>6-20"</u>		
<u>Composite</u>	<u>1014</u>	<u>20-25"</u>		
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Thurs &amp; Uranium</u>	<u>1-40oz Jc-</u>	<u>✓✓</u>	

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

MS/MSD Duplicate ID No.: \_\_\_\_\_

**Signature(s):**

[Signature]



Project Site Name: Dark Hard Core Sample ID No.: SD-219-08  
 Project No.: \_\_\_\_\_ Sample Location: SD-219  
 Sampled By: R. Martin  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6-10-14</u>	<u>0926</u>	<u>0-6"</u>	<u>Sec</u>	<u>Log Sheet</u>
Method:	<u>0922</u>	<u>6-12"</u>		
<u>Composite</u>	<u>0925</u>	<u>12-18"</u>		
Monitor Readings (Range in ppm):	<u>0928</u>	<u>18-24"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thuride &amp; Uranium</u>	<u>1-4g or Jcr</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>	<b>Signature(s):</b>
MS/MSD Duplicate ID No.:	<u>bc</u>



Project Site Name: Dark Head Cove Sample ID No.: SD-220  
 Project No.: \_\_\_\_\_ Sample Location: SD-220  
 Sampled By: S. Green  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/10/14</u>	<u>1440</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>1442</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1444</u>	<u>18-30</u>		
Monitor Readings (Range in ppm):	<u>1446</u>	<u>30-50 &amp; 49</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Thorium + Uranium</u>	<u>1-4oz jar</u>	<u>✓✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

OBSERVATIONS / NOTES: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD Duplicate ID No.: \_\_\_\_\_





Project Site Name: DHC Sample ID No.: SD-221  
 Project No.: \_\_\_\_\_ Sample Location: SD-221  
 Sampled By: S. General  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>1320</u>	<u>0-6"</u>	<u>Sec</u>	<u>Coj Slect</u>
Method: <u>Composite</u>	<u>1325</u>	<u>6-10"</u>		
	<u>1330</u>	<u>10-11"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thorium + Uranium</u>	<u>1-4oz Jar</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>[Signature]</u>



### SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: DHC

Project No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Sample ID No.: SD-222

Sample Location: SD-222

Sampled By: SBC

C.O.C. No.: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>0905</u>	<u>0-6</u>	<u>Sec Log Sheet</u>	
Method: <u>Composite</u>	<u>0910</u>	<u>6-12</u>		
	<u>0915</u>	<u>12-19</u>		
	<u>0920</u>	<u>19-24</u>		
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Vanadium &amp; Thorium</u>	<u>1-4oz Jar</u>	<u>JJJJ</u>	

**OBSERVATIONS / NOTES:**

MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_

Signature(s): AC



Project Site Name: DHC Sample ID No.: SD-223  
 Project No.: \_\_\_\_\_ Sample Location: SD-223  
 Sampled By: SRL  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>0840</u>	<u>0-6"</u>	<u>Sec</u>	<u>Log Sheet</u>
Method: <u>Composite</u>	<u>0845</u>	<u>6-18"</u>		
	<u>0850</u>	<u>18-36"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Vanadium &amp; Thorium</u>	<u>1-4oz Jar</u>	<u>JJJ</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>JJJ</u>	

OBSERVATIONS / NOTES: MAP:

Clay encountered @ 24"

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: DHC Sample ID No.: SD-224  
 Project No.: \_\_\_\_\_ Sample Location: SD-224  
 Sampled By: S. Geman  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
6/13/14	0820	0-6	Sec	Log Sheet
Method: Composite	0825	6-18		
Monitor Readings (Range in ppm):	0930	18-30		
	0835	30-52		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
Uranium & Thorium	1-4oz Jar	✓✓✓	
PCOs	1-4oz Jar	✓✓✓	

OBSERVATIONS / NOTES: MAP:

Clay encountered @ 40"

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s):



Project Site Name: DHC Sample ID No.: SD225  
 Project No.: \_\_\_\_\_ Sample Location: SJ-225  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>0915</u>	<u>0-6'</u>	<u>Sec 1</u>	
Method: <u>Composite</u>	<u>0920</u>	<u>6-18"</u>		
	<u>0925</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0930</u>	<u>30-52"</u>		<u>Sheet</u>

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Uranium + Thorium</u>	<u>1-4oz Jar</u>		
<u>PCBs</u>	<u>1-4oz Jar</u>		

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): \_\_\_\_\_

MS/MSD	Duplicate ID No.:
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Project Site Name: DHC Sample ID No.: SD-226  
 Project No.: \_\_\_\_\_ Sample Location: SD-226  
 Sampled By: SPL  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>0855</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>0900</u>	<u>6-18"</u>		
	<u>0905</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0910</u>	<u>30-38"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Volatile + Inorganics</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:** Clay @ 24"

**MAP:**

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_

Signature(s): [Signature]



Project Site Name: DHC Sample ID No.: SD-227  
 Project No.: \_\_\_\_\_ Sample Location: \_\_\_\_\_  
 Surface Soil Sampled By: SBC  
 Subsurface Soil C.O.C. No.: \_\_\_\_\_  
 Sediment Type of Sample:  
 Other: \_\_\_\_\_  Low Concentration  
 QA Sample Type: \_\_\_\_\_  High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1310</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>135</u>	<u>6-18"</u>		
	<u>1320</u>	<u>18-24"</u>		
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Vanadium &amp; Thionin</u>	<u>1-4oz Jsr</u>	<u>✓✓</u>	
<u>PCO<sub>2</sub></u>	<u>1-4oz Jsr</u>	<u>✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>	<b>Signature(s):</b>
MS/MSD Duplicate ID No.:	<u>[Signature]</u>



Project Site Name: DHC Sample ID No.: SD-228  
 Project No.: \_\_\_\_\_ Sample Location: SD-228  
 Sampled By: SOC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1005</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>1010</u>	<u>6-18"</u>		
	<u>1015</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1020</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thorpyn &amp; Uranium</u>	<u>1-4oz Jcr</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jcr</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>	<b>Signature(s):</b>
MS/MSD Duplicate ID No.:	<u>[Signature]</u>



Project Site Name: \_\_\_\_\_ Sample ID No.: SD-229  
 Project No.: \_\_\_\_\_ Sample Location: SD-229  
 Sampled By: Sec  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/16/14</u>	<u>1205</u>	<u>0-6</u>	<u>Sec Log</u>	<u>Sheet</u>
Method: <u>Composite</u>	<u>1210</u>	<u>6-21</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thurman + Uranium PCB</u>	<u>1-4oz Jar</u>	<input checked="" type="checkbox"/>	
	<u>1-4oz Jar</u>	<input checked="" type="checkbox"/>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>	<b>Signature(s):</b>
MS/MSD _____ Duplicate ID No.: _____	



Project Site Name: DHC Sample ID No.: SD-230  
 Project No.: \_\_\_\_\_ Sample Location: SD-230  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/16/14</u>	<u>1340</u>	<u>0-6</u>	<u>See Log Sheet</u>	
	<u>1345</u>	<u>6-18</u>		
Method: <u>Composite</u>	<u>1350</u>	<u>18-30</u>		
Monitor Readings (Range in ppm):	<u>1355</u>	<u>30-40</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thyroxine &amp; Uranium PCBs</u>	<u>1-4oz Jar</u>	<u>✓</u>	
	<u>1-4oz Jar</u>	<u>✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:	Signature(s):
MS/MSD <u>YES @</u>	

18"-30"  
(Interval 02)

Duplicate ID No.: \_\_\_\_\_





Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-231  
Sample Location: SD-231  
Sampled By: SPC  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/16/14</u>	<u>1410</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>1415</u>	<u>6-18"</u>		
Monitor Readings (Range in ppm):	<u>1420</u>	<u>18-30"</u>		
	<u>1425</u>	<u>30-50"</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Thomson</u>	<u>1-4oz Jar</u>	<u>✓</u>	
<u>PLG1</u>	<u>1-4oz Jar</u>	<u>✓</u>	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.: \_\_\_\_\_

[Signature]



Project Site Name: DHC Sample ID No.: SD-232  
 Project No.: \_\_\_\_\_ Sample Location: SD-232  
 Sampled By: \_\_\_\_\_  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/16/14</u>	<u>1520</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>1525</u>	<u>6-18"</u>		
	<u>1530</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1535</u>	<u>30-50"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thorium &amp; Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>		<b>Signature(s):</b> 
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	



Project Site Name: DHC Sample ID No.: SD-233  
 Project No.: \_\_\_\_\_ Sample Location: SD-233  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/16/14</u>	<u>1540</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>1545</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1550</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1555</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thiam + Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓</u>	

OBSERVATIONS / NOTES: \_\_\_\_\_ MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: DHC Sample ID No.: SD-234  
 Project No.: \_\_\_\_\_ Sample Location: SD-234  
 Sampled By: JRC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1030</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>1035</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<del><u>1040</u></del>	<del><u>18-30"</u></del>		
Monitor Readings (Range in ppm):	<del><u>1045</u></del>	<del><u>30-50"</u></del>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Uranium + Thorium Pb<sub>210</sub></u>	<u>1-4oz Tin 1-4oz Jar</u>	<u>✓ (MVA) ✓ JRC</u>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): AL



Project Site Name: DHC Sample ID No.: SD-235  
 Project No.: \_\_\_\_\_ Sample Location: SD-235  
 Sampled By: SR  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1100</u>	<u>0-6"</u>	<u>See Log Sheets</u>	
	<u>1105</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1110</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1115</u>	<u>30-52"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Vanilins &amp; Phenols</u>	<u>1-4 oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4 oz Jar</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:**

MAP:

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]





Project Site Name: DAC Sample ID No.: SD-236  
 Project No.: \_\_\_\_\_ Sample Location: SD-236  
 Sampled By: JRC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1205</u>	<u>0-6"</u>	<u>See Log</u>	
Method: <u>Composite</u>	<u>1210</u>	<u>6-18"</u>	<u>Log</u>	<u>Sheet</u>
	<u>1215</u>	<u>18-34"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Uranium + Thorium</u> <u>PCBs</u>	<u>1-4oz Jar</u> <u>1-4oz Jar</u>		

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:	Signature(s):
<input type="checkbox"/> MS/MSD Duplicate ID No.:	<u>[Signature]</u>



Project Site Name: DHC Sample ID No.: SD-237  
 Project No.: \_\_\_\_\_ Sample Location: SD-237  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1230</u>	<u>0-6"</u>	<u>Sec log sheet</u>	
	<u>1235</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1240</u>	<u>18-30</u>		
Monitor Readings (Range in ppm):	<u>1245</u>	<u>30-41</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Uranium &amp; Thorium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCB<sub>s</sub></u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:	Duplicate ID No.:	Signature(s):
<input type="checkbox"/> MS/MSD	<u>NO: SD-DUP05 @ SD-237-02</u>	<u>[Signature]</u>
	<u>PCB: SD-DUP03 @ SD-237-02</u>	



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-238  
Sample Location: SD-238  
Sampled By: SBC  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>0820</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>0825</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>0830</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0835</u>	<u>30-53"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Thursion &amp; Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCOs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

**Signature(s):**

MS/MSD Duplicate ID No.: \_\_\_\_\_

SBC



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-239  
Sample Location: SD-239  
Sampled By: SPL  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>0735</u>	<u>0-6"</u>	<u>See log sheets</u>	
Method: <u>Composite</u>	<u>0740</u>	<u>6-18"</u>		
	<u>0745</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0750</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Thyroxine + Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:

MAP:

Observations / Notes area (empty)

MAP area (empty)

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.: \_\_\_\_\_

[Signature]



Project Site Name: DAC Sample ID No.: SD-240  
 Project No.: \_\_\_\_\_ Sample Location: SD-240  
 Sampled By: SAC  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>0845</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>0850</u>	<u>6-18"</u>		
	<u>0855</u>	<u>18-30"</u>		
	<u>0900</u>	<u>30-50"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thorp &amp; Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: \_\_\_\_\_ MAP: \_\_\_\_\_

MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-241  
Sample Location: SD-241  
Sampled By: CBC  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

GRAVE SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
6/17/14	0910	0-6"	See log sheet	
	0915	6-18"		
	0920	18-30"		
	0925	30-51"		
Method: Composite				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysts	Container Requirements	Collected	Other
Van Dam & Flanigan	1-4oz Jar	<input checked="" type="checkbox"/>	
New PCAS	1-4oz Jar	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:	MAP:

MS/MSD	Duplicate ID No.: <u>RAO: SD-DUP06 @ SD-241-02</u>	Signature(s): <u>EL</u>
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PCB: SD-DUP04 @ SD-241-01





Project Site Name: DAC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-247  
Sample Location: SD-247  
Sampled By: SOE  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>0940</u>	<u>0-6"</u>	<u>See Log</u>	<u>Silt</u>
Method: <u>Composite</u>	<u>0945</u>	<u>6-18"</u>		
	<u>0950</u>	<u>18-30"</u>		
	<u>0955</u>	<u>30-50"</u>		
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Uranium &amp; Thorium</u>	<u>1-4oz Jar</u>	<u>✓</u>	
<u>PCBS</u>	<u>1-4oz Jar</u>	<u>✓</u>	

**OBSERVATIONS / NOTES:**

**MAP:**

Large empty area for observations and notes.

**Circle if Applicable:**

MS/MSD \_\_\_\_\_ Duplicate ID No.: \_\_\_\_\_

**Signature(s):**

[Signature]



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-243  
Sample Location: SD-243  
Sampled By: SRG  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>1010</u>	<u>0-6"</u>	<u>Sa</u>	<u>log</u>
Method: <u>Composite</u>	<u>1015</u>	<u>6-18"</u>		
Monitor Readings	<u>1020</u>	<u>18-30"</u>		
(Range in ppm):	<u>1025</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Universal + Thermal PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:

MAP:

Observations and notes area (empty).

Map area (empty).

MS/MSD (if Applicable):

Duplicate ID No.: \_\_\_\_\_

Signature(s):

[Signature]



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-244  
Sample Location: SD-244  
Sampled By: SAL  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

**CRAB SAMPLE DATA**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>1045</u>	<u>0-6</u>	<u>See Log Sheets</u>	
Method:	<u>10SD</u>	<u>6-18</u>		
<u>Composite</u>	<u>10SS</u>	<u>18-30</u>		
Monitor Readings (Range in ppm):	<u>1100</u>	<u>30-52</u>		

**SAMPLE COLLECTION INFORMATION**

Analysis	Container Requirements	Collected	Other
<u>Uranium &amp; Thorium</u>	<u>1.4oz Jar</u>	<u>✓</u>	
<u>PCBs</u>	<u>1.4oz Jar</u>	<u>✓</u>	

**OBSERVATIONS / NOTES**

\_\_\_\_\_

**MAP**

\_\_\_\_\_

MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: DAC Sample ID No.: SD-245  
 Project No.: \_\_\_\_\_ Sample Location: SD-245  
 Sampled By: SAV  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>1135</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>1140</u>	<u>6-11"</u>		
	<u>1145</u>	<u>18-30"</u>		
	<u>1150</u>	<u>30-52"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Thoron &amp; Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

OBSERVATIONS / NOTES: \_\_\_\_\_  
 MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): SAV



Project Site Name: DHC Sample ID No.: SD-246\*  
 Project No.: \_\_\_\_\_ Sample Location: SD-246  
 Sampled By: SRE  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>12:05</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>12:10</u>	<u>6-11"</u>		
Monitor Readings	<u>12:15</u>	<u>11-30"</u>		
(Range in ppm):	<u>12:20</u>	<u>30-51"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thoron &amp; Uranium</u>	<u>1-4oz Jar</u>	<u>Yes</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>Yes</u>	

OBSERVATIONS / NOTES: \_\_\_\_\_ MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: DHC Sample ID No.: SD-247  
 Project No.: \_\_\_\_\_ Sample Location: SD-247  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>1305</u>	<u>01'</u>		
Method: <u>Composite</u>	<u>1310</u>	<u>6-18"</u>	<u>See Log Sheets</u>	
	<u>1315</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1320</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thurium + Uranium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>	<b>Signature(s):</b>
<input type="checkbox"/> MS/MSD      Duplicate ID No.: _____	<u>Don Cameron</u>





Project Site Name: DIC Sample ID No.: SD-248  
 Project No.: \_\_\_\_\_ Sample Location: SD-248  
 Sampled By: SLC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>1400</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>1405</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1410</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1415</u>	<u>30-51"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Thorium &amp; Uranium</u>	<u>1-4oz Jw</u>	<u>✓✓✓</u>	
<u>PCR<sub>1</sub></u>	<u>1-4oz Jw</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

Circle if Applicable: MS/MSD MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): SLC



Project Site Name: DAL Sample ID No.: SD-2494  
 Project No.: \_\_\_\_\_ Sample Location: SD-45  
 Sampled By: JCL  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/17/14</u>	<u>1425</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>1430</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1435</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1440</u>	<u>30-54"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Therm + Volatility PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓</u>	
	<u>1-4oz Jar</u>	<u>✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>AW</u>



Project Site Name: DHC Sample ID No.: SD-250  
 Project No.: \_\_\_\_\_ Sample Location: SD-250  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>0755</u>	<u>0-6'</u>	<u>See log sheet</u>	
Method:	<u>0800</u>	<u>6-18"</u>		
<u>Composite</u>	<u>0805</u>	<u>18-30'</u>		
Monitor Readings	<u>0810</u>	<u>30-52'</u>		
(Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Uranium + Thorium</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s): <u>AC</u>
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-251  
Sample Location: SD-251  
Sampled By: SBC  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>0830</u>	<u>0-6"</u>	<u>Soe Log Shells</u>	
	<u>0835</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>0840</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0845</u>	<u>30-52"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Uranium &amp; Thorium</u>	<u>1-4oz Jar</u>	<u>✓✓✓✓</u>	
<u>PCO<sub>2</sub></u>	<u>1-4oz Jar</u>	<u>✓✓✓✓</u>	

**OBSERVATIONS / NOTES:**

\_\_\_\_\_

**MAP:**

\_\_\_\_\_

**Circle if Applicable:**

MS/MSD \_\_\_\_\_ Duplicate ID No.: RAD: SD-DVA07 @ SD-251-02

**Signature(s):**

[Signature]



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-252  
Sample Location: SD-252  
Sampled By: SBL  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm)			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>1335</u>	<u>0-6</u>	<u>See Log Sheet</u>	
Method:				
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1 - 4oz Jar</u>	<input checked="" type="checkbox"/>	

**OBSERVATIONS / NOTES:**

\_\_\_\_\_

**MAP:**

\_\_\_\_\_

**Circle if Applicable:**

MS/MSD Duplicate ID No.: \_\_\_\_\_

**Signature(s):**

[Signature]



Project Site Name: DHC Sample ID No.: SD-253  
 Project No.: \_\_\_\_\_ Sample Location: SD-253  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>1340</u>	<u>0-6"</u>	<u>see log sheet</u>	
Method:				
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>PCR<sub>s</sub></u>	<u>1-4oz Jars</u>	<input checked="" type="checkbox"/>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

**Circle if Applicable:** MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]





Project Site Name: DHC Sample ID No.: SD-254  
 Project No.: \_\_\_\_\_ Sample Location: \_\_\_\_\_  
 Sampled By: \_\_\_\_\_  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>MSD</u>	<u>0-1'</u>	<u>Sec Log Sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz Jar</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_

Signature(s): [Signature]



Project Site Name: DAC Sample ID No.: SD-255  
 Project No.: \_\_\_\_\_ Sample Location: SD-255  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
_____	_____	_____	_____
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>1505</u>	<u>06'</u>	<u>Sec Log Sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PLR<sub>s</sub></u>	<u>1.4oz Jars</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: SD-DUP08 Signature(s): [Signature]



Project Site Name: DAL Sample ID No.: SD-256  
 Project No.: \_\_\_\_\_ Sample Location: SD-256  
 Sampled By: SRL  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/26/14</u>	<u>0810</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method:				
<u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz J65</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_  
 MAP: \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]  
 MS/MSD Duplicate ID No.: \_\_\_\_\_



Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-257  
Sample Location: SD-257  
Sampled By: SB  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
_____	_____	_____	_____
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/20/11</u>	<u>0755</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz JER</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:

\_\_\_\_\_

\_\_\_\_\_

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

SD-0109

[Signature]



Project Site Name: DAL Sample ID No.: SD-258  
 Project No.: \_\_\_\_\_ Sample Location: SD-258  
 Sampled By: JBC  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
_____	_____	_____	_____
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/20/14</u>	<u>0820</u>	<u>0-6"</u>	<u>Sec log</u>	<u>Shct</u>
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>PCOs</u>	<u>1.4oz Jerr</u>	<input checked="" type="checkbox"/>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): JBC

MS/MSD	Duplicate ID No.: _____
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Project Site Name: DAL Sample ID No.: SD-259  
 Project No.: \_\_\_\_\_ Sample Location: SD-259  
 Sampled By: JRL  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/20/14</u>	<u>0830</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz Jar</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES: MAP:

OBSERVATIONS / NOTES: \_\_\_\_\_  
 MAP: \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]  
 MS/MSD Duplicate ID No.: \_\_\_\_\_





Project Site Name: DAL Sample ID No.: SO-260  
 Project No.: \_\_\_\_\_ Sample Location: SO-260  
 Sampled By: SRG  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>0825</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>0830</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>0835</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0840</u>	<u>30-50"</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4025</u>		

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable:

MS/MSD	Duplicate ID No.:
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Signature(s): \_\_\_\_\_



Project Site Name: DHC Sample ID No.: SD-261-AB  
 Project No.: \_\_\_\_\_ Sample Location: SD-261  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>1100</u>	<u>0-1'</u>		
Method: <u>Composite</u>	<u>1105</u>	<u>6-18"</u>	<u>See log sheet</u>	
	<u>1110</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1115</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCAs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

OBSERVATIONS / NOTES: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s): <u>[Signature]</u>
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Project Site Name: DHC  
Project No.: \_\_\_\_\_

Sample ID No.: SD-262  
Sample Location: SD-262  
Sampled By: SBC  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>0915</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>0920</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>0925</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>0930</u>	<u>30-50"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:**

**MAP:**

Observations and map area (currently blank).

**Circle if Applicable:**

**Signature(s):**

MS/MSD

Duplicate ID No.:

PCB1 SD-262-SS SD-DUP05

[Signature]



Project Site Name: DHC Sample ID No.: SD-263  
 Project No.: \_\_\_\_\_ Sample Location: SD-263  
 \_\_\_\_\_ Sampled By: SBC  
 \_\_\_\_\_ C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>1035</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
	<u>1040</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1045</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm): <u>1050</u>		<u>30-52'</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>REDC</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:**

OBSERVATIONS / NOTES: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): \_\_\_\_\_

MS/MSD Duplicate ID No.: \_\_\_\_\_

SD-263-01 MS/MSD



Project Site Name: DHC Sample ID No.: SD-264  
 Project No.: \_\_\_\_\_ Sample Location: SD-264  
 Sampled By: SPC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>1100</u>	<u>0-6</u>	<u>See Log Sheet</u>	
	<u>1105</u>	<u>6-18</u>		
Method: <u>Composite</u>	<u>1110</u>	<u>18-30</u>		
Monitor Readings (Range in ppm):	<u>1115</u>	<u>30-32</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1 - 4oz Jar</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>	<b>Signature(s):</b>
<input type="checkbox"/> MS/MSD      Duplicate ID No.: _____	<u>SPC</u>



Project Site Name: DAC Sample ID No.: SD-265  
 Project No.: \_\_\_\_\_ Sample Location: SD-265  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>12:00</u>	<u>0-6"</u>	<u>See Log Sheets</u>	
	<u>12:05</u>	<u>6-18"</u>		
	<u>12:10</u>	<u>18-30"</u>		
	<u>12:10</u>	<u>30-52"</u>		
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>PCRF</u>	<u>1-4oz Jars</u>	<u>JKW</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>[Signature]</u>



Project Site Name: DAC Sample ID No.: SD-266  
 Project No.: \_\_\_\_\_ Sample Location: SD-266  
 Sampled By: SEC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm)			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/18</u>	<u>1030</u>	<u>6-8"</u>	<u>Sec</u>	<u>See Log Sheets</u>
	<u>1035</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1040</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm)	<u>1045</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4 oz Jars</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD Duplicate ID No.: \_\_\_\_\_





Project Site Name: DHC Sample ID No.: SD-267  
 Project No.: \_\_\_\_\_ Sample Location: SD-267  
 Sampled By: SRL  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>1000</u>	<u>0-6"</u>	<u>Sec Log Sheets</u>	
	<u>1005</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1010</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1015</u>	<u>30-33"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>PCA</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:** \_\_\_\_\_ **MAP:** \_\_\_\_\_

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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Project Site Name: DHC Sample ID No.: SD-268  
 Project No.: \_\_\_\_\_ Sample Location: SD-268  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>1320</u>	<u>0-1'</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>1325</u>	<u>1-18"</u>		
	<u>1330</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1335</u>	<u>30-52'</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCQS</u>	<u>1 402 Jcr</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_

Signature(s): [Signature]



Project Site Name: \_\_\_\_\_  
Project No.: \_\_\_\_\_

Sample ID No.: SD-269  
Sample Location: SD-269  
Sampled By: SBC  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
6/18/14	1420	0-6"	See Log Sheet	
Method: Composite	1425	6-18"		
Monitor Readings (Range in ppm)	1430	18-30		
	1435	30-52"		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
PCB <sub>s</sub>	1.4oz Jar	JJJ	

**OBSERVATIONS / NOTES:**

\_\_\_\_\_

**MAP:**

\_\_\_\_\_

**Circle if Applicable:**

MS/MSD Duplicate ID No.: \_\_\_\_\_

**Signature(s):**

*[Signature]*



Project Site Name: DAC Sample ID No.: SD-270  
 Project No.: \_\_\_\_\_ Sample Location: SD-270  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>1340</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>1345</u>	<u>6-18"</u>		
	<u>1350</u>	<u>18-30"</u>		
	<u>1355</u>	<u>30-33"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4 oz jar</u>	<u>✓✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: PCB: DUP SD-DUPO6 for SD-270-02

Signature(s): [Signature]



Project Site Name: DHC Sample ID No.: SD-271  
 Project No.: \_\_\_\_\_ Sample Location: SD-271  
 Sampled By: SRL  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
_____	_____	_____	_____
Time: _____	_____	_____	_____
Method: _____	_____	_____	_____
Monitor Reading (ppm): _____	_____	_____	_____

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>MSS</u>	<u>0-6"</u>	<u>See log sheet</u>	
	<u>1500</u>	<u>6-18</u>		
	<u>1505</u>	<u>18-30</u>		
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCB<sub>s</sub></u>	<u>1-4 oz Jc</u>	<u>✓✓</u>	

OBSERVATIONS / NOTES: MAP:

OBSERVATIONS / NOTES: \_\_\_\_\_  
 MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: SD-271-01 Signature(s): [Signature]



Project Site Name: DHC Sample ID No.: SD-272  
 Project No.: \_\_\_\_\_ Sample Location: SD-272  
 Sampled By: JR  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/14/14</u>	<u>0925</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>0930</u>	<u>6-14"</u>		
	<u>0935</u>	<u>16-20"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1.4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_  
 MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: PCB, SD-DUP07 From SD-272-01 Signature(s): [Signature]



Project Site Name: DAL  
Project No.: \_\_\_\_\_

Sample ID No.: SD-273  
Sample Location: SD-273  
Sampled By: SRC  
C.O.C. No.: \_\_\_\_\_

- Surface Soil
- Subsurface Soil
- Sediment
- Other: \_\_\_\_\_
- QA Sample Type: \_\_\_\_\_

- Type of Sample:
- Low Concentration
  - High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
_____	_____	_____	_____
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/18/14</u>	<u>1525</u>	<u>0-6"</u>	<u>Sec Log</u>	<u>Silt</u>
	<u>1530</u>	<u>6-18"</u>		
Method: <u>Composite</u>	<u>1535</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1540</u>	<u>30-45"</u>		

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>PLASTIC</u>	<u>✓✓✓</u>	

**OBSERVATIONS / NOTES:**

**MAP:**

\_\_\_\_\_

\_\_\_\_\_

**Circle if Applicable:**

MS/MSD Duplicate ID No.: \_\_\_\_\_

**Signature(s):**

[Signature]





Project Site Name: DHC Sample ID No.: SD-274  
 Project No.: \_\_\_\_\_ Sample Location: SD-274  
 Sampled By: SBL  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>0755</u>	<u>0-6"</u>	<u>See Log Sheets</u>	
Method:	<u>0800</u>	<u>6-18"</u>		
<u>Composite</u>	<u>0805</u>	<u>18-30"</u>		
	<u>0810</u>	<u>30-52"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Observations / Notes: \_\_\_\_\_

MAP: \_\_\_\_\_

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: DAC Sample ID No.: SD-275  
 Project No.: \_\_\_\_\_ Sample Location: SD-275  
 Sampled By: SA  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>1320</u>	<u>0-6"</u>	<u>See log sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz Jar</u>	<u>✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>MS/MSD</b>	<b>Duplicate ID No.:</b>	<b>Signature(s):</b>
		<u>AC</u>



Project Site Name: DHC Sample ID No.: SD-276  
 Project No.: \_\_\_\_\_ Sample Location: SD-276  
 Sampled By: SLC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/19/14</u>	<u>1220</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>PCBs</u>	<u>1-4oz Jar</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:		Signature(s): <u>SLC</u>
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	



Project Site Name: Deak Head Cove Sample ID No.: SD-277  
 Project No.: \_\_\_\_\_ Sample Location: SD-277  
 Sampled By: S. Green  
 C.O.C. No.: \_\_\_\_\_  
 Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_  
 Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/9/14</u>	<u>1810</u>	<u>SS 0-6"</u>	<u>See</u>	<u>Log Sheet</u>
	<u>1815</u>	<u>01 6-18"</u>		
	<u>1820</u>	<u>02 18-30"</u>		
Method:	<u>Composite</u>	<u>03 30-52"</u>		
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Thorium + Uranium</u>	<u>1-46 oz jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES:	MAP:

Circle if Applicable:	Duplicate ID No.:	Signature(s):
<input type="checkbox"/> MS/MSD		<u>[Signature]</u>



Project Site Name: Dark Head Cove Sample ID No.: SO-278  
 Project No.: \_\_\_\_\_ Sample Location: SO-270  
 Sampled By: S. Gorman  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/9/14</u>	<u>1740</u>	<u>55 (0-6")</u>	<u>See Log Sheet</u>	
Method: <u>Composite</u>	<u>1745</u>	<u>01 (6-12")</u>		
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Uranium &amp; Thorium</u>	<u>1-4oz Jar</u>	<u>✓</u>	

**OBSERVATIONS / NOTES:**

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
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Signature(s):



Project Site Name: DHC Sample ID No.: SD-278 (2)  
 Project No.: \_\_\_\_\_ Sample Location: SD-278  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/20/14</u>	<u>1000</u>	<u>0-6"</u>	<u>See Log Sheet</u>	
Method:	<u>1015</u>	<u>6-18"</u>		
<u>Composite</u>	<u>1010</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1015</u>	<u>30-54"</u>		

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Volatile &amp; Pesticides</u>	<u>14oz Jar</u>	<u>✓✓✓</u>	

OBSERVATIONS / NOTES: MAP:

Background extract 2.

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: Deer Head Cove Sample ID No.: SD-279  
 Project No.: \_\_\_\_\_ Sample Location: SD-279  
 Sampled By: S. Ginn  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/9/14</u>	<u>1540</u>	<u>0-6"</u>	<u>See</u>	
Method: <u>Composite</u>	<u>1545</u>	<u>6-18"</u>	<u>See</u>	<u>See LOG SHEETS</u>
	<u>1550</u>	<u>18-30"</u>		
Monitor Readings (Range in ppm):	<u>1555</u>	<u>30-52"</u>		

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Uranium &amp; Thorium</u> <u>Fluorine</u>	<u>1-40 62 Jcf</u>	<u>✓✓✓</u>	

<b>OBSERVATIONS / NOTES:</b>	<b>MAP:</b>

<b>Circle if Applicable:</b>		<b>Signature(s):</b>
<input type="checkbox"/> MS/MSD	Duplicate ID No.:	<u>[Signature]</u>





Project Site Name: DHC Sample ID No.: SD-005E-01  
 Project No.: \_\_\_\_\_ Sample Location: Outfall 005 East  
 Surface Soil Sampled By: S. Canina  
 Subsurface Soil C.O.C. No.: \_\_\_\_\_  
 Sediment Type of Sample:  
 Other: \_\_\_\_\_  Low Concentration  
 QA Sample Type: \_\_\_\_\_  High Concentration

GRAB SAMPLE DATA			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>0830</u>	<u>--</u>		<u>From Cores <del>SD-207</del> and <del>SD-208</del>, SD-204 through SD-210 and SD-221</u>
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION			
Analysis	Container Requirements	Collected	Other
<u>Gamma Spectroscopy</u>	<u>1.5-16 oz plastic</u>	<u>✓✓</u>	

OBSERVATIONS / NOTES: Tier 1 Gamma Spectroscopy sample  
Composited from borings ~~SD-207~~ and ~~SD-208~~  
~~SD-207~~, and ~~SD-208~~ SD-204 through  
SD-210 and SD-221

Circle if Applicable: \_\_\_\_\_ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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Project Site Name: DHC Sample ID No.: SD-005E-02  
 Project No.: \_\_\_\_\_ Sample Location: Outfall 005 East  
 Sampled By: JPL  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1205</u>	<u>—</u>	<u>—</u>	<u>From cores SD-234 to SD-237</u>
Method:				
<u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Gamma Spectroscopy</u>	<u>2-16oz plastic</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES: MAP:

Tier 2 Gamma Spectroscopy sample  
Composited from borings SD-234 to SD-237

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): \_\_\_\_\_



Project Site Name: DHC Sample ID No.: SD-005V-01  
 Project No.: \_\_\_\_\_ Sample Location: Outfall 005 W  
 Sampled By: \_\_\_\_\_  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

**GRAB SAMPLE DATA:**

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

**COMPOSITE SAMPLE DATA:**

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/11/14</u>	<u>1200</u>	<u>0-20</u>		<u>From cores SD-195 through SD-202</u>
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

**SAMPLE COLLECTION INFORMATION:**

Analysis	Container Requirements	Collected	Other
<u>Gamma Spectroscopy</u>	<u>1-lb oz plastic</u>	<input checked="" type="checkbox"/>	

**OBSERVATIONS / NOTES:**  
 Tier 1 Gamma Spectroscopy sample  
 Compositied from boring SD-195 through  
 SD-202 around Outfall 005 W.

**MAP:**

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s):



Project Site Name: DHC Sample ID No.: SD-005W-02  
 Project No.: \_\_\_\_\_ Sample Location: SD-005W outfall  
 Sampled By: SBC  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/13/14</u>	<u>1200</u>	<u>—</u>	<u>—</u>	<u>From cores SD-223 to SD-228</u>
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>Gamma Spectroscopy</u>	<u>2-1602 (Plastic)</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES: MAP:

Tier 2 Gamma Spectroscopy sample  
Composited from borings SD-223 to SD-228

Circle if Applicable: MS/MSD Duplicate ID No.: \_\_\_\_\_ Signature(s): [Signature]



Project Site Name: DHC Sample ID No.: SD-008-01  
 Project No.: \_\_\_\_\_ Sample Location: Outfall 08  
 Sampled By: S. Cameron  
 C.O.C. No.: \_\_\_\_\_

Surface Soil  
 Subsurface Soil  
 Sediment  
 Other: \_\_\_\_\_  
 QA Sample Type: \_\_\_\_\_

Type of Sample:  
 Low Concentration  
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: _____			
Method: _____			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>6/12/14</u>	<u>1450</u>	<u>-</u>		<u>From cores collected near outfall 8</u>
Method: <u>Composite</u>				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>Gamma Spectroscopy</u>	<u>2.16oz plastic</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:	MAP:
<u>Tier 1 Gamma Spectroscopy sample</u> <u>Composited from samples ground outfall 8</u>	

Circle if Applicable:		Signature(s):
<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____	<u>[Signature]</u>

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## APPENDIX B—DATA-VALIDATION REPORTS



TO: M. MARTIN DATE: AUGUST 29, 2014  
 FROM: MICHELLE L. ALLEN COPIES: DV FILE  
 SUBJECT: ORGANIC DATA VALIDATION – PCB HOMOLOGS  
 LOCKHEED MARTIN CORPORATION (LMC) – SEDIMENT INVESTIGATION  
 SDG 680-102252-1

SAMPLES: 27/Sediment/PCB Homologs

SD-195-SS	SD-197-01	SD-197-02
SD-197-03	SD-197-SS	SD-199-01
SD-199-02	SD-199-03	SD-199-SS
SD-200-01	SD-200-02	SD-200-03
SD-200-SS	SD-202-01	SD-202-02
SD-202-SS	SD-204-01	SD-204-02
SD-204-SS	SD-207-01	SD-207-02
SD-207-03	SD-207-SS	SD-209-01
SD-209-02	SD-209-03	SD-DUP 01

Overview

The sample set for LMC, SDG 680-102252-1 consisted of twenty-seven (27) sediment environmental samples. All twenty-seven (27) sediment samples were analyzed for polychlorinated biphenyls (PCB) homologs. One field duplicate sample pair was included in this SDG: SD-DUP 01/SD-199-02.

The samples were collected by Tetra Tech, Inc. on June 11-12, 2014 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with EPA Method 680 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times/sample preservation, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, laboratory control sample results, matrix spike/matrix spike duplicate results, internal standard areas and recoveries, field duplicate precision, chromatographic resolution, compound identification, and detection limits. Areas of concern are listed below.

Major

No major issues were identified.

Minor

- The Percent Solids (% Solids) was less than 30% in the following samples:

<u>Sample</u>	<u>% Solids</u>
SD-197-01	23.7
SD-197-SS	18.2
SD-199-SS	17.3
SD-200-01	28.9
SD-200-SS	20.2

The detected and non-detected results reported for the PCB homologs in these samples were qualified as estimated, (J) and (UJ), respectively.



- The following PCB homologs were detected in the laboratory method blank at the following maximum concentrations:

<u>PCB Homolog</u>	<u>Maximum Concentration (µg/Kg)</u>	<u>Action Level (µg/Kg)</u>
Heptachlorobiphenyl <sup>(1)</sup>	11.7	58.5
Hexachlorobiphenyl <sup>(1)</sup>	17.3	86.5
Pentachlorobiphenyl <sup>(1)</sup>	1.03	5.15

<sup>(1)</sup> - Maximum concentration detected in the laboratory method blank MB 680-336158/10-A, from preparation batch #336158 affecting sample SD-204-02.

Action levels of 5X the maximum concentration were established to evaluate for laboratory blank contamination. Percent moisture, dilution factor, and sample aliquot, if necessary, were taken into consideration during the application of the action level. The detected result reported for hexachlorobiphenyl in the affected sample below the established action level was qualified as non-detected, (U).

- The surrogate spike compound, dechlorobiphenyl-13C12, had a Percent Recovery (%R) below the lower quality control limit in sample SD-197-SS. The detected and non-detected reported for the PCB homologs in this sample were qualified as estimated, (J) and (UJ), respectively.
- The internal standard areas for phenanthrene-d10 and chrysene-d12 were above the 130% quality control limit in samples SD-199-02, SD-199-03, SD-204-02, SD-209-01, and SD-DUP 01. In addition, the internal standard area for chrysene-d12 was above 130% in samples SD-199-SS and SD-209-03. The detected results reported for the PCB homologs associated with these internal standards were qualified as estimated, (J).
- The Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses performed on sample SD-204-02 had %Rs for heptachlorobiphenyl below the lower quality control limit. In addition, the MS %R for hexachlorobiphenyl was low. No action was taken for hexachlorobiphenyl because the MSD %R was acceptable and the result in the parent sample was qualified due to blank contamination. The detected result reported heptachlorobiphenyl in the parent sample was qualified as estimated, (J).
- Detected results reported below the RL limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

#### Notes

The surrogate recoveries were not evaluated for samples SD-199-01, SD-200-01, SD-200-SS, SD-202-SS, SD-207-01, and SD-207-SS because these samples were analyzed at dilutions.

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SDG: 680-102252-1

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The following samples were diluted due to concentrations of PCB homologs.

<u>Sample</u>	<u>Dilution</u>
SD-197-01	5X
SD-197-SS	5X
SD-199-01	10X
SD-200-01	10X
SD-200-02	5X
SD-200-SS	10X
SD-202-01	5X
SD-202-SS	50X
SD-204-01	5X
SD-204-SS	5X
SD-207-01	50X
SD-207-02	5X
SD-207-03	5X
SD-207-SS	100X
SD-DUP 01	5X

The MS/MSD analyses performed on sample SD-202-SS had %Rs for nonachlorobiphenyl above the upper quality control limit. The MS and MSD samples were analyzed at a 50X dilution, therefore, this quality control parameter was not evaluated. No action was taken in the parent sample.

Decachlorobiphenyl is used as the calibration congener for nonachlorobiphenyl. The continuing calibration forms were modified by removing nonachlorobiphenyl from the calibration congener list because the results were inaccurate.

Non-detected results were reported to the MDL.

### **Executive Summary**

**Laboratory Performance:** The %Solids exceeded 30% in some samples. PCB homologs were detected in on laboratory method blank. Several samples had high internal standard areas.

**Other Factors Affecting Data Quality:** Many samples were diluted. The MS/MSD analyses had noncompliant %Rs. One sample had a low surrogate %R. Results below the RL were estimated.


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The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (June 2008) and EPA Method 680 analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.



Tetra Tech, Inc.  
Michelle L. Allen  
Chemist/Data Validator



Tetra Tech, Inc.  
Joseph A. Samchuck  
Data Validation Manager

Attachments:

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

**Appendix A**

Qualified Analytical Results

**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 ( $< 2 \times$  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 standard deviations is greater than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed
- Z3 = Tentatively Identified Compound aldol condensate

<b>PROJ_NO: 05220</b> <b>SDG: 680-102252-1</b> <b>FRACTION: PCB</b> <b>MEDIA: SEDIMENT</b>	NSAMPLE	SD-195-SS			SD-197-01			SD-197-02			SD-197-03		
	LAB_ID	680-102252-4			680-102252-10			680-102252-11			680-102252-12		
	SAMP_DATE	6/10/2014			6/11/2014			6/11/2014			6/11/2014		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	82.6			23.7			58.6			45.9		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	1	U		17	UJ	Y	1.4	U		1.8	U		
DICHLOROBIPHENYLS	0.42	U		7.3	UJ	Y	0.6	U		0.76	U		
HEPTACHLOROBIPHENYLS	0.61	U		890	J	Y	2.5	J	P	1.1	U		
HEXACHLOROBIPHENYL	0.4	U		1500	J	Y	19			0.71	U		
MONOCHLOROBIPHENYLS	0.23	U		4	UJ	Y	0.32	U		0.41	U		
NONACHLOROBIPHENYLS	4	U		69	UJ	Y	5.6	U		7.1	U		
OCTACHLOROBIPHENYLS	0.64	U		52	J	PY	0.9	U		1.1	U		
PENTACHLOROBIPHENYLS	0.41	U		1300	J	Y	31			8.1	J	P	
TETRACHLOROBIPHENYLS	0.45	U		2700	J	Y	60			21			
TRICHLOROBIPHENYLS	0.21	U		73	J	Y	7.3			0.37	U		

<b>PROJ_NO: 05220</b> <b>SDG: 680-102252-1</b> <b>FRACTION: PCB</b> <b>MEDIA: SEDIMENT</b>	NSAMPLE	SD-197-SS			SD-199-01			SD-199-02			SD-199-03		
	LAB_ID	680-102252-9			680-102252-14			680-102252-15			680-102252-16		
	SAMP_DATE	6/11/2014			6/11/2014			6/11/2014			6/11/2014		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	18.2			31.2			47.9			67.5		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	23	UJ	RY	26	U		1.7	U		1.2	U		
DICHLOROBIPHENYLS	9.6	UJ	RY	18	J	P	0.73	U		0.52	U		
HEPTACHLOROBIPHENYLS	170	J	PRY	3900			1	U		0.74	U		
HEXACHLOROBIPHENYL	310	J	RY	5100			5.7	J	NP	0.49	U		
MONOCHLOROBIPHENYLS	5.2	UJ	RY	6.1	U		0.4	U		0.28	U		
NONACHLOROBIPHENYLS	90	UJ	RY	110	U		6.9	U		4.9	U		
OCTACHLOROBIPHENYLS	14	UJ	RY	690			1.1	U		0.78	U		
PENTACHLOROBIPHENYLS	77	J	PRY	4600			17	J	N	0.5	U		
TETRACHLOROBIPHENYLS	300	J	RY	20000			150	J	N	0.55	U		
TRICHLOROBIPHENYLS	4.6	UJ	RY	1200			12	J	N	0.25	U		



<b>PROJ_NO: 05220</b> <b>SDG: 680-102252-1</b> <b>FRACTION: PCB</b> <b>MEDIA: SEDIMENT</b>	NSAMPLE	SD-199-SS			SD-200-01			SD-200-02			SD-200-03		
	LAB_ID	680-102252-13			680-102252-6			680-102252-7			680-102252-8		
	SAMP_DATE	6/11/2014			6/10/2014			6/10/2014			6/10/2014		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	17.3			28.9			42.1			70.7		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	4.8	UJ	NY	29	UJ	Y	9.8	U		1.2	U		
DICHLOROBIPHENYLS	2	UJ	Y	12	UJ	Y	4.2	U		0.5	U		
HEPTACHLOROBIPHENYLS	190	J	NY	4200	J	Y	5.9	U		1.8	J	P	
HEXACHLOROBIPHENYL	320	J	Y	4300	J	Y	22	J	P	7.1	J	P	
MONOCHLOROBIPHENYLS	1.1	UJ	Y	6.6	UJ	Y	2.3	U		0.27	U		
NONACHLOROBIPHENYLS	19	UJ	Y	110	UJ	Y	39	U		4.7	U		
OCTACHLOROBIPHENYLS	24	J	NPY	520	J	Y	6.3	U		0.75	U		
PENTACHLOROBIPHENYLS	110	J	Y	4500	J	Y	16	J	P	1.5	J	P	
TETRACHLOROBIPHENYLS	350	J	Y	16000	J	Y	190			5.2	J	P	
TRICHLOROBIPHENYLS	6.9	J	PY	690	J	Y	12	J	P	0.24	U		

<b>PROJ_NO: 05220</b> <b>SDG: 680-102252-1</b> <b>FRACTION: PCB</b> <b>MEDIA: SEDIMENT</b>	NSAMPLE	SD-200-SS			SD-202-01			SD-202-02			SD-202-SS		
	LAB_ID	680-102252-5			680-102252-2			680-102252-3			680-102252-1		
	SAMP_DATE	6/10/2014			6/10/2014			6/10/2014			6/10/2014		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	20.2			70.6			75.4			52.5		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	41	UJ	Y	5.9	U		1.1	U		79	U		
DICHLOROBIPHENYLS	17	UJ	Y	2.5	U		0.46	U		33	U		
HEPTACHLOROBIPHENYLS	1100	J	Y	59	J	P	11	J	P	44000			
HEXACHLOROBIPHENYL	1500	J	Y	95			18			59000			
MONOCHLOROBIPHENYLS	9.4	UJ	Y	1.3	U		0.25	U		18	U		
NONACHLOROBIPHENYLS	160	UJ	Y	23	UJ	D	4.4	UJ	D	400	J	P	
OCTACHLOROBIPHENYLS	67	J	Y	3.7	U		0.7	U		5200			
PENTACHLOROBIPHENYLS	910	J	Y	19	J	P	3.9	J	P	18000			
TETRACHLOROBIPHENYLS	1900	J	Y	92			25			10000			
TRICHLOROBIPHENYLS	47	J	PY	2.9	J	P	0.74	J	P	530			

<b>PROJ_NO: 05220</b> <b>SDG: 680-102252-1</b> <b>FRACTION: PCB</b> <b>MEDIA: SEDIMENT</b>	NSAMPLE	SD-204-01			SD-204-02			SD-204-SS			SD-207-01		
	LAB_ID	680-102252-22			680-102252-23			680-102252-21			680-102252-25		
	SAMP_DATE	6/11/2014			6/11/2014			6/11/2014			6/11/2014		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	57.9			80.3			51.0			33.8		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	7.1	U		1	U		7.9	U		120	U		
DICHLOROBIPHENYLS	3	U		0.43	U		6.1	J	P	51	U		
HEPTACHLOROBIPHENYLS	4.3	U		100	J	DN	6500			6800			
HEXACHLOROBIPHENYL	2.8	U		75	U	A	7100			7400			
MONOCHLOROBIPHENYLS	1.6	U		0.24	U	N	1.8	U		28	U		
NONACHLOROBIPHENYLS	28	U		4.1	U		73	J	P	480	U		
OCTACHLOROBIPHENYLS	4.5	U		8.9	J	NP	1200			1800			
PENTACHLOROBIPHENYLS	6.5	J	P	9.1	J	N	2800			17000			
TETRACHLOROBIPHENYLS	79			22	J	N	6300			95000			
TRICHLOROBIPHENYLS	1.5	U		0.91	J	NP	360			6400			

<b>PROJ_NO: 05220</b> <b>SDG: 680-102252-1</b> <b>FRACTION: PCB</b> <b>MEDIA: SEDIMENT</b>	NSAMPLE	SD-207-02			SD-207-03			SD-207-SS			SD-209-01		
	LAB_ID	680-102252-26			680-102252-27			680-102252-24			680-102252-18		
	SAMP_DATE	6/11/2014			6/11/2014			6/11/2014			6/11/2014		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	39.4			58.4			31.5			76.9		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	10	U		7.1	U		260	U		1.1	U		
DICHLOROBIPHENYLS	4.4	U		3	U		110	U		0.45	U		
HEPTACHLOROBIPHENYLS	290			13	J	P	30000			0.65	U		
HEXACHLOROBIPHENYL	510			39	J	P	43000			0.43	U		
MONOCHLOROBIPHENYLS	2.4	U		1.6	U		60	U		0.25	U		
NONACHLOROBIPHENYLS	42	U		28	U		1000	U		4.3	U		
OCTACHLOROBIPHENYLS	52	J	P	4.5	U		7300			0.69	U		
PENTACHLOROBIPHENYLS	880			36	J	P	39000			0.44	U		
TETRACHLOROBIPHENYLS	5300			350			150000			0.99	J	NP	
TRICHLOROBIPHENYLS	340			5	J	P	8900			0.22	U		

<b>PROJ_NO: 05220</b> <b>SDG: 680-102252-1</b> <b>FRACTION: PCB</b> <b>MEDIA: SEDIMENT</b>	NSAMPLE	SD-209-02			SD-209-03			SD-DUP01		
	LAB_ID	680-102252-19			680-102252-20			680-102252-17		
	SAMP_DATE	6/11/2014			6/11/2014			6/11/2014		
	QC_TYPE	NM			NM			FD		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	76.0			81.4			51.7		
	DUP_OF							SD-199-02		
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	1.1	U		1	UJ	N	8	U		
DICHLOROBIPHENYLS	0.46	U		0.43	U		3.4	U		
HEPTACHLOROBIPHENYLS	23			0.61	UJ	N	4.8	U		
HEXACHLOROBIPHENYL	37			2.3	J	P	3.2	U		
MONOCHLOROBIPHENYLS	0.25	U		0.23	U		1.8	U		
NONACHLOROBIPHENYLS	4.3	U		4	U		32	U		
OCTACHLOROBIPHENYLS	3.8	J	P	0.65	UJ	N	5.1	U		
PENTACHLOROBIPHENYLS	12			4.8	J	P	9.2	J	NP	
TETRACHLOROBIPHENYLS	25			0.59	J	P	190	J	N	
TRICHLOROBIPHENYLS	0.49	J	P	0.21	U		12	J	NP	

**Appendix B**

Results as Reported by the Laboratory

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-195-SS

Lab Sample ID: 680-102252-4

Date Sampled: 06/10/2014 1330

Client Matrix: Solid

% Moisture: 17.4

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337751	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0618.D	
Dilution: 1.0		Initial Weight/Volume: 29.95 g	
Analysis Date: 07/06/2014 2042		Final Weight/Volume: 1 mL	
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.0	U	1.0	21
Dichlorobiphenyl		0.42	U	0.42	4.0
Heptachlorobiphenyl		0.61	U	0.61	12
Hexachlorobiphenyl		0.40	U	0.40	8.1
Monochlorobiphenyl		0.23	U	0.23	4.0
Nonachlorobiphenyl		4.0	U	4.0	21
Octachlorobiphenyl		0.64	U	0.64	12
Pentachlorobiphenyl		0.41	U	0.41	8.1
Tetrachlorobiphenyl		0.45	U	0.45	8.1
Trichlorobiphenyl		0.21	U	0.21	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	92		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Client Sample ID: SD-197-01

Lab Sample ID: 680-102252-10  
Client Matrix: Solid

% Moisture: 76.3

Date Sampled: 06/11/2014 1035  
Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0631.D
Dilution: 5.0		Initial Weight/Volume: 30.21 g
Analysis Date: 07/07/2014 0258		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		17	U	17	360
Dichlorobiphenyl		7.3	U	7.3	69
Heptachlorobiphenyl		890		10	210
Hexachlorobiphenyl		1500		6.9	140
Monochlorobiphenyl		4.0	U	4.0	69
Nonachlorobiphenyl		69	U	69	360
Octachlorobiphenyl		52	J	11	210
Pentachlorobiphenyl		1300		7.1	140
Tetrachlorobiphenyl		2700		7.8	140
Trichlorobiphenyl		73		3.6	69

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	69		30 - 130



## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Client Sample ID: SD-197-02

Lab Sample ID: 680-102252-11

Date Sampled: 06/11/2014 1040

Client Matrix: Solid

% Moisture: 41.4

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0632.D	
Dilution: 1.0		Initial Weight/Volume: 30.07 g	
Analysis Date: 07/07/2014 0326		Final Weight/Volume: 1 mL	
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.4	U	1.4	29
Dichlorobiphenyl		0.60	U	0.60	5.6
Heptachlorobiphenyl		2.5	J	0.85	17
Hexachlorobiphenyl		19		0.56	11
Monochlorobiphenyl		0.32	U	0.32	5.6
Nonachlorobiphenyl		5.6	U	5.6	29
Octachlorobiphenyl		0.90	U	0.90	17
Pentachlorobiphenyl		31		0.58	11
Tetrachlorobiphenyl		60		0.63	11
Trichlorobiphenyl		7.3		0.29	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	91		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-197-03

Lab Sample ID: 680-102252-12

Date Sampled: 06/11/2014 1045

Client Matrix: Solid

% Moisture: 54.1

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0633.D
Dilution: 1.0		Initial Weight/Volume: 30.16 g
Analysis Date: 07/07/2014 0355		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.8	U	1.8	37
Dichlorobiphenyl		0.76	U	0.76	7.1
Heptachlorobiphenyl		1.1	U	1.1	22
Hexachlorobiphenyl		0.71	U	0.71	15
Monochlorobiphenyl		0.41	U	0.41	7.1
Nonachlorobiphenyl		7.1	U	7.1	37
Octachlorobiphenyl		1.1	U	1.1	22
Pentachlorobiphenyl		8.1	J	0.74	15
Tetrachlorobiphenyl		21		0.80	15
Trichlorobiphenyl		0.37	U	0.37	7.1

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	88		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-197-SS

Lab Sample ID: 680-102252-9

Date Sampled: 06/11/2014 1030

Client Matrix: Solid

% Moisture: 81.8

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0630.D
Dilution: 5.0		Initial Weight/Volume: 30.10 g
Analysis Date: 07/07/2014 0229		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		23	U	23	460
Dichlorobiphenyl		9.6	U	9.6	90
Heptachlorobiphenyl		170	J	14	270
Hexachlorobiphenyl		310		9.0	180
Monochlorobiphenyl		5.2	U	5.2	90
Nonachlorobiphenyl		90	U	90	460
Octachlorobiphenyl		14	U	14	270
Pentachlorobiphenyl		77	J	9.3	180
Tetrachlorobiphenyl		300		10	180
Trichlorobiphenyl		4.6	U	4.6	90

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	28	X	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-199-01

Lab Sample ID: 680-102252-14

Date Sampled: 06/11/2014 1115

Client Matrix: Solid

% Moisture: 68.8

Date Received: 06/12/2014 0930

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0635.D	
Dilution: 10		Initial Weight/Volume: 30.15 g	
Analysis Date: 07/07/2014 0453		Final Weight/Volume: 1 mL	
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		26	U	26	540
Dichlorobiphenyl		18	J	11	110
Heptachlorobiphenyl		3900		16	320
Hexachlorobiphenyl		5100		11	210
Monochlorobiphenyl		6.1	U	6.1	110
Nonachlorobiphenyl		110	U	110	540
Octachlorobiphenyl		690		17	320
Pentachlorobiphenyl		4600		11	210
Tetrachlorobiphenyl		20000		12	210
Trichlorobiphenyl		1200		5.4	110

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-199-02

Lab Sample ID: 680-102252-15

Date Sampled: 06/11/2014 1120

Client Matrix: Solid

% Moisture: 52.1

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0636.D	
Dilution: 1.0		Initial Weight/Volume: 30.06 g	
Analysis Date: 07/07/2014 0522		Final Weight/Volume: 1 mL	
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.7	U*	1.7	35
Dichlorobiphenyl		0.73	U*	0.73	6.9
Heptachlorobiphenyl		1.0	U*	1.0	21
Hexachlorobiphenyl		5.7	J*	0.69	14
Monochlorobiphenyl		0.40	U*	0.40	6.9
Nonachlorobiphenyl		6.9	U*	6.9	35
Octachlorobiphenyl		1.1	U*	1.1	21
Pentachlorobiphenyl		17	*	0.71	14
Tetrachlorobiphenyl		150	*	0.77	14
Trichlorobiphenyl		12	*	0.35	6.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	91	*	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Client Sample ID: SD-199-03

Lab Sample ID: 680-102252-16  
Client Matrix: Solid

% Moisture: 32.5

Date Sampled: 06/11/2014 1125  
Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0637.D
Dilution: 1.0		Initial Weight/Volume: 30.12 g
Analysis Date: 07/07/2014 0552		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.2	U *	1.2	25
Dichlorobiphenyl		0.52	U *	0.52	4.9
Heptachlorobiphenyl		0.74	U *	0.74	15
Hexachlorobiphenyl		0.49	U *	0.49	9.9
Monochlorobiphenyl		0.28	U *	0.28	4.9
Nonachlorobiphenyl		4.9	U *	4.9	25
Octachlorobiphenyl		0.78	U *	0.78	15
Pentachlorobiphenyl		0.50	U *	0.50	9.9
Tetrachlorobiphenyl		0.55	U *	0.55	9.9
Trichlorobiphenyl		0.25	U *	0.25	4.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	72	*	30 - 130

Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-199-SS

Lab Sample ID: 680-102252-13

Date Sampled: 06/11/2014 1110

Client Matrix: Solid

% Moisture: 82.7

Date Received: 06/12/2014 0933

680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method:	680	Analysis Batch:	680-337778	Instrument ID:	CMSF
Prep Method:	680	Prep Batch:	680-335389	Lab File ID:	Fg0634.D
Dilution:	1.0			Initial Weight/Volume:	30.16 g
Analysis Date:	07/07/2014 0424			Final Weight/Volume:	1 mL
Prep Date:	06/24/2014 1156			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		4.8	U	4.8	98
Dichlorobiphenyl		2.0	U	2.0	19
Heptachlorobiphenyl		190		2.9	58
Hexachlorobiphenyl		320		1.9	39
Monochlorobiphenyl		1.1	U	1.1	19
Nonachlorobiphenyl		19	U	19	98
Octachlorobiphenyl		24	J	3.1	58
Pentachlorobiphenyl		110		2.0	39
Tetrachlorobiphenyl		350		2.1	39
Trichlorobiphenyl		6.9	J	0.98	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	55		30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-200-01

Lab Sample ID: 680-102252-6

Date Sampled: 06/10/2014 1555

Client Matrix: Solid

% Moisture: 71.1

Date Received: 06/12/2014 1009

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337751	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0620.D	
Dilution: 10		Initial Weight/Volume: 29.98 g	
Analysis Date: 07/06/2014 2139		Final Weight/Volume: 1 mL	
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		29	U	29	590
Dichlorobiphenyl		12	U	12	110
Heptachlorobiphenyl		4200		17	350
Hexachlorobiphenyl		4300		11	230
Monochlorobiphenyl		6.6	U	6.6	110
Nonachlorobiphenyl		110	U	110	590
Octachlorobiphenyl		520		18	350
Pentachlorobiphenyl		4500		12	230
Tetrachlorobiphenyl		16000		13	230
Trichlorobiphenyl		690		5.9	110

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130



## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-200-02

Lab Sample ID: 680-102252-7

Date Sampled: 06/10/2014 1600

Client Matrix: Solid

% Moisture: 57.9

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337751	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0621.D	
Dilution: 5.0		Initial Weight/Volume: 30.06 g	
Analysis Date: 07/06/2014 2208		Final Weight/Volume: 1 mL	
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		9.8	U	9.8	200
Dichlorobiphenyl		4.2	U	4.2	39
Heptachlorobiphenyl		5.9	U	5.9	120
Hexachlorobiphenyl		22	J	3.9	79
Monochlorobiphenyl		2.3	U	2.3	39
Nonachlorobiphenyl		39	U	39	200
Octachlorobiphenyl		6.3	U	6.3	120
Pentachlorobiphenyl		16	J	4.0	79
Tetrachlorobiphenyl		190		4.4	79
Trichlorobiphenyl		12	J	2.0	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	70		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-200-03

Lab Sample ID: 680-102252-8

Date Sampled: 06/10/2014 1605

Client Matrix: Solid

% Moisture: 29.3

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0629.D
Dilution: 1.0		Initial Weight/Volume: 29.92 g
Analysis Date: 07/07/2014 0200		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.2	U	1.2	24
Dichlorobiphenyl		0.50	U	0.50	4.7
Heptachlorobiphenyl		1.8	J	0.71	14
Hexachlorobiphenyl		7.1	J	0.47	9.5
Monochlorobiphenyl		0.27	U	0.27	4.7
Nonachlorobiphenyl		4.7	U	4.7	24
Octachlorobiphenyl		0.75	U	0.75	14
Pentachlorobiphenyl		1.5	J	0.48	9.5
Tetrachlorobiphenyl		5.2	J	0.52	9.5
Trichlorobiphenyl		0.24	U	0.24	4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	83		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-200-SS

Lab Sample ID: 680-102252-5

Date Sampled: 06/10/2014 1550

Client Matrix: Solid

% Moisture: 79.8

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337751	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0619.D
Dilution: 10		Initial Weight/Volume: 29.92 g
Analysis Date: 07/06/2014 2111		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		41	U	41	840
Dichlorobiphenyl		17	U	17	160
Heptachlorobiphenyl		1100		25	500
Hexachlorobiphenyl		1500		16	330
Monochlorobiphenyl		9.4	U	9.4	160
Nonachlorobiphenyl		160	U	160	840
Octachlorobiphenyl		67	J	26	500
Pentachlorobiphenyl		910		17	330
Tetrachlorobiphenyl		1900		18	330
Trichlorobiphenyl		47	J	8.4	160
<hr/>					
Surrogate		%Rec	Qualifier	Acceptance Limits	
Decachlorobiphenyl-13C12		0	D	30 - 130	

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Client Sample ID: SD-202-01

Lab Sample ID: 680-102252-2

Date Sampled: 06/10/2014 1225

Client Matrix: Solid

% Moisture: 29.4

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337751	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0616.D
Dilution: 5.0		Initial Weight/Volume: 30.04 g
Analysis Date: 07/06/2014 1944		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		5.9	U	5.9	120
Dichlorobiphenyl		2.5	U	2.5	23
Heptachlorobiphenyl		59	J	3.5	71
Hexachlorobiphenyl		95		2.3	47
Monochlorobiphenyl		1.3	U	1.3	23
Nonachlorobiphenyl		23	U	23	120
Octachlorobiphenyl		3.7	U	3.7	71
Pentachlorobiphenyl		19	J	2.4	47
Tetrachlorobiphenyl		92		2.6	47
Trichlorobiphenyl		2.9	J	1.2	23

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	82		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Client Sample ID: SD-202-02

Lab Sample ID: 680-102252-3

Date Sampled: 06/10/2014 1230

Client Matrix: Solid

% Moisture: 24.6

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337751	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0617.D
Dilution: 1.0		Initial Weight/Volume: 29.98 g
Analysis Date: 07/06/2014 2012		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.1	U	1.1	23
Dichlorobiphenyl		0.46	U	0.46	4.4
Heptachlorobiphenyl		11	J	0.66	13
Hexachlorobiphenyl		18		0.44	8.9
Monochlorobiphenyl		0.25	U	0.25	4.4
Nonachlorobiphenyl		4.4	U	4.4	23
Octachlorobiphenyl		0.70	U	0.70	13
Pentachlorobiphenyl		3.9	J	0.45	8.9
Tetrachlorobiphenyl		25		0.49	8.9
Trichlorobiphenyl		0.74	J	0.23	4.4

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	97		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-202-SS

Lab Sample ID: 680-102252-1

Date Sampled: 06/10/2014 1220

Client Matrix: Solid

% Moisture: 47.5

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method:	680	Analysis Batch:	680-337751	Instrument ID:	CMSF
Prep Method:	680	Prep Batch:	680-335389	Lab File ID:	Fg0613.D
Dilution:	50			Initial Weight/Volume:	30.07 g
Analysis Date:	07/06/2014 1816			Final Weight/Volume:	1 mL
Prep Date:	06/24/2014 1156			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		79	U	79	1600
Dichlorobiphenyl		33	U	33	310
Heptachlorobiphenyl		44000		47	950
Hexachlorobiphenyl		59000		31	640
Monochlorobiphenyl		18	U	18	310
Nonachlorobiphenyl		400	J	310	1600
Octachlorobiphenyl		5200		50	950
Pentachlorobiphenyl		18000		32	640
Tetrachlorobiphenyl		10000		35	640
Trichlorobiphenyl		530		16	310

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-204-01

Lab Sample ID: 680-102252-22

Date Sampled: 06/11/2014 1225

Client Matrix: Solid

% Moisture: 42.1

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337937	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-337170	Lab File ID: Fg0713.D	
Dilution: 5.0		Initial Weight/Volume: 30.24 g	
Analysis Date: 07/07/2014 2128		Final Weight/Volume: 1 mL	
Prep Date: 07/02/2014 0853		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		7.1	U	7.1	150
Dichlorobiphenyl		3.0	U	3.0	28
Heptachlorobiphenyl		4.3	U	4.3	86
Hexachlorobiphenyl		2.8	U	2.8	57
Monochlorobiphenyl		1.6	U	1.6	28
Nonachlorobiphenyl		28	U	28	150
Octachlorobiphenyl		4.5	U	4.5	86
Pentachlorobiphenyl		6.5	J	2.9	57
Tetrachlorobiphenyl		79		3.2	57
Trichlorobiphenyl		1.5	U	1.5	28

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	78		30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-204-02

Lab Sample ID: 680-102252-23

Date Sampled: 06/11/2014 1230

Client Matrix: Solid

% Moisture: 19.7

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-336158	Lab File ID: Fg0646.D	
Dilution: 1.0		Initial Weight/Volume: 30.10 g	
Analysis Date: 07/07/2014 1012		Final Weight/Volume: 1 mL	
Prep Date: 06/25/2014 1333		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.0	U *	1.0	21
Dichlorobiphenyl		0.43	U *	0.43	4.1
Heptachlorobiphenyl		100	* B	0.62	12
Hexachlorobiphenyl		75	* B	0.41	8.3
Monochlorobiphenyl		0.24	U *	0.24	4.1
Nonachlorobiphenyl		4.1	U *	4.1	21
Octachlorobiphenyl		8.9	J *	0.66	12
Pentachlorobiphenyl		9.1	* B	0.42	8.3
Tetrachlorobiphenyl		22	*	0.46	8.3
Trichlorobiphenyl		0.91	J *	0.21	4.1

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	83	*	30 - 130



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-204-SS

Lab Sample ID: 680-102252-21

Date Sampled: 06/11/2014 1220

Client Matrix: Solid

% Moisture: 49.0

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337937	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-337170	Lab File ID: Fg0712.D
Dilution: 5.0		Initial Weight/Volume: 31.03 g
Analysis Date: 07/07/2014 2059		Final Weight/Volume: 1 mL
Prep Date: 07/02/2014 0853		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		7.9	U	7.9	160
Dichlorobiphenyl		6.1	J	3.3	31
Heptachlorobiphenyl		6500		4.7	95
Hexachlorobiphenyl		7100		3.1	64
Monochlorobiphenyl		1.8	U	1.8	31
Nonachlorobiphenyl		73	J	31	160
Octachlorobiphenyl		1200		5.0	95
Pentachlorobiphenyl		2800		3.2	64
Tetrachlorobiphenyl		6300		3.5	64
Trichlorobiphenyl		360		1.6	31

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	58		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Client Sample ID: SD-207-01

Lab Sample ID: 680-102252-25  
Client Matrix: Solid

% Moisture: 66.2

Date Sampled: 06/11/2014 1450  
Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-338065	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-337170	Lab File ID: XG0818.D
Dilution: 50		Initial Weight/Volume: 30.33 g
Analysis Date: 07/08/2014 2206		Final Weight/Volume: 1 mL
Prep Date: 07/02/2014 0853		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		120	U	120	2500
Dichlorobiphenyl		51	U	51	480
Heptachlorobiphenyl		6800		73	1500
Hexachlorobiphenyl		7400		48	980
Monochlorobiphenyl		28	U	28	480
Nonachlorobiphenyl		480	U	480	2500
Octachlorobiphenyl		1800		78	1500
Pentachlorobiphenyl		17000		50	980
Tetrachlorobiphenyl		95000		54	980
Trichlorobiphenyl		6400		25	480

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-207-02

Lab Sample ID: 680-102252-26

Date Sampled: 06/11/2014 1455

Client Matrix: Solid

% Moisture: 60.6

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337937	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-337170	Lab File ID: Fg0716.D	
Dilution: 5.0		Initial Weight/Volume: 30.22 g	
Analysis Date: 07/07/2014 2255		Final Weight/Volume: 1 mL	
Prep Date: 07/02/2014 0853		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		10	U	10	210
Dichlorobiphenyl		4.4	U	4.4	42
Heptachlorobiphenyl		290		6.3	130
Hexachlorobiphenyl		510		4.2	84
Monochlorobiphenyl		2.4	U	2.4	42
Nonachlorobiphenyl		42	U	42	210
Octachlorobiphenyl		52	J	6.7	130
Pentachlorobiphenyl		880		4.3	84
Tetrachlorobiphenyl		5300		4.7	84
Trichlorobiphenyl		340		2.1	42

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	67		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Client Sample ID: SD-207-03

Lab Sample ID: 680-102252-27  
Client Matrix: Solid

% Moisture: 41.6

Date Sampled: 06/11/2014 1500  
Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337937	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-337170	Lab File ID: Fg0717.D
Dilution: 5.0		Initial Weight/Volume: 30.15 g
Analysis Date: 07/07/2014 2324		Final Weight/Volume: 1 mL
Prep Date: 07/02/2014 0853		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		7.1	U	7.1	140
Dichlorobiphenyl		3.0	U	3.0	28
Heptachlorobiphenyl		13	J	4.3	85
Hexachlorobiphenyl		39	J	2.8	57
Monochlorobiphenyl		1.6	U	1.6	28
Nonachlorobiphenyl		28	U	28	140
Octachlorobiphenyl		4.5	U	4.5	85
Pentachlorobiphenyl		36	J	2.9	57
Tetrachlorobiphenyl		350		3.1	57
Trichlorobiphenyl		5.0	J	1.4	28

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	72		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-207-SS

Lab Sample ID: 680-102252-24

Date Sampled: 06/11/2014 1448

Client Matrix: Solid

% Moisture: 68.5

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-338412	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-337170	Lab File ID: XG1006.D
Dilution: 100		Initial Weight/Volume: 30.21 g
Analysis Date: 07/10/2014 1142		Final Weight/Volume: 1 mL
Prep Date: 07/02/2014 0853		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		260	U	260	5400
Dichlorobiphenyl		110	U	110	1000
Heptachlorobiphenyl		30000		160	3200
Hexachlorobiphenyl		43000		100	2100
Monochlorobiphenyl		60	U	60	1000
Nonachlorobiphenyl		1000	U	1000	5400
Octachlorobiphenyl		7300		170	3200
Pentachlorobiphenyl		39000		110	2100
Tetrachlorobiphenyl		150000		120	2100
Trichlorobiphenyl		8900		54	1000

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-209-01

Lab Sample ID: 680-102252-18

Date Sampled: 06/11/2014 1400

Client Matrix: Solid

% Moisture: 23.1

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0639.D
Dilution: 1.0		Initial Weight/Volume: 30.17 g
Analysis Date: 07/07/2014 0649		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.1	U *	1.1	22
Dichlorobiphenyl		0.45	U *	0.45	4.3
Heptachlorobiphenyl		0.65	U *	0.65	13
Hexachlorobiphenyl		0.43	U *	0.43	8.7
Monochlorobiphenyl		0.25	U *	0.25	4.3
Nonachlorobiphenyl		4.3	U *	4.3	22
Octachlorobiphenyl		0.69	U *	0.69	13
Pentachlorobiphenyl		0.44	U *	0.44	8.7
Tetrachlorobiphenyl		0.99	J *	0.48	8.7
Trichlorobiphenyl		0.22	U *	0.22	4.3

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	88	*	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-209-02

Lab Sample ID: 680-102252-19

Date Sampled: 06/11/2014 1405

Client Matrix: Solid

% Moisture: 24.0

Date Received: 06/12/2014 0933

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF	
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0640.D	
Dilution: 1.0		Initial Weight/Volume: 29.97 g	
Analysis Date: 07/07/2014 0718		Final Weight/Volume: 1 mL	
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.1	U	1.1	22
Dichlorobiphenyl		0.46	U	0.46	4.3
Heptachlorobiphenyl		23		0.66	13
Hexachlorobiphenyl		37		0.43	8.8
Monochlorobiphenyl		0.25	U	0.25	4.3
Nonachlorobiphenyl		4.3	U	4.3	22
Octachlorobiphenyl		3.8	J	0.70	13
Pentachlorobiphenyl		12		0.45	8.8
Tetrachlorobiphenyl		25		0.49	8.8
Trichlorobiphenyl		0.49	J	0.22	4.3

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	85		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-209-03

Lab Sample ID: 680-102252-20

Date Sampled: 06/11/2014 1410

Client Matrix: Solid

% Moisture: 18.6

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0641.D
Dilution: 1.0		Initial Weight/Volume: 30.08 g
Analysis Date: 07/07/2014 0747		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		1.0	U	1.0	21
Dichlorobiphenyl		0.43	U	0.43	4.0
Heptachlorobiphenyl		0.61	U	0.61	12
Hexachlorobiphenyl		2.3	J	0.40	8.2
Monochlorobiphenyl		0.23	U	0.23	4.0
Nonachlorobiphenyl		4.0	U	4.0	21
Octachlorobiphenyl		0.65	U	0.65	12
Pentachlorobiphenyl		4.8	J	0.42	8.2
Tetrachlorobiphenyl		0.59	J	0.45	8.2
Trichlorobiphenyl		0.21	U	0.21	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	81		30 - 130



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Client Sample ID: SD-DUP 01

Lab Sample ID: 680-102252-17FD

Date Sampled: 06/11/2014 0000

Client Matrix: Solid

% Moisture: 48.3

Date Received: 06/12/2014 0933

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-337778	Instrument ID: CMSF
Prep Method: 680	Prep Batch: 680-335389	Lab File ID: Fg0638.D
Dilution: 5.0		Initial Weight/Volume: 30.12 g
Analysis Date: 07/07/2014 0620		Final Weight/Volume: 1 mL
Prep Date: 06/24/2014 1156		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		8.0	U *	8.0	160
Dichlorobiphenyl		3.4	U *	3.4	32
Heptachlorobiphenyl		4.8	U *	4.8	96
Hexachlorobiphenyl		3.2	U *	3.2	64
Monochlorobiphenyl		1.8	U *	1.8	32
Nonachlorobiphenyl		32	U *	32	160
Octachlorobiphenyl		5.1	U *	5.1	96
Pentachlorobiphenyl		9.2	J *	3.3	64
Tetrachlorobiphenyl		190	*	3.6	64
Trichlorobiphenyl		12	J *	1.6	32

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	77	*	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-195-SS

Lab Sample ID: 680-102252-4

Date Sampled: 06/10/2014 1330

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	17		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-197-01

Lab Sample ID: 680-102252-10

Client Matrix: Solid

Date Sampled: 06/11/2014 1035

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	76		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-197-02

Lab Sample ID: 680-102252-11

Date Sampled: 06/11/2014 1040

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	41		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-197-03

Lab Sample ID: 680-102252-12

Date Sampled: 06/11/2014 1045

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	54		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-197-SS

Lab Sample ID: 680-102252-9

Date Sampled: 06/11/2014 1030

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	82		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-199-01

Lab Sample ID: 680-102252-14

Date Sampled: 06/11/2014 1115

Client Matrix: Solid

Date Received: 06/12/2014 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	69		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-199-02

Lab Sample ID: 680-102252-15

Date Sampled: 06/11/2014 1120

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	52		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-199-03

Lab Sample ID: 680-102252-16

Client Matrix: Solid

Date Sampled: 06/11/2014 1125

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	32		%	0.010	0.010	1.0	Moisture

Analysis Batch: 680-333961      Analysis Date: 06/12/2014 1700      DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-199-SS

Lab Sample ID: 680-102252-13

Date Sampled: 06/11/2014 1110

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	83		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-200-01

Lab Sample ID: 680-102252-6

Date Sampled: 06/10/2014 1555

Client Matrix: Solid

Date Received: 06/12/2014 1009

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	71		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-200-02

Lab Sample ID: 680-102252-7

Date Sampled: 06/10/2014 1600

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	58		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: SD-200-03

Lab Sample ID: 680-102252-8

Client Matrix: Solid

Date Sampled: 06/10/2014 1605

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	29		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

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**General Chemistry**

Client Sample ID: **SD-200-SS**

Lab Sample ID: 680-102252-5

Date Sampled: 06/10/2014 1550

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	80		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-202-01

Lab Sample ID: 680-102252-2

Client Matrix: Solid

Date Sampled: 06/10/2014 1225

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	29		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-202-02

Lab Sample ID: 680-102252-3

Client Matrix: Solid

Date Sampled: 06/10/2014 1230

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	25		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-202-SS

Lab Sample ID: 680-102252-1

Client Matrix: Solid

Date Sampled: 06/10/2014 1220

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	47		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-204-01

Lab Sample ID: 680-102252-22

Date Sampled: 06/11/2014 1225

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	42		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-204-02

Lab Sample ID: 680-102252-23

Client Matrix: Solid

Date Sampled: 06/11/2014 1230

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	20		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-204-SS

Lab Sample ID: 680-102252-21

Date Sampled: 06/11/2014 1220

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	49		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-207-01

Lab Sample ID: 680-102252-25

Client Matrix: Solid

Date Sampled: 06/11/2014 1450

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	66		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-207-02

Lab Sample ID: 680-102252-26

Client Matrix: Solid

Date Sampled: 06/11/2014 1455

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	61		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-207-03

Lab Sample ID: 680-102252-27

Date Sampled: 06/11/2014 1500

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	42		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-207-SS

Lab Sample ID: 680-102252-24

Date Sampled: 06/11/2014 1448

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	69		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-209-01

Lab Sample ID: 680-102252-18

Date Sampled: 06/11/2014 1400

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	23		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-209-02

Lab Sample ID: 680-102252-19

Date Sampled: 06/11/2014 1405

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	24		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-209-03

Lab Sample ID: 680-102252-20

Date Sampled: 06/11/2014 1410

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	19		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

---

**General Chemistry**

Client Sample ID: SD-DUP 01

Lab Sample ID: 680-102252-17FD

Date Sampled: 06/11/2014 0000

Client Matrix: Solid

Date Received: 06/12/2014 0933

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	48		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-333961		Analysis Date: 06/12/2014 1700				DryWt Corrected: N

**Appendix C**

Support Documentation

**MRC SEDIMENT INVESTIGATION  
SEDIMENT DATA**

680-102252-1

(K) (SX)

FRACTION	CHEMICAL	SD-199-02	UNITS	SD-DUP 01	RPD	D
PCB	HEXACHLOROBIPHENYL	5.7 J*	UG/KG	ND	200.00	5.70 ✓
PCB	PENTACHLOROBIPHENYLS	17 J	UG/KG	9.2 J	59.54	7.80 ✓
PCB	TETRACHLOROBIPHENYLS	150 J	UG/KG	190 J	23.53	40.00
PCB	TRICHLOROBIPHENYLS	12 J	UG/KG	12 J	0.00	0.00

*RL = 14*

*RL = 14*

Current RPD Quality Control Limit: 50 %.  
Shaded cells indicate RPDs that exceed the applicable quality control limit.

LMC - MRC  
SDG 680-102252-1

SAMPLE IDENTIFICATION

SD-207-SS

COMPOUND

TETRACHLOROBIPHENYL

COMPOUND AREA	528645
INTERNAL STANDARD AMOUNT (ng)	0.75
DILUTION FACTOR	100
INTERNAL STANDARD AREA	84662
AVERAGE RRF	0.3256
% SOLIDS	0.315
WEIGHT OF SAMPLE (g)	30.21
VOLUME EXTRACT (μl)	1000
VOLUME INJECTED (μl)	1
ng to μg	1000
g to Kg	1000

CONCENTRATION = 151144 ng/g OR μg/Kg

$528645 * 0.75 \text{ng} * 1000 \mu\text{l} * 100 * 1 \mu\text{g} * 1000 \text{g} / (84662 * 0.3256 * 30.21 \text{g} * 1 \mu\text{l} * 0.315 * 1000 \text{ng} * 1 \text{Kg})$

TestAmerica Savannah  
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSX\20140710-10871.b\XG1006.D  
 Lims ID: 680-102252-A-24-D Lab Sample ID: 680-102252-24  
 Client ID: SD-207-SS  
 Sample Type: Client  
 Inject. Date: 10-Jul-2014 11:42:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 100.0000  
 Sample Info: 102252-A-24-D DL=100  
 Misc. Info.: 680-0010871-006  
 Operator ID: nmd Instrument ID: CMSX  
 Method: \\SAVCHROM\ChromData\CMSX\20140710-10871.b\680\CMSX.m  
 Limit Group: 680  
 Last Update: 26-Jul-2014 20:44:30 Calib Date: 08-Jul-2014 15:58:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\SAVCHROM\ChromData\CMSX\20140708-10816.b\XG0808.D  
 Column 1: Det: MS SCAN  
 Process Host: XAWRK031

DF = 100X  
RRF = 0.3256

% solid = 31.5%  
30.21g / 1ml

First Level Reviewer: davisn Date: 25-Jul-2014 18:56:05

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/ml	Flags
* 5 Phenanthrene-d10	188	10.378	10.378	0.0	99	84662	0.7500	
A 25 Trichlorobiphenyl	256	11.254	9.940 - 12.568		0	42484	0.8464	
→ A 26 Tetrachlorobiphenyl	292	12.743	11.036 - 14.449		0	528645	14.4	
A 27 Pentachlorobiphenyl	326	14.144	12.306 - 15.981		0	103528	3.68	
A 28 1,1'-Biphenyl, hexachloro-	360	15.431	13.480 - 17.383		0	113114	4.08	
* 15 Chrysene-d12	240	16.506	16.508 - 0.002		100	90792	0.7500	
A 29 1,1'-Biphenyl, heptachloro-	394	16.559	15.092 - 18.025		0	66116	2.82	
A 30 1,1'-Biphenyl, octachloro-	430	17.649	16.578 - 18.721		0	15052	0.6975	
A 31 1,1'-Biphenyl, nonachloro-	464	18.704	18.150 - 19.258		0	397	0.0523	

Reagents:

SM-680istd\_00027 Amount Added: 30.00 Units: uL Run Reagent



PCB

# Chain of Custody Record

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

**Client Information**  
 Client Contact: Mike Martin  
 Company: Tetra Tech, Inc.  
 Address: 20251 Century Blvd Suite 200  
 City: Germantown  
 State, Zip: MD, 20874  
 Phone: (703) 340-8389  
 Lab PM: Lanier, Jerry A  
 E-Mail: jerry.lanier@testamericainc.com

**Analysis Requested**  
 Due Date Requested:  
 TAT Requested (days):  
 PO #: Purchase Order not required  
 WO #:  
 Project #: 68012942  
 SSSOW #:  
 Email: Michael.Martin@tetratech.com  
 Project Name: Sediments  
 Site: Dank Heul Cave

**Sample Identification**

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, B=soil, O=organic, T=tissue, A=air)	Field Preserved Sample (Y or N)	680 - Local Method	A01R_Th - Standard Target List	GA_01_R_Ra - (MOD) Radium-226/228	680-102252 Chain of Custody	Special Instructions/Note:
SD-202-55	5/16/14	1220	C	Solid	X	X	X	X		
SD-202-01		1225	C	Solid	X	X	X	X		
SD-202-02		1230	C	Solid	X	X	X	X		
SD-195-55		1330	C	Solid	X	X	X	X		
<del>TCLP-195-20</del>										
SD-200-55		1550	C	Solid	X	X	X	X		Following PCB Analysis submit sample with highest concentration for TCLP Analysis.
SD-200-01		1555	C	Solid	X	X	X	X		
SD-200-02		1600	C	Solid	X	X	X	X		
SD-200-03		1605	C	Solid	X	X	X	X		
SD-197-55	6/11/14	1030	C	Solid	X	X	X	X		
SD-197-01	6/11/14	1035	C	Solid	X	X	X	X		

**Possible Hazard Identification**  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological  
 Deliverable Requested: I, II, III, IV, Other (specify)

**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:**

**Empty Kit Relinquished by:** \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: 5-11-14 / 1600  
 Relinquished by: \_\_\_\_\_ Date/Time: 6/11/14 / 1715  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

**Received by:** \_\_\_\_\_ Date/Time: 6/10/14 0133  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

**Company:** \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Company: \_\_\_\_\_

**Custody Seal No.:** \_\_\_\_\_  
 A Yes Δ No  
 Cooler Temperature(s) °C and Other Remarks: 2.7°C 680-102252

PCB

Chain of Custody Record



**Client Information**  
 Client Contact: Mike Martin  
 Company: Tetra Tech, Inc.  
 Address: 20251 Century Blvd Suite 200  
 City: Germantown  
 State, Zip: MD, 20874  
 Phone:  
 Email: Michael.Martin@tetratech.com  
 Project Name: Sediments  
 Site:

**Sampler:** Stu Cameron  
 Lab P#: Jerry Lanier, Jerry A  
 E-Mail: jerry.lanier@testamericainc.com  
 Phone: (703) 742-8384

**Carrier Tracking No(s):**  
 COC No: 680-56831-24906.8  
 Page: 2 of 3  
 Job #:

**Analysis Requested**  
 Total Number of Containers: 10  
 680 Local Method  
 A01R\_Th - Standard Target List  
 9020\_7470A  
 GA\_01\_R\_Ra - (MOD) Radium-226/228

**Due Date Requested:**  
 TAT Requested (days):  
 PO #: Purchase Order not required  
 WO #:  
 Project #: 68012942  
 SSOW #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Other)	Field Filtered Sample (Yes or No)	680 Local Method	A01R_Th - Standard Target List	9020_7470A	GA_01_R_Ra - (MOD) Radium-226/228	Special Instructions/Note:
SD-197-02	6/11/14	1040	C	Solid		X				
SD-197-03		1045	C	Solid		X				
SD-194-55		1110	C	Solid		X				
SD-194-01		1115	C	Solid		X				
SD-194-02		1120	C	Solid		X				
SD-194-03		1125	C	Solid		X				
SD-009-01		0000	C	Solid		X				
SD-209-01		1400	C	Solid		X				
SD-209-02		1405	C	Solid		X				
SD-209-03		1410	C	Solid		X				
SD-204-55		1220	C	Solid		X				

**Possible Hazard Identification**  
 Non-Hazard  Flammable  Skin Irritant  
 Poison B  Unknown  Radiological  
 Deliverable Requested: I, II, III, IV, Other (specify)

**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:

**Empty Kit Relinquished by:**  
 Relinquished by: [Signature]  
 Relinquished by: [Signature]  
 Relinquished by: [Signature]

**Received by:**  
 Received by: [Signature]  
 Received by: [Signature]  
 Received by: [Signature]

**Date:**  
 Date: 6-11-14 1600  
 Date: 6/11/14 1715  
 Date: 6/12/14 0933

**Company:**  
 Company: Tetra Tech  
 Company: TestAmerica  
 Company: Tetra Tech

**Custody Seal No.:**  
 Custody Seal No.: 680-102252  
 Δ Yes Δ No

PCB

# Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**Client Information**  
 Client Contact: Mike Martin  
 Company: Tetra Tech, Inc.  
 Address: 20251 Century Blvd Suite 200  
 City: Germantown  
 State, Zip: MD, 20874  
 Phone:  
 Email: Michael.Martin@tetratech.com  
 Project Name: Sediments  
 Site:

**Sampler:** Stu Gump  
**Phone:** (703) 342-8389  
**E-Mail:** jerry.lanier@testamericainc.com  
**Lab P/N:** Lanier, Jerry A  
**Lab #:** Jerry.Lanier@tetamericainc.com

**Tracking Information:**  
 COC No: 680-56831-24906.9  
 Page: 3 of 3  
 Job #:

**Analysis Requested:**  
 GA-01, R, Ra - (MOD), Radium-226/228  
 AQR, Th - Standard Target List  
 680 - Local Method

**Due Date Requested:**  
**TAT Requested (days):**  
**PO #:** Purchase Order not required  
**WO #:**  
**Project #:** 68012942  
**SSOW #:**

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Inorganic, Organic, Other)	Preservation Code		Special Instructions/Note:
					Field Filtered Sample (Yes or No)	Preservation Code	
SD-204-01	6/11/14	1225	C	Solid	X	N	
SD-204-02		1230	C	Solid	X	N	
SD-207-55		1448	C	Solid	X	N	
SD-207-01		1450	C	Solid	X	N	
SD-207-02		1455	C	Solid	X	N	
SD-207-03		1500	C	Solid	X	N	
				Solid			
				Solid			
				Solid			
				Solid			
				Solid			
				Solid			

**Preservation Codes:**  
 A- HCL  
 B- NaOH  
 C- Zn Acetate  
 D- Nitric Acid  
 E- NaHSO4  
 F- MeOH  
 G- Amchlor  
 H- Ascorbic Acid  
 I- Ice  
 J- DI Water  
 K- EDTA  
 L- EDA  
 M- Hexane  
 N- None  
 O- AsNaO2  
 P- Na2O4S  
 Q- Na2SO3  
 R- Na2SO4  
 S- H2SO4  
 T- TSP Dodecahydrate  
 U- Acetone  
 V- MCAA  
 W- ph 4.5  
 Z- other (specify)  
 Other:

**Special Instructions/Note:**  
 Total Number of Containers: \_\_\_\_\_

**Possible Hazard Identification:**  
 Non-Hazard  Flammable  Skin Irritant  
 Deliverable Requested: I, II, III, IV, Other (specify)

**Empty Kit Relinquished by:** \_\_\_\_\_  
 Poison B  Unknown  Radiological

**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:**

**Relinquished by:** *Stu Gump* Date/Time: 6-11-14/1600  
 Relinquished by: *TestAmerica* Date/Time: 6/11/14/1715  
 Relinquished by: *DKL* Date/Time: 6/12/14 0923

**Custody Seals Intact:** Custody Seal No.: \_\_\_\_\_  
 A Yes A No

**Company:** TestAmerica  
**Date of Shipment:** 6/12/14 0923  
**Method of Shipment:** 680-10252

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

SDG Number: 680102252-1

Login Number: 102252

List Source: TestAmerica Savannah

List Number: 1

Creator: Conner, Keaton

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Sediments

Report Number: 680-102252-1

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 06/12/2014, 06/12/2014 and 06/12/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.4 C.

The SDG was revised to include the raw data ratios for the compounds, surrogate and internal standard for method 680.

### POLYCHLORINATED BIPHENYLS (PCBS)

Samples SD-202-SS (680-102252-1), SD-202-01 (680-102252-2), SD-202-02 (680-102252-3), SD-195-SS (680-102252-4), SD-200-SS (680-102252-5), SD-200-01 (680-102252-6), SD-200-02 (680-102252-7), SD-200-03 (680-102252-8), SD-197-SS (680-102252-9), SD-197-01 (680-102252-10), SD-197-02 (680-102252-11), SD-197-03 (680-102252-12), SD-199-SS (680-102252-13), SD-199-01 (680-102252-14), SD-199-02 (680-102252-15), SD-199-03 (680-102252-16), SD-DUP 01 (680-102252-17), SD-209-01 (680-102252-18), SD-209-02 (680-102252-19), SD-209-03 (680-102252-20), SD-204-SS (680-102252-21), SD-204-01 (680-102252-22), SD-204-02 (680-102252-23), SD-207-SS (680-102252-24), SD-207-01 (680-102252-25), SD-207-02 (680-102252-26) and SD-207-03 (680-102252-27) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 06/24/2014, 06/25/2014 and 07/02/2014 and analyzed on 07/06/2014, 07/07/2014, 07/08/2014 and 07/10/2014.

Internal standard (ISTD) response for the following sample(s) was outside of acceptance limits when compared to the area of the CCVIS. It passes when compared the average internal standard area of the ICAL per the 680 method.: (680-102252-23 MS), (680-102252-23 MSD), (LCS 680-336158/11-A), SD-199-02 (680-102252-15), SD-199-03 (680-102252-16), SD-204-02 (680-102252-23), SD-209-01 (680-102252-18), SD-DUP 01 (680-102252-17).

Heptachlorobiphenyl and Hexachlorobiphenyl were detected in method blank MB 680-336158/10-A at levels exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Associated samples were not re-analyzed because results were less than 1/2 the reporting limit (RL) OR practical quantitation limit (PQL) with the exception of SD-204-02 (680-102252-23). There was insufficient sample for SD-204-02 (680-102252-23) to perform a re-extraction and/or re-analysis; therefore, the data have been reported.

Pentachlorobiphenyl was detected in method blank MB 680-336158/10-A 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. Refer to the QC report for details.

The following samples were diluted due to the nature of the sample matrix and abundance of target analytes : (680-102252-1 MS), (680-102252-1 MSD), SD-200-01 (680-102252-6), SD-200-SS (680-102252-5), SD-202-SS (680-102252-1), SD-199-01 (680-102252-14), SD-207-SS (680-102252-24), and SD-207-01 (680-102252-25). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Surrogate recovery for the following sample was outside control limits: SD-197-SS (680-102252-9). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported.

Tetrachlorobiphenyl and Trichlorobiphenyl exceeded the recovery criteria low for the MS of sample SD-202-SSMS (680-102252-1) in batch 680-337751. Heptachlorobiphenyl, Hexachlorobiphenyl, Octachlorobiphenyl and Pentachlorobiphenyl exceeded the recovery criteria high.

Tetrachlorobiphenyl exceeded the recovery criteria low for the MSD of sample SD-202-SSMSD (680-102252-1) in batch 680-337751. Several analytes exceeded the recovery criteria high.

Heptachlorobiphenyl and Hexachlorobiphenyl exceeded the recovery criteria low for the MS of sample SD-204-02MS (680-102252-23) in batch 680-337778.

Heptachlorobiphenyl exceeded the recovery criteria low for the MSD of sample SD-204-02MSD (680-102252-23) in batch 680-337778.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SD-202-SS (680-102252-1)[50X], SD-202-01 (680-102252-2)[5X], SD-200-SS (680-102252-5)[10X], SD-200-01 (680-102252-6)[10X], SD-200-02 (680-102252-7)[5X], SD-197-SS (680-102252-9)[5X], SD-197-01 (680-102252-10)[5X], SD-199-01 (680-102252-14)[10X], SD-DUP 01 (680-102252-17)[5X], SD-204-SS (680-102252-21)[5X], SD-204-01 (680-102252-22)[5X], SD-207-SS (680-102252-24)[100X], SD-207-01 (680-102252-25)[50X], SD-207-02 (680-102252-26)[5X] and SD-207-03 (680-102252-27)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**PERCENT SOLIDS/MOISTURE**

Samples SD-202-SS (680-102252-1), SD-202-01 (680-102252-2), SD-202-02 (680-102252-3), SD-195-SS (680-102252-4), SD-200-SS (680-102252-5), SD-200-01 (680-102252-6), SD-200-02 (680-102252-7), SD-200-03 (680-102252-8), SD-197-SS (680-102252-9), SD-197-01 (680-102252-10), SD-197-02 (680-102252-11), SD-197-03 (680-102252-12), SD-199-SS (680-102252-13), SD-199-01 (680-102252-14), SD-199-02 (680-102252-15), SD-199-03 (680-102252-16), SD-DUP 01 (680-102252-17), SD-209-01 (680-102252-18), SD-209-02 (680-102252-19), SD-209-03 (680-102252-20), SD-204-SS (680-102252-21), SD-204-01 (680-102252-22), SD-204-02 (680-102252-23), SD-207-SS (680-102252-24), SD-207-01 (680-102252-25), SD-207-02 (680-102252-26) and SD-207-03 (680-102252-27) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 06/12/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## SAMPLE SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102252-1  
Sdg Number: 680102252-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-102252-1	SD-202-SS	Solid	06/10/2014 1220	06/12/2014 0933
680-102252-2	SD-202-01	Solid	06/10/2014 1225	06/12/2014 0933
680-102252-3	SD-202-02	Solid	06/10/2014 1230	06/12/2014 0933
680-102252-4	SD-195-SS	Solid	06/10/2014 1330	06/12/2014 0933
680-102252-5	SD-200-SS	Solid	06/10/2014 1550	06/12/2014 0933
680-102252-6	SD-200-01	Solid	06/10/2014 1555	06/12/2014 1009
680-102252-7	SD-200-02	Solid	06/10/2014 1600	06/12/2014 0933
680-102252-8	SD-200-03	Solid	06/10/2014 1605	06/12/2014 0933
680-102252-9	SD-197-SS	Solid	06/11/2014 1030	06/12/2014 0933
680-102252-10	SD-197-01	Solid	06/11/2014 1035	06/12/2014 0933
680-102252-11	SD-197-02	Solid	06/11/2014 1040	06/12/2014 0933
680-102252-12	SD-197-03	Solid	06/11/2014 1045	06/12/2014 0933
680-102252-13	SD-199-SS	Solid	06/11/2014 1110	06/12/2014 0933
680-102252-14	SD-199-01	Solid	06/11/2014 1115	06/12/2014 0930
680-102252-15	SD-199-02	Solid	06/11/2014 1120	06/12/2014 0933
680-102252-16	SD-199-03	Solid	06/11/2014 1125	06/12/2014 0933
680-102252-17FD	SD-DUP 01	Solid	06/11/2014 0000	06/12/2014 0933
680-102252-18	SD-209-01	Solid	06/11/2014 1400	06/12/2014 0933
680-102252-19	SD-209-02	Solid	06/11/2014 1405	06/12/2014 0933
680-102252-20	SD-209-03	Solid	06/11/2014 1410	06/12/2014 0933
680-102252-21	SD-204-SS	Solid	06/11/2014 1220	06/12/2014 0933
680-102252-22	SD-204-01	Solid	06/11/2014 1225	06/12/2014 0933
680-102252-23	SD-204-02	Solid	06/11/2014 1230	06/12/2014 0933
680-102252-24	SD-207-SS	Solid	06/11/2014 1448	06/12/2014 0933
680-102252-25	SD-207-01	Solid	06/11/2014 1450	06/12/2014 0933
680-102252-26	SD-207-02	Solid	06/11/2014 1455	06/12/2014 0933
680-102252-27	SD-207-03	Solid	06/11/2014 1500	06/12/2014 0933

## METHOD SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

<b>Description</b>	<b>Lab Location</b>	<b>Method</b>	<b>Preparation Method</b>
<b>Matrix: Solid</b>			
Polychlorinated Biphenyls (PCBs) (GC/MS)	TAL SAV	EPA 680	
Extraction (Solid PCBs)	TAL SAV		EPA 680
Percent Moisture	TAL SAV	EPA Moisture	

### Lab References:

TAL SAV = TestAmerica Savannah

### Method References:

EPA = US Environmental Protection Agency



## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102252-1  
SDG: 680102252-1

### GC/MS Semi VOA

#### Prep Batch: 335389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-1	SD-202-SS	Total/NA	Solid	680	
680-102252-1 MS	SD-202-SS	Total/NA	Solid	680	
680-102252-1 MSD	SD-202-SS	Total/NA	Solid	680	
680-102252-2	SD-202-01	Total/NA	Solid	680	
680-102252-3	SD-202-02	Total/NA	Solid	680	
680-102252-4	SD-195-SS	Total/NA	Solid	680	
680-102252-5	SD-200-SS	Total/NA	Solid	680	
680-102252-6	SD-200-01	Total/NA	Solid	680	
680-102252-7	SD-200-02	Total/NA	Solid	680	
680-102252-8	SD-200-03	Total/NA	Solid	680	
680-102252-9	SD-197-SS	Total/NA	Solid	680	
680-102252-10	SD-197-01	Total/NA	Solid	680	
680-102252-11	SD-197-02	Total/NA	Solid	680	
680-102252-12	SD-197-03	Total/NA	Solid	680	
680-102252-13	SD-199-SS	Total/NA	Solid	680	
680-102252-14	SD-199-01	Total/NA	Solid	680	
680-102252-15	SD-199-02	Total/NA	Solid	680	
680-102252-16	SD-199-03	Total/NA	Solid	680	
680-102252-17	SD-DUP 01	Total/NA	Solid	680	
680-102252-18	SD-209-01	Total/NA	Solid	680	
680-102252-19	SD-209-02	Total/NA	Solid	680	
680-102252-20	SD-209-03	Total/NA	Solid	680	
LCS 680-335389/22-A	Lab Control Sample	Total/NA	Solid	680	
MB 680-335389/21-A	Method Blank	Total/NA	Solid	680	

#### Prep Batch: 336158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-23	SD-204-02	Total/NA	Solid	680	
680-102252-23 MS	SD-204-02	Total/NA	Solid	680	
680-102252-23 MSD	SD-204-02	Total/NA	Solid	680	
LCS 680-336158/11-A	Lab Control Sample	Total/NA	Solid	680	
MB 680-336158/10-A	Method Blank	Total/NA	Solid	680	

#### Prep Batch: 337170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-21	SD-204-SS	Total/NA	Solid	680	
680-102252-22	SD-204-01	Total/NA	Solid	680	
680-102252-24	SD-207-SS	Total/NA	Solid	680	
680-102252-25	SD-207-01	Total/NA	Solid	680	
680-102252-26	SD-207-02	Total/NA	Solid	680	
680-102252-27	SD-207-03	Total/NA	Solid	680	
LCS 680-337170/12-A	Lab Control Sample	Total/NA	Solid	680	
MB 680-337170/11-A	Method Blank	Total/NA	Solid	680	

#### Analysis Batch: 337751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-1	SD-202-SS	Total/NA	Solid	680	335389
680-102252-1 MS	SD-202-SS	Total/NA	Solid	680	335389
680-102252-1 MSD	SD-202-SS	Total/NA	Solid	680	335389
680-102252-2	SD-202-01	Total/NA	Solid	680	335389
680-102252-3	SD-202-02	Total/NA	Solid	680	335389

TestAmerica Savannah

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102252-1  
SDG: 680102252-1

### GC/MS Semi VOA (Continued)

#### Analysis Batch: 337751 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-4	SD-195-SS	Total/NA	Solid	680	335389
680-102252-5	SD-200-SS	Total/NA	Solid	680	335389
680-102252-6	SD-200-01	Total/NA	Solid	680	335389
680-102252-7	SD-200-02	Total/NA	Solid	680	335389
LCS 680-335389/22-A	Lab Control Sample	Total/NA	Solid	680	335389
MB 680-335389/21-A	Method Blank	Total/NA	Solid	680	335389

#### Analysis Batch: 337778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-8	SD-200-03	Total/NA	Solid	680	335389
680-102252-9	SD-197-SS	Total/NA	Solid	680	335389
680-102252-10	SD-197-01	Total/NA	Solid	680	335389
680-102252-11	SD-197-02	Total/NA	Solid	680	335389
680-102252-12	SD-197-03	Total/NA	Solid	680	335389
680-102252-13	SD-199-SS	Total/NA	Solid	680	335389
680-102252-14	SD-199-01	Total/NA	Solid	680	335389
680-102252-15	SD-199-02	Total/NA	Solid	680	335389
680-102252-16	SD-199-03	Total/NA	Solid	680	335389
680-102252-17	SD-DUP 01	Total/NA	Solid	680	335389
680-102252-18	SD-209-01	Total/NA	Solid	680	335389
680-102252-19	SD-209-02	Total/NA	Solid	680	335389
680-102252-20	SD-209-03	Total/NA	Solid	680	335389
680-102252-23	SD-204-02	Total/NA	Solid	680	336158
680-102252-23 MS	SD-204-02	Total/NA	Solid	680	336158
680-102252-23 MSD	SD-204-02	Total/NA	Solid	680	336158
LCS 680-336158/11-A	Lab Control Sample	Total/NA	Solid	680	336158
MB 680-336158/10-A	Method Blank	Total/NA	Solid	680	336158

#### Analysis Batch: 337937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-21	SD-204-SS	Total/NA	Solid	680	337170
680-102252-22	SD-204-01	Total/NA	Solid	680	337170
680-102252-26	SD-207-02	Total/NA	Solid	680	337170
680-102252-27	SD-207-03	Total/NA	Solid	680	337170
LCS 680-337170/12-A	Lab Control Sample	Total/NA	Solid	680	337170
MB 680-337170/11-A	Method Blank	Total/NA	Solid	680	337170

#### Analysis Batch: 338065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-25	SD-207-01	Total/NA	Solid	680	337170

#### Analysis Batch: 338412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-24	SD-207-SS	Total/NA	Solid	680	337170

### General Chemistry

#### Analysis Batch: 333961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-1	SD-202-SS	Total/NA	Solid	Moisture	

TestAmerica Savannah

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102252-1  
SDG: 680102252-1

### General Chemistry (Continued)

#### Analysis Batch: 333961 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102252-2	SD-202-01	Total/NA	Solid	Moisture	
680-102252-3	SD-202-02	Total/NA	Solid	Moisture	
680-102252-4	SD-195-SS	Total/NA	Solid	Moisture	
680-102252-5	SD-200-SS	Total/NA	Solid	Moisture	
680-102252-6	SD-200-01	Total/NA	Solid	Moisture	
680-102252-7	SD-200-02	Total/NA	Solid	Moisture	
680-102252-8	SD-200-03	Total/NA	Solid	Moisture	
680-102252-9	SD-197-SS	Total/NA	Solid	Moisture	
680-102252-10	SD-197-01	Total/NA	Solid	Moisture	
680-102252-11	SD-197-02	Total/NA	Solid	Moisture	
680-102252-12	SD-197-03	Total/NA	Solid	Moisture	
680-102252-13	SD-199-SS	Total/NA	Solid	Moisture	
680-102252-14	SD-199-01	Total/NA	Solid	Moisture	
680-102252-15	SD-199-02	Total/NA	Solid	Moisture	
680-102252-16	SD-199-03	Total/NA	Solid	Moisture	
680-102252-17	SD-DUP 01	Total/NA	Solid	Moisture	
680-102252-18	SD-209-01	Total/NA	Solid	Moisture	
680-102252-19	SD-209-02	Total/NA	Solid	Moisture	
680-102252-20	SD-209-03	Total/NA	Solid	Moisture	
680-102252-21	SD-204-SS	Total/NA	Solid	Moisture	
680-102252-22	SD-204-01	Total/NA	Solid	Moisture	
680-102252-23	SD-204-02	Total/NA	Solid	Moisture	
680-102252-24	SD-207-SS	Total/NA	Solid	Moisture	
680-102252-25	SD-207-01	Total/NA	Solid	Moisture	
680-102252-26	SD-207-02	Total/NA	Solid	Moisture	
680-102252-27	SD-207-03	Total/NA	Solid	Moisture	

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## DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc.

Job Number: 680-102252-1

Sdg Number: 680102252-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	*	ISTD response or retention time outside acceptable limits
	F1	MS and/or MSD Recovery exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Instrument ID: CMSF Calibration Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calibration End Date: 07/06/2014 15:52  
 Calibration ID: 31869

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		32586	11.44	49110	17.66		
UPPER LIMIT		48879	11.94	73665	18.16		
LOWER LIMIT		16293	10.94	24555	17.16		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-337751/9		35720	11.44	49992	17.66		
MB 680-335389/21-A		38614	11.44	58864	17.66		
LCS 680-335389/22-A		37673	11.44	58440	17.66		
680-102252-1	SD-202-SS	29691	11.44	33683	17.66		
680-102252-1 MS	SD-202-SS MS	34497	11.44	42816	17.66		
680-102252-1 MSD	SD-202-SS MSD	36252	11.44	45409	17.66		
680-102252-2	SD-202-01	29834	11.44	37172	17.66		
680-102252-3	SD-202-02	36752	11.44	63368	17.66		
680-102252-4	SD-195-SS	34927	11.44	52432	17.66		
680-102252-5	SD-200-SS	40113	11.44	56488	17.66		
680-102252-6	SD-200-01	38202	11.44	54143	17.67		
680-102252-7	SD-200-02	35237	11.44	47378	17.66		
CCV 680-337751/22		42132	11.44	71035	17.66		
CCVIS 680-337778/4		28000	11.44	41369	17.66		
680-102252-8	SD-200-03	31831	11.44	52134	17.67		
680-102252-9	SD-197-SS	32344	11.44	46008	17.66		
680-102252-10	SD-197-01	30793	11.44	44324	17.67		
680-102252-11	SD-197-02	28426	11.44	49960	17.67		
680-102252-12	SD-197-03	30806	11.44	49670	17.67		
680-102252-13	SD-199-SS	34096	11.44	57684*	17.67		
680-102252-14	SD-199-01	32788	11.44	43436	17.67		
680-102252-15	SD-199-02	42009*	11.44	72479*	17.67		
680-102252-16	SD-199-03	39368*	11.44	62795*	17.67		
680-102252-17	SD-DUP 01	41243*	11.44	56779*	17.67		
680-102252-18	SD-209-01	44591*	11.44	77615*	17.67		
680-102252-19	SD-209-02	34812	11.44	64004*	17.67		
680-102252-20	SD-209-03	35365	11.44	58694*	17.67		
MB 680-336158/10-A		37525	11.44	60661	17.67		
LCS 680-336158/11-A		47056	11.44	81668*	17.67		
680-102252-23 MS	SD-204-02 MS	44395*	11.44	78812*	17.67		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Instrument ID: CMSF Calibration Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25 (mm) Calibration End Date: 07/06/2014 15:52  
 Calibration ID: 31869

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	32586	11.44	49110	17.66		
UPPER LIMIT	48879	11.94	73665	18.16		
LOWER LIMIT	16293	10.94	24555	17.16		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102252-23 MSD	SD-204-02 MSD		44312*	11.44	70488*	17.67
680-102252-23	SD-204-02		40680*	11.44	68231*	17.67
CCV 680-337778/25			44541	11.44	73638	17.67
CCVIS 680-337937/4			38199	11.37	63851	17.58
MB 680-337170/11-A			48585	11.37	64660	17.59
LCS 680-337170/12-A			49267*	11.37	68087	17.58
680-102252-21	SD-204-SS		35440	11.37	47575	17.58
680-102252-22	SD-204-01		38495	11.37	50990	17.58
680-102252-26	SD-207-02		42608	11.37	61376	17.60
680-102252-27	SD-207-03		40940	11.37	57946	17.60
CCV 680-337937/21			44464	11.37	66808	17.58

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Sample No.: CCVIS 680-337778/4 Date Analyzed: 07/07/2014 01:02  
 Instrument ID: CMSF GC Column: HP-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): Fg0627.D Heated Purge: (Y/N) N  
 Calibration ID: 31869

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	28000	11.44	41369	17.66		
UPPER LIMIT	36400	11.94	53780	18.16		
LOWER LIMIT	19600	10.94	28958	17.16		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102252-8	SD-200-03	31831	11.44	52134	17.67	
680-102252-9	SD-197-SS	32344	11.44	46008	17.66	
680-102252-10	SD-197-01	30793	11.44	44324	17.67	
680-102252-11	SD-197-02	28426	11.44	49960	17.67	
680-102252-12	SD-197-03	30806	11.44	49670	17.67	
680-102252-13	SD-199-SS	34096	11.44	57684*	17.67	
680-102252-14	SD-199-01	32788	11.44	43436	17.67	
680-102252-15	SD-199-02	42009*	11.44	72479*	17.67	
680-102252-16	SD-199-03	39368*	11.44	62795*	17.67	
680-102252-17	SD-DUP 01	41243*	11.44	56779*	17.67	
680-102252-18	SD-209-01	44591*	11.44	77615*	17.67	
680-102252-19	SD-209-02	34812	11.44	64004*	17.67	
680-102252-20	SD-209-03	35365	11.44	58694*	17.67	
MB 680-336158/10-A		37525	11.44	60661	17.67	
LCS 680-336158/11-A		47056	11.44	81668*	17.67	
680-102252-23 MS	SD-204-02 MS	44395*	11.44	78812*	17.67	
680-102252-23 MSD	SD-204-02 MSD	44312*	11.44	70488*	17.67	
680-102252-23	SD-204-02	40680*	11.44	68231*	17.67	
CCV 680-337778/25		44541	11.44	73638	17.67	

PHN = Phenanthrene-d10

CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Sample No.: CCVIS 680-337937/4 Date Analyzed: 07/07/2014 16:47  
 Instrument ID: CMSF GC Column: HP-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): Fg0704.D Heated Purge: (Y/N) N  
 Calibration ID: 31869

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	38199	11.37	63851	17.58		
UPPER LIMIT	49659	11.87	83006	18.08		
LOWER LIMIT	26739	10.87	44696	17.08		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-337170/11-A			48585	11.37	64660	17.59
LCS 680-337170/12-A			49267*	11.37	68087	17.58
680-102252-21	SD-204-SS		35440	11.37	47575	17.58
680-102252-22	SD-204-01		38495	11.37	50990	17.58
680-102252-26	SD-207-02		42608	11.37	61376	17.60
680-102252-27	SD-207-03		40940	11.37	57946	17.60
CCV 680-337937/21			44464	11.37	66808	17.58

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits



FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Instrument ID: CMSX Calibration Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/08/2014 15:58  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	82146	10.37	111835	16.51		
UPPER LIMIT	123219	10.87	167753	17.01		
LOWER LIMIT	41073	9.87	55918	16.01		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-338065/9			84988	10.37	88856	16.51
680-102252-25	SD-207-01		81047	10.38	96796	16.51
CCV 680-338065/19			90751	10.38	142407	16.51
CCVIS 680-338412/4			86819	10.38	130449	16.51
680-102252-24	SD-207-SS		84662	10.38	90792	16.51
CCV 680-338412/20			80906	10.38	108335	16.51

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Sample No.: CCVIS 680-338412/4 Date Analyzed: 07/10/2014 10:45  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1004.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	86819	10.38	130449	16.51		
UPPER LIMIT	112865	10.88	169584	17.01		
LOWER LIMIT	60773	9.88	91314	16.01		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102252-24	SD-207-SS		84662	10.38	90792	16.51
CCV 680-338412/20			80906	10.38	108335	16.51

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102252-1

SDG No.: 680102252-1

Matrix: Solid

Level: Low

GC Column (1): HP-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #	
SD-202-SS	680-102252-1	0	D
SD-202-01	680-102252-2	82	
SD-202-02	680-102252-3	97	
SD-195-SS	680-102252-4	92	
SD-200-SS	680-102252-5	0	D
SD-200-01	680-102252-6	0	D
SD-200-02	680-102252-7	70	
SD-200-03	680-102252-8	83	
SD-197-SS	680-102252-9	28	X
SD-197-01	680-102252-10	69	
SD-197-02	680-102252-11	91	
SD-197-03	680-102252-12	88	
SD-199-SS	680-102252-13	55	
SD-199-01	680-102252-14	0	D
SD-199-02	680-102252-15	91	*
SD-199-03	680-102252-16	72	*
SD-DUP 01	680-102252-17	77	*
SD-209-01	680-102252-18	88	*
SD-209-02	680-102252-19	85	
SD-209-03	680-102252-20	81	
SD-204-SS	680-102252-21	58	
SD-204-01	680-102252-22	78	
SD-204-02	680-102252-23	83	*
SD-207-SS	680-102252-24	0	D
SD-207-01	680-102252-25	0	D
SD-207-02	680-102252-26	67	
SD-207-03	680-102252-27	72	
	MB 680-335389/21-A	83	
	MB 680-336158/10-A	81	
	MB 680-337170/11-A	80	
	LCS 680-335389/22-A	94	
	LCS 680-336158/11-A	77	

Sox

10x  
10x

10x

100x  
Sox

13DCB = Decachlorobiphenyl-13C12

QC LIMITS  
30-130

# Column to be used to flag recovery values

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102252-1

SDG No.: 680102252-1

Matrix: Solid

Level: Low

GC Column (1): HP-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #
	LCS 680-337170/12-A	85 *
SD-202-SS MS	680-102252-1 MS	0 D
SD-204-02 MS	680-102252-23 MS	68 *
SD-202-SS MSD	680-102252-1 MSD	0 D
SD-204-02 MSD	680-102252-23 MSD	70 *

13DCB = Decachlorobiphenyl-13C12

QC LIMITS  
30-130

# Column to be used to flag recovery values

FORM II 680

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab File ID: Fg0611.D Lab Sample ID: MB 680-335389/21-A  
 Matrix: Solid Date Extracted: 06/24/2014 11:56  
 Instrument ID: CMSF Date Analyzed: 07/06/2014 17:19  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-335389/22-A	Fg0612.D	07/06/2014 17:47
SD-202-SS	680-102252-1	Fg0613.D	07/06/2014 18:16
SD-202-SS MS	680-102252-1 MS	Fg0614.D	07/06/2014 18:45
SD-202-SS MSD	680-102252-1 MSD	Fg0615.D	07/06/2014 19:15
SD-202-01	680-102252-2	Fg0616.D	07/06/2014 19:44
SD-202-02	680-102252-3	Fg0617.D	07/06/2014 20:12
SD-195-SS	680-102252-4	Fg0618.D	07/06/2014 20:42
SD-200-SS	680-102252-5	Fg0619.D	07/06/2014 21:11
SD-200-01	680-102252-6	Fg0620.D	07/06/2014 21:39
SD-200-02	680-102252-7	Fg0621.D	07/06/2014 22:08
SD-200-03	680-102252-8	Fg0629.D	07/07/2014 02:00
SD-197-SS	680-102252-9	Fg0630.D	07/07/2014 02:29
SD-197-01	680-102252-10	Fg0631.D	07/07/2014 02:58
SD-197-02	680-102252-11	Fg0632.D	07/07/2014 03:26
SD-197-03	680-102252-12	Fg0633.D	07/07/2014 03:55
SD-199-SS	680-102252-13	Fg0634.D	07/07/2014 04:24
SD-199-01	680-102252-14	Fg0635.D	07/07/2014 04:53
SD-199-02	680-102252-15	Fg0636.D	07/07/2014 05:22
SD-199-03	680-102252-16	Fg0637.D	07/07/2014 05:52
SD-DUP 01	680-102252-17	Fg0638.D	07/07/2014 06:20
SD-209-01	680-102252-18	Fg0639.D	07/07/2014 06:49
SD-209-02	680-102252-19	Fg0640.D	07/07/2014 07:18
SD-209-03	680-102252-20	Fg0641.D	07/07/2014 07:47

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-335389/21-A  
 Matrix: Solid Lab File ID: Fg0611.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 06/24/2014 11:56  
 Sample wt/vol: 30.15(g) Date Analyzed: 07/06/2014 17:19  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 337751 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	83		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Matrix: Solid Level: Low Lab File ID: Fg0612.D  
 Lab ID: LCS 680-335389/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	334	309	93	30-130	
Dichlorobiphenyl	66.7	50.5	76	30-130	
Heptachlorobiphenyl	200	168	84	40-140	
Hexachlorobiphenyl	133	116	87	40-140	
Monochlorobiphenyl	66.7	50.7	76	30-130	
Nonachlorobiphenyl	334	368	110	30-130	
Octachlorobiphenyl	200	185	92	40-140	
Pentachlorobiphenyl	133	118	89	40-140	
Tetrachlorobiphenyl	133	108	81	40-140	
Trichlorobiphenyl	66.7	53.5	80	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Matrix: Solid Level: Low Lab File ID: Fg0614.D  
 Lab ID: 680-102252-1 MS Client ID: SD-202-SS MS *50x dilution*

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	634	79 U	79 U	0	30-130	F1 - Dilute
Dichlorobiphenyl	127	33 U	89.1 J	70	30-130	
Heptachlorobiphenyl	380	44000	57200	3426	40-140	4 -
Hexachlorobiphenyl	253	59000	73000	5547	40-140	4 -
Monochlorobiphenyl	127	18 U	84.8 J	67	30-130	
Nonachlorobiphenyl	634	400 J	1350 J	150	30-130	F1
Octachlorobiphenyl	380	5200	7000	476	40-140	4 -
Pentachlorobiphenyl	253	18000	22300	1691	40-140	4 -
Tetrachlorobiphenyl	253	10000	8480	-776	40-140	4 -
Trichlorobiphenyl	127	530	537	7	30-130	4 -

# Column to be used to flag recovery and RPD values



FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Matrix: Solid Level: Low Lab File ID: Fg0615.D  
 Lab ID: 680-102252-1 MSD Client ID: SD-202-SS MSD *Sox delwin*

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	635	79 U	0	NC	50	30-130	F1 - D Sox
Dichlorobiphenyl	127	120 J	94	29	50	30-130	
Heptachlorobiphenyl	381	54400	2674	5	50	40-140	4 -
Hexachlorobiphenyl	254	70100	4409	4	50	40-140	4 -
Monochlorobiphenyl	127	105 J	83	22	50	30-130	
Nonachlorobiphenyl	635	1530 J	179	13	50	30-130	F1
Octachlorobiphenyl	381	9280	1073	28	50	40-140	4 -
Pentachlorobiphenyl	254	20700	1074	7	50	40-140	4 -
Tetrachlorobiphenyl	254	8400	-806	1	50	40-140	4 -
Trichlorobiphenyl	127	629	79	16	50	30-130	4 -

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
SDG No.: 680102252-1  
Lab File ID: Fg0642.D Lab Sample ID: MB 680-336158/10-A  
Matrix: Solid Date Extracted: 06/25/2014 13:33  
Instrument ID: CMSF Date Analyzed: 07/07/2014 08:16  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-336158/11-A	Fg0643.D	07/07/2014 08:45
SD-204-02 MS	680-102252-23 MS	Fg0644.D	07/07/2014 09:14
SD-204-02 MSD	680-102252-23 MSD	Fg0645.D	07/07/2014 09:43
SD-204-02	680-102252-23	Fg0646.D	07/07/2014 10:12

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-336158/10-A  
 Matrix: Solid Lab File ID: Fg0642.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 06/25/2014 13:33  
 Sample wt/vol: 30.03(g) Date Analyzed: 07/07/2014 08:16  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 33778 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	11.7		10	0.50
26601-64-9	Hexachlorobiphenyl	17.3		6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	1.03	J	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	81		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Matrix: Solid Level: Low Lab File ID: Fg0643.D  
 Lab ID: LCS 680-336158/11-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	334	253	76	30-130	
Dichlorobiphenyl	66.7	44.8	67	30-130	
Heptachlorobiphenyl	200	146	73	40-140	
Hexachlorobiphenyl	133	101	76	40-140	
Monochlorobiphenyl	66.7	43.1	65	30-130	
Nonachlorobiphenyl	334	296	89	30-130	
Octachlorobiphenyl	200	155	77	40-140	
Pentachlorobiphenyl	133	103	77	40-140	
Tetrachlorobiphenyl	133	90.3	68	40-140	
Trichlorobiphenyl	66.7	45.1	68	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1

SDG No.: 680102252-1

Matrix: Solid Level: Low Lab File ID: Fg0644.D

Lab ID: 680-102252-23 MS Client ID: SD-204-02 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	415	1.0 U	280	68	30-130	*
Dichlorobiphenyl	83.1	0.43 U	52.4	63	30-130	*
Heptachlorobiphenyl	249	100	172	29	40-140	* F1
Hexachlorobiphenyl	166	75	123	29	40-140	* F1
Monochlorobiphenyl	83.1	0.24 U	49.0	59	30-130	*
Nonachlorobiphenyl	415	4.1 U	351	85	30-130	*
Octachlorobiphenyl	249	8.9 J	172	65	40-140	*
Pentachlorobiphenyl	166	9.1	114	63	40-140	*
Tetrachlorobiphenyl	166	22	116	56	40-140	*
Trichlorobiphenyl	83.1	0.91 J	54.1	64	30-130	*

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Matrix: Solid Level: Low Lab File ID: Fg0645.D  
 Lab ID: 680-102252-23 MSD Client ID: SD-204-02 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	415	280	68	0	50	30-130	*
Dichlorobiphenyl	83.0	49.0	59	7	50	30-130	*
Heptachlorobiphenyl	249	186	35	8	50	40-140	* F1
Hexachlorobiphenyl	166	145	42	16	50	40-140	*
Monochlorobiphenyl	83.0	47.0	57	4	50	30-130	*
Nonachlorobiphenyl	415	346	83	2	50	30-130	*
Octachlorobiphenyl	249	170	65	1	50	40-140	*
Pentachlorobiphenyl	166	112	62	2	50	40-140	*
Tetrachlorobiphenyl	166	119	58	3	50	40-140	*
Trichlorobiphenyl	83.0	54.3	64	0	50	30-130	*

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
SDG No.: 680102252-1  
Lab File ID: Fg0706.D Lab Sample ID: MB 680-337170/11-A  
Matrix: Solid Date Extracted: 07/02/2014 08:53  
Instrument ID: CMSF Date Analyzed: 07/07/2014 18:05  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-337170/12-A	Fg0707.D	07/07/2014 18:34
SD-204-SS	680-102252-21	Fg0712.D	07/07/2014 20:59
SD-204-01	680-102252-22	Fg0713.D	07/07/2014 21:28
SD-207-02	680-102252-26	Fg0716.D	07/07/2014 22:55
SD-207-03	680-102252-27	Fg0717.D	07/07/2014 23:24
SD-207-01	680-102252-25	XG0818.D	07/08/2014 22:06
SD-207-SS	680-102252-24	XG1006.D	07/10/2014 11:42

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-337170/11-A  
 Matrix: Solid Lab File ID: Fg0706.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/02/2014 08:53  
 Sample wt/vol: 30.15(g) Date Analyzed: 07/07/2014 18:05  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 337937 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	80		30-130



FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Matrix: Solid Level: Low Lab File ID: Fg0707.D  
 Lab ID: LCS 680-337170/12-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	279	84	30-130	*
Dichlorobiphenyl	66.6	48.9	73	30-130	*
Heptachlorobiphenyl	200	159	80	40-140	*
Hexachlorobiphenyl	133	107	80	40-140	*
Monochlorobiphenyl	66.6	49.3	74	30-130	*
Nonachlorobiphenyl	333	340	102	30-130	*
Octachlorobiphenyl	200	168	84	40-140	*
Pentachlorobiphenyl	133	107	80	40-140	*
Tetrachlorobiphenyl	133	98.0	74	40-140	*
Trichlorobiphenyl	66.6	48.1	72	30-130	*

# Column to be used to flag recovery and RPD values

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab File ID: Fg0602.D DFTPP Injection Date: 07/06/2014  
 Instrument ID: CMSF DFTPP Injection Time: 12:56  
 Analysis Batch No.: 337751

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	48.3
197	Less than 1 % of mass 198	0.3
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	7.3
275	10 - 30% of mass 198	22.0
365	Greater than 1% of mass 198	3.0
441	Present but less than mass 443	10.7 (75.4)2
442	Greater than 40% of mass 198	73.3
443	17 - 23% of mass 442	14.2 (19.4)1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-337751/4	Fg0604.D	07/06/2014	13:56
	IC 680-337751/5	Fg0605.D	07/06/2014	14:25
	IC 680-337751/6	Fg0606.D	07/06/2014	14:54
	IC 680-337751/7	Fg0607.D	07/06/2014	15:23
	IC 680-337751/8	Fg0608.D	07/06/2014	15:52
	ICV 680-337751/9	Fg0609.D	07/06/2014	16:21
	MB 680-335389/21-A	Fg0611.D	07/06/2014	17:19
	LCS 680-335389/22-A	Fg0612.D	07/06/2014	17:47
SD-202-SS	680-102252-1	Fg0613.D	07/06/2014	18:16
SD-202-SS MS	680-102252-1 MS	Fg0614.D	07/06/2014	18:45
SD-202-SS MSD	680-102252-1 MSD	Fg0615.D	07/06/2014	19:15
SD-202-01	680-102252-2	Fg0616.D	07/06/2014	19:44
SD-202-02	680-102252-3	Fg0617.D	07/06/2014	20:12
SD-195-SS	680-102252-4	Fg0618.D	07/06/2014	20:42
SD-200-SS	680-102252-5	Fg0619.D	07/06/2014	21:11
SD-200-01	680-102252-6	Fg0620.D	07/06/2014	21:39
SD-200-02	680-102252-7	Fg0621.D	07/06/2014	22:08
	CCV 680-337751/22	Fg0622.D	07/06/2014	22:37

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102252-1

Analy Batch No.: 337751

SDG No.: 680102252-1

Instrument ID: CMSF

GC Column: HP-5MS

Heated Purge: (Y/N) N

Calibration Start Date: 07/06/2014 13:56

Calibration End Date: 07/06/2014 15:52

Calibration ID: 31869

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-337751/8	Fg0608.D
Level 2	IC 680-337751/7	Fg0607.D
Level 3	ICISAV 680-337751/4	Fg0604.D
Level 4	IC 680-337751/6	Fg0606.D
Level 5	IC 680-337751/5	Fg0605.D

ANALYTE	RRF						CURVE TYPE			COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	B	M1	M2												
Monochlorobiphenyl	1.0360	1.0204	0.9964	1.0400	0.9363	Ave	1.0058		4.2	20.0										
Dichlorobiphenyl	0.7057	0.6752	0.6652	0.6518	0.6177	Ave	0.6631		4.9	20.0										
Trichlorobiphenyl	0.4888	0.4754	0.4650	0.4816	0.4380	Ave	0.4698		4.2	20.0										
PCB-104			0.3015			Ave	0.3015			30.0										
Tetrachlorobiphenyl	0.3154	0.2898	0.2843	0.2951	0.2810	Ave	0.2931		4.6	20.0										
Pentachlorobiphenyl	0.2558	0.2565	0.2462	0.2491	0.2414	Ave	0.2498		2.6	20.0										
PCB-77			0.4559			Ave	0.4559			30.0										
Hexachlorobiphenyl	0.2207	0.2115	0.2067	0.2115	0.1994	Ave	0.2099		3.7	20.0										
Heptachlorobiphenyl	0.2233	0.2029	0.1917	0.2060	0.1840	Ave	0.2016		7.4	20.0										
Octachlorobiphenyl	0.2273	0.2205	0.2152	0.2207	0.2039	Ave	0.2175		4.0	20.0										
PCB-208			0.1309			Ave	0.1309			30.0										
Nonachlorobiphenyl			0.1070			Ave	0.1152		7.7	20.0										
DCB Decachlorobiphenyl	0.1251	0.1218	0.1143	0.1120	0.1025	Ave	0.1152		7.7	20.0										
Decachlorobiphenyl-13C12	0.1420	0.1470	0.1285	0.1330	0.1131	Ave	0.1327		9.9	20.0										

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: ICV 680-337751/9 Calibration Date: 07/06/2014 16:21  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0609.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.003		0.997	1.00	-0.3	20.0
Dichlorobiphenyl	Ave	0.6631	0.6344		0.957	1.00	-4.3	20.0
Trichlorobiphenyl	Ave	0.4698	0.4964		1.06	1.00	5.7	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.2976		2.03	2.00	1.5	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2558		2.05	2.00	2.4	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2140		2.04	2.00	1.9	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2033		3.03	3.00	0.8	20.0
Octachlorobiphenyl	Ave	0.2175	0.2228		3.07	3.00	2.4	20.0
DCB Decachlorobiphenyl	Ave	0.1152	0.1150		4.99	5.00	-0.1	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCV 680-337751/22 Calibration Date: 07/06/2014 22:37  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0622.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.009		1.00	1.00	0.3	20.0
Dichlorobiphenyl	Ave	0.6631	0.6695		1.01	1.00	1.0	20.0
Trichlorobiphenyl	Ave	0.4698	0.4794		1.02	1.00	2.0	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.2882		1.97	2.00	-1.7	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2560		2.05	2.00	2.5	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2146		2.04	2.00	2.2	20.0
Heptachlorobiphenyl	Ave	0.2016	0.1939		2.89	3.00	-3.8	20.0
Octachlorobiphenyl	Ave	0.2175	0.2301		3.17	3.00	5.8	20.0
<del>Nonachlorobiphenyl</del>	<del>Ave</del>	<del>0.1152</del>	<del>0.1526</del>		<del>5.30</del>	<del>4.00</del>	<del>32.5*</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.1152	0.1288		5.59	5.00	11.8	20.0
Decachlorobiphenyl-13C12	Ave	0.1327	0.1406		5.30	5.00	6.0	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab File ID: Fg0625.D DFTPP Injection Date: 07/07/2014  
 Instrument ID: CMSF DFTPP Injection Time: 00:04  
 Analysis Batch No.: 337778

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.3
197	Less than 1 % of mass 198	0.5
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.9
275	10 - 30% of mass 198	20.0
365	Greater than 1% of mass 198	2.4
441	Present but less than mass 443	9.7 (79.0)2
442	Greater than 40% of mass 198	63.5
443	17 - 23% of mass 442	12.3 (19.3)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-337778/3	Fg0626.D	07/07/2014	00:33
	CCVIS 680-337778/4	Fg0627.D	07/07/2014	01:02
SD-200-03	680-102252-8	Fg0629.D	07/07/2014	02:00
SD-197-SS	680-102252-9	Fg0630.D	07/07/2014	02:29
SD-197-01	680-102252-10	Fg0631.D	07/07/2014	02:58
SD-197-02	680-102252-11	Fg0632.D	07/07/2014	03:26
SD-197-03	680-102252-12	Fg0633.D	07/07/2014	03:55
SD-199-SS	680-102252-13	Fg0634.D	07/07/2014	04:24
SD-199-01	680-102252-14	Fg0635.D	07/07/2014	04:53
SD-199-02	680-102252-15	Fg0636.D	07/07/2014	05:22
SD-199-03	680-102252-16	Fg0637.D	07/07/2014	05:52
SD-DUP 01	680-102252-17	Fg0638.D	07/07/2014	06:20
SD-209-01	680-102252-18	Fg0639.D	07/07/2014	06:49
SD-209-02	680-102252-19	Fg0640.D	07/07/2014	07:18
SD-209-03	680-102252-20	Fg0641.D	07/07/2014	07:47
	MB 680-336158/10-A	Fg0642.D	07/07/2014	08:16
	LCS 680-336158/11-A	Fg0643.D	07/07/2014	08:45
SD-204-02 MS	680-102252-23 MS	Fg0644.D	07/07/2014	09:14
SD-204-02 MSD	680-102252-23 MSD	Fg0645.D	07/07/2014	09:43
SD-204-02	680-102252-23	Fg0646.D	07/07/2014	10:12
	CCV 680-337778/25	Fg0648.D	07/07/2014	11:09

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCVIS 680-337778/4 Calibration Date: 07/07/2014 01:02  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0627.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.174		1.17	1.00	16.7	20.0
Dichlorobiphenyl	Ave	0.6631	0.7327		1.10	1.00	10.5	20.0
Trichlorobiphenyl	Ave	0.4698	0.4881		1.04	1.00	3.9	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.2971		2.03	2.00	1.3	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2668		2.14	2.00	6.8	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2209		2.10	2.00	5.2	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2135		3.18	3.00	5.9	20.0
Octachlorobiphenyl	Ave	0.2175	0.2267		3.13	3.00	4.2	20.0
<del>Nonachlorobiphenyl</del>	<del>Ave</del>	<del>0.1162</del>	<del>0.1377</del>		<del>4.78</del>	<del>4.00</del>	<del>19.6</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.1152	0.1169		5.07	5.00	1.5	20.0
Decachlorobiphenyl-13C12	Ave	0.1327	0.1294		4.87	5.00	-2.5	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCV 680-337778/25 Calibration Date: 07/07/2014 11:09  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0648.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.061		1.05	1.00	5.5	20.0
Dichlorobiphenyl	Ave	0.6631	0.6946		1.05	1.00	4.7	20.0
Trichlorobiphenyl	Ave	0.4698	0.4932		1.05	1.00	5.0	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.3056		2.09	2.00	4.3	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2688		2.15	2.00	7.6	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2174		2.07	2.00	3.6	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2015		3.00	3.00	-0.0	20.0
Octachlorobiphenyl	Ave	0.2175	0.2292		3.16	3.00	5.4	20.0
<del>Nonachlorobiphenyl</del>	<del>Ave</del>	<del>0.1152</del>	<del>0.1427</del>		<del>4.96</del>	<del>4.00</del>	<del>23.9*</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.1152	0.1202		5.22	5.00	4.4	20.0
Decachlorobiphenyl-13C12	Ave	0.1327	0.1335		5.03	5.00	0.6	20.0



FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab File ID: Fg0702.D DFTPP Injection Date: 07/07/2014  
 Instrument ID: CMSF DFTPP Injection Time: 15:25  
 Analysis Batch No.: 337937

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.9
197	Less than 1 % of mass 198	0.8
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.2
275	10 - 30% of mass 198	19.1
365	Greater than 1% of mass 198	2.7
441	Present but less than mass 443	9.7 (77.2)2
442	Greater than 40% of mass 198	64.6
443	17 - 23% of mass 442	12.6 (19.5)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-337937/3	Fg0703.D	07/07/2014	15:54
	CCVIS 680-337937/4	Fg0704.D	07/07/2014	16:47
	MB 680-337170/11-A	Fg0706.D	07/07/2014	18:05
	LCS 680-337170/12-A	Fg0707.D	07/07/2014	18:34
SD-204-SS	680-102252-21	Fg0712.D	07/07/2014	20:59
SD-204-01	680-102252-22	Fg0713.D	07/07/2014	21:28
SD-207-02	680-102252-26	Fg0716.D	07/07/2014	22:55
SD-207-03	680-102252-27	Fg0717.D	07/07/2014	23:24
	CCV 680-337937/21	Fg0721.D	07/08/2014	01:19

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCVIS 680-337937/4 Calibration Date: 07/07/2014 16:47  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0704.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.077		1.07	1.00	7.0	20.0
Dichlorobiphenyl	Ave	0.6631	0.6962		1.05	1.00	5.0	20.0
Trichlorobiphenyl	Ave	0.4698	0.5090		1.08	1.00	8.4	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.3010		2.05	2.00	2.7	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2791		2.23	2.00	11.7	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2071		1.97	2.00	-1.4	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2059		3.06	3.00	2.1	20.0
Octachlorobiphenyl	Ave	0.2175	0.2223		3.07	3.00	2.2	20.0
<del>Nonachlorobiphenyl</del>	<del>Ave</del>	<del>0.1152</del>	<del>0.1418</del>		<del>4.93</del>	<del>4.00</del>	<del>23.2*</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.1152	0.1138		4.94	5.00	-1.2	20.0
Decachlorobiphenyl-13C12	Ave	0.1327	0.1257		4.74	5.00	-5.3	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCV 680-337937/21 Calibration Date: 07/08/2014 01:19  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0721.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.079		1.07	1.00	7.3	20.0
Dichlorobiphenyl	Ave	0.6631	0.6777		1.02	1.00	2.2	20.0
Trichlorobiphenyl	Ave	0.4698	0.4895		1.04	1.00	4.2	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.3041		2.08	2.00	3.8	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2502		2.00	2.00	0.2	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2209		2.10	2.00	5.2	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2096		3.12	3.00	3.9	20.0
Octachlorobiphenyl	Ave	0.2175	0.2224		3.07	3.00	2.2	20.0
<del>Nonachlorobiphenyl</del>	<del>Ave</del>	<del>0.1152</del>	<del>0.1279</del>		<del>4.44</del>	<del>4.00</del>	<del>11.1</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.1152	0.1087		4.72	5.00	-5.6	20.0
Decachlorobiphenyl-13C12	Ave	0.1327	0.1202		4.53	5.00	-9.5	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab File ID: XG0802.D DFTPP Injection Date: 07/08/2014  
 Instrument ID: CMSX DFTPP Injection Time: 11:48  
 Analysis Batch No.: 338065

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.8
197	Less than 1 % of mass 198	0.3
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	27.8
365	Greater than 1% of mass 198	4.5
441	Present but less than mass 443	14.0 (80.5)2
442	Greater than 40% of mass 198	92.8
443	17 - 23% of mass 442	17.3 (18.7)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-338065/3	XG0803.D	07/08/2014	12:18
	ICISAV 680-338065/4	XG0804.D	07/08/2014	14:04
	IC 680-338065/5	XG0805.D	07/08/2014	14:32
	IC 680-338065/6	XG0806.D	07/08/2014	15:01
	IC 680-338065/7	XG0807.D	07/08/2014	15:29
	IC 680-338065/8	XG0808.D	07/08/2014	15:58
	ICV 680-338065/9	XG0809.D	07/08/2014	16:27
SD-207-01	680-102252-25	XG0818.D	07/08/2014	22:06
	CCV 680-338065/19	XG0819.D	07/08/2014	22:34

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102252-1 Analy Batch No.: 338065  
 SDG No.: 660102252-1  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/08/2014 14:04 Calibration End Date: 07/08/2014 15:58 Calibration ID: 31919

Calibration Files:

LEVEL	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-338065/8	XG0808.D
Level 2	IC 680-338065/7	XG0807.D
Level 3	ICISAV 680-338065/4	XG0804.D
Level 4	IC 680-338065/6	XG0806.D
Level 5	IC 680-338065/5	XG0805.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			# MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	# MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2						
Monochlorobiphenyl	0.8065	0.8925	0.9538	0.9322	0.9238	Ave		0.9218				2.6	20.0		
Dichlorobiphenyl	0.5915	0.6255	0.6459	0.6725	0.6659	Ave		0.6403				5.1	20.0		
Trichlorobiphenyl	0.3952	0.4252	0.4540	0.4764	0.4724	Ave		0.4446				7.7	20.0		
PCB-104			0.3459			Ave		0.3459					30.0		
Tetrachlorobiphenyl	0.2979	0.3138	0.3348	0.3431	0.3385	Ave		0.3256				5.9	20.0		
Pentachlorobiphenyl	0.1953	0.2349	0.2632	0.2716	0.2824	Ave		0.2495				14.0	20.0		
PCB-77			0.4735			Ave		0.4735					30.0		
Hexachlorobiphenyl	0.1989	0.2390	0.2639	0.2669	0.2604	Ave		0.2458				12.0	20.0		
Heptachlorobiphenyl	0.1683	0.1973	0.2134	0.2347	0.2265	Ave		0.2081				13.0	20.0		
Octachlorobiphenyl	0.1458	0.1847	0.1949	0.2143	0.2163	Ave		0.1912				15.0	20.0		
PCB-208			0.0906			Ave		0.0906					30.0		
Nonachlorobiphenyl			0.0725			Ave		0.0672					15.0	20.0	
DCB Decachlorobiphenyl	0.0507	0.0661	0.0711	0.0735	0.0747	Ave		0.0672				15.0	20.0		
Decachlorobiphenyl-13C12	0.0604	0.0799	0.0831	0.0851	0.0829	Ave		0.0783				13.0	20.0		

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: ICV 680-338065/9 Calibration Date: 07/08/2014 16:27  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG0809.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8805		0.955	1.00	-4.5	20.0
Dichlorobiphenyl	Ave	0.6403	0.6291		0.983	1.00	-1.7	20.0
Trichlorobiphenyl	Ave	0.4446	0.4497		1.01	1.00	1.1	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3210		1.97	2.00	-1.4	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2325		1.86	2.00	-6.8	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2501		2.03	2.00	1.7	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2019		2.91	3.00	-3.0	20.0
Octachlorobiphenyl	Ave	0.1912	0.1790		2.81	3.00	-6.4	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0596		4.44	5.00	-11.3	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCV 680-338065/19 Calibration Date: 07/08/2014 22:34  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG0819.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8055		0.874	1.00	-12.6	20.0
Dichlorobiphenyl	Ave	0.6403	0.6012		0.939	1.00	-6.1	20.0
Trichlorobiphenyl	Ave	0.4446	0.4506		1.01	1.00	1.3	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3157		1.94	2.00	-3.1	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2673		2.14	2.00	7.2	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2567		2.09	2.00	4.4	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2211		3.19	3.00	6.3	20.0
Octachlorobiphenyl	Ave	0.1912	0.2096		3.29	3.00	9.6	20.0
<del>Nonaclorobiphenyl</del>	<del>Ave</del>	<del>0.0672</del>	<del>0.0944</del>		<del>5.62</del>	<del>4.00</del>	<del>40.4*</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.0672	0.0732		5.45	5.00	8.9	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0853		5.45	5.00	9.0	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab File ID: XG1002.D DFTPP Injection Date: 07/10/2014  
 Instrument ID: CMSX DFTPP Injection Time: 09:26  
 Analysis Batch No.: 338412

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.8
275	10 - 30% of mass 198	27.9
365	Greater than 1% of mass 198	4.5
441	Present but less than mass 443	15.5 (82.2)2
442	Greater than 40% of mass 198	99.7
443	17 - 23% of mass 442	18.8 (18.9)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-338412/3	XG1003.D	07/10/2014	09:57
	CCVIS 680-338412/4	XG1004.D	07/10/2014	10:45
SD-207-SS	680-102252-24	XG1006.D	07/10/2014	11:42
	CCV 680-338412/20	XG1020.D	07/10/2014	18:23



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCVIS 680-338412/4 Calibration Date: 07/10/2014 10:45  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1004.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8663		0.940	1.00	-6.0	20.0
Dichlorobiphenyl	Ave	0.6403	0.6240		0.975	1.00	-2.5	20.0
Trichlorobiphenyl	Ave	0.4446	0.4559		1.03	1.00	2.5	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3204		1.97	2.00	-1.6	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2650		2.12	2.00	6.2	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2613		2.13	2.00	6.3	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2299		3.31	3.00	10.5	20.0
Octachlorobiphenyl	Ave	0.1912	0.2078		3.26	3.00	8.7	20.0
<del>Nonachlorobiphenyl</del>	<del>Ave</del>	<del>0.0672</del>	<del>0.0946</del>		<del>5.63</del>	<del>4.00</del>	<del>40.7*</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.0672	0.0721		5.36	5.00	7.3	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0825		5.27	5.00	5.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102252-1  
 SDG No.: 680102252-1  
 Lab Sample ID: CCV 680-338412/20 Calibration Date: 07/10/2014 18:23  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1020.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8077		0.876	1.00	-12.4	20.0
Dichlorobiphenyl	Ave	0.6403	0.6223		0.972	1.00	-2.8	20.0
Trichlorobiphenyl	Ave	0.4446	0.4553		1.02	1.00	2.4	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3124		1.92	2.00	-4.1	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2555		2.05	2.00	2.4	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2443		1.99	2.00	-0.6	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2111		3.04	3.00	1.5	20.0
Octachlorobiphenyl	Ave	0.1912	0.1892		2.97	3.00	-1.0	20.0
<del>Nonachlorobiphenyl</del>	<del>Ave</del>	<del>0.0672</del>	<del>0.0778</del>		<del>4.63</del>	<del>4.00</del>	<del>15.7</del>	<del>20.0</del>
DCB Decachlorobiphenyl	Ave	0.0672	0.0584		4.35	5.00	-13.1	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0695		4.44	5.00	-11.3	20.0



**TO:** M. MARTIN **DATE:** AUGUST 29, 2014  
**FROM:** A. COGNETTI **COPIES:** DV FILE  
**SUBJECT:** ORGANIC DATA VALIDATION – PCB HOMOLOGUES  
LOCKHEED MIDDLE RIVER COMPLEX (MRC) SEDIMENT INVESTIGATION  
SAMPLE DELIVERY GROUP (SDG) 680-102521-1

**SAMPLES:** 46 / Sediment / PCB Homologues

SD-250-01	SD-250-02	SD-250-03	SD-250-SS	SD-251-01
SD-251-02	SD-251-03	SD-251-SS	SD-262-01	SD-262-02
SD-262-03	SD-262-SS	SD-263-01	SD-263-02	SD-263-03
SD-263-SS	SD-264-01	SD-264-02	SD-264-03	SD-264-SS
SD-265-01	SD-265-02	SD-265-03	SD-265-SS	SD-268-01
SD-268-02	SD-268-03	SD-268-SS	SD-269-01	SD-269-02
SD-269-03	SD-269-SS	SD-270-01	SD-270-02	SD-270-03
SD-270-SS	SD-271-01	SD-271-02	SD-271-03	SD-271-SS
SD-273-01	SD-273-02	SD-273-03	SD-273-SS	SD-Dup05
SD-Dup-06				

#### Overview

The sample set for Lockheed MRC Sediment Investigation, SDG 680-102521-1, consisted of forty-six (46) sediment samples. There are two (2) field duplicate sample pairs included in this SDG: SD-Dup-05/SD-262-SS and SD-Dup-06/SD-270-02.

The samples were collected by Tetra Tech on June 18, 2014 and analyzed by Test America. All analyses were conducted in accordance with EPA Method 680 for PCBs analytical and reporting protocols.

The data contained in this SDG was validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

#### Major Problems

- The surrogate recovery of decachlorobiphenyl-13C12 was less than 10% in sample SD-265-02. The sample was re-extracted and re-analyzed at a 10X dilution. The surrogate recovery diluted out. The original sample results were used for validation and reporting purposes. The nondetected results were qualified as rejected (UR). The detected results were qualified as estimated (J).

#### Minor Problems

- The continuing calibration percent difference (%D) for decachlorobiphenyl was greater than the 20% quality control limit on July 21, 2014 @ 15:33 on instrument CMSX. The nondetected decachlorobiphenyl and nonachlorobiphenyl results were qualified as estimated (UJ) in the affected samples.

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 FROM: A. Cagnetti  
 SDG: 680-102521-1  
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- The continuing calibration %D for decachlorobiphenyl was greater than the 20% quality control limit on July 27, 2014 @ 18:32 on instrument CMSX. The nondetected decachlorobiphenyl and nonachlorobiphenyl results were qualified as estimated (UJ) in the affected samples.
- Several samples had surrogate recoveries of decachlorobiphenyl-13C12 outside quality control limits.

Sample	Dilution Factor	Surrogate %R	Laboratory Action	Sample Selected for Validation and Reporting Purposes	Validation Action
SD-250-SS	5X	24	Re-extracted and re-analyzed sample	Yes	J, UJ
SD-250-SS-Re	5X	8			Use original sample results
SD-250-01	5X	27	Re-extracted and re-analyzed sample	Yes	J, UJ
SD-250-01-Re	5X	8			Use original sample results
SD-250-02	10X	0	None, surrogate diluted out		No action
SD-251-SS	5X	24	Re-extracted and re-analyzed sample		
SD-251-SS-Re	5X	21		Yes	J, UJ
SD-262-SS	1X	10	Re-extracted and re-analyzed sample	Yes	J, UJ
SD-262-SS-Re	1X	8			Use original sample results
SD-Dup-05	10X	0	None, surrogate diluted out		No action
SD-263-02	1X	22	Re-extracted and re-analyzed sample		Use re-extracted sample results
SD-263-02-Re	2X	32		Yes	No action
SD-264-SS	1X	13	Re-extracted and re-analyzed sample	Yes	J, UJ
SD-264-SS-Re	1X	3			Use original sample results
SD-264-02	10X	0	None, surrogate diluted out		No action
SD-265-01	1X	17	Re-extracted and re-analyzed	Yes	J, UJ

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Sample	Dilution Factor	Surrogate %R	Laboratory Action	Sample Selected for Validation and Reporting Purposes	Validation Action
			sample		
SD-265-01-Re	1X	12			Use original sample results
<b>SD-265-03</b>	<b>5X</b>	<b>27</b>	<b>Re-extracted and re-analyzed sample</b>	<b>Yes</b>	
SD-265-03-Re	10X	0	None, surrogate diluted out		
SD-268-SS	1x	9	Re-extracted and re-analyzed sample		
<b>SD-268-SS-Re</b>	<b>5X</b>	<b>36</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>
SD-268-01	10X	0	None, surrogate diluted out		No action
SD-270-SS	2X	12	Re-extracted and re-analyzed sample		
<b>SD-270-SS-Re</b>	<b>10X</b>	<b>0</b>	<b>None, surrogate diluted out</b>	<b>Yes</b>	<b>Detected results in re-extracted sample significantly greater in conc.</b>
SD-270-01	5X	25	Re-extracted and re-analyzed sample		
<b>SD-270-01-Re</b>	<b>5X</b>	<b>37</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>
SD-270-02	1X	17	Re-extracted and re-analyzed sample		
<b>SD-270-02-Re</b>	<b>1X</b>	<b>33</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>
SD-Dup06	1X	25	Re-extracted and re-analyzed sample		
<b>SD-Dup06-Re</b>	<b>1X</b>	<b>47</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>
SD-269-SS	2X	7	Re-extracted and re-analyzed		

Sample	Dilution Factor	Surrogate %R	Laboratory Action	Sample Selected for Validation and Reporting Purposes	Validation Action
			sample		
<b>SD-269-SS-Re</b>	<b>10X</b>	<b>0</b>	<b>None, surrogate diluted out</b>	<b>Yes</b>	<b>Use re-extracted sample, results significantly higher, no action</b>
SD-269-01	10X	0	None, surrogate diluted out		No action
SD-269-02	1X	10	Re-extracted and re-analyzed sample		
<b>SD-269-02-Re</b>	<b>1X</b>	<b>43</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>
SD-271-SS	1X	22	Re-extracted and re-analyzed sample		
<b>SD-271-SS-Re</b>	<b>1X</b>	<b>37</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>
<b>SD-273-SS</b>	<b>10X</b>	<b>0</b>	<b>Re-extracted and re-analyzed sample</b>	<b>Yes</b>	<b>No action</b>
SD-273-SS-Re	10X	0	None, surrogate diluted out		Use original sample results
SD-273-01	1X	18	Re-extracted and re-analyzed sample		
<b>SD-273-01-Re</b>	<b>1X</b>	<b>35</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>
SD-273-02	10X	0	None, surrogate diluted out		No action
SD-273-03	1X	16	Re-extracted and re-analyzed sample		
<b>SD-273-03-Re</b>	<b>1X</b>	<b>49</b>		<b>Yes</b>	<b>Use re-extracted sample results, no action</b>

- The matrix spike (MS) percent recovery (%R) of all PCB homologs were less than the lower quality control limit in spiked sample SD-263-01. The matrix spike duplicate (MSD) %Rs of all PCB homologs except nonachlorobiphenyl were less than the lower quality control limit. The relative percent differences (RPDs) for pentachlorobiphenyl, tetrachlorobiphenyl and

TO: M. Martin  
FROM: A. Cognetti  
SDG: 680-102521-1  
DATE: August 29, 2014

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trichlorobiphenyl exceeded quality control limits. All detected and nondetected results were qualified as estimated (J) and (UJ), respectively in sample SD-263-01.

- The MSD %Rs of every PCB homologs were less than the lower quality control limit and the RPDs exceeded quality control limits in spiked sample SD-264-01. All detected and nondetected results were qualified as estimated (J) and (UJ), respectively in sample SD-264-01.
- The MS/MSD %Rs of every PCB homolog were less than the lower quality control limit in spiked sample SD-271-01. All detected and nondetected results were qualified as estimated (J) and (UJ), respectively in sample SD-271-01.
- Samples SD-250-SS, SD-262-SS, SD-263-01, SD-263-SS, SD-264-01, SD-264-SS, SD-265-01, SD-265-SS, SD-273-SS and SD-Dup-05 contained less than 30% solids. The detected and nondetected results were qualified as estimated (J) and (UJ), respectively.
- The internal standard area of chrysene-d12 was greater than the 130% quality control limit in sample SD-250-02. The detected results quantitated using this internal standard were qualified as estimated (J).
- Field duplicate imprecision was noted in the field duplicate pair SD-Dup-05 and SD-262-SS. The variance was greater than the 2X the reporting limit for tetrachlorobiphenyl. The detected and nondetected tetrachlorobiphenyl results were qualified as estimated (J) and (UJ), respectively.

#### Notes

Samples SD-251-SS and SD-251-SS-Re were missing % moisture on the form 1s and EDD. The laboratory was contacted to provide this missing information.

Sample SD-271-03 was not listed on the chain of custody but was analyzed by the laboratory. This item is noted for completeness.

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

#### EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Continuing calibration %Ds noncompliances were noted. Several samples had surrogate recoveries outside quality control limits. Internal standard noncompliance was noted in sample SD-250-02. Nondetected results in sample SD-265-02 were rejected because of a poor surrogate recovery. Many samples were qualified because of noncompliant surrogate recoveries and the sample results were qualified as estimated.

**Other Factors Affecting Data Quality:** MS noncompliances were noted in samples SD-263-01, SD-264-01 and SD-271-01. Several samples contained less than 30% solids. Field duplicate imprecision was noted in the field duplicate pair SD-Dup-05 and SD-262-SS. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

TO: M. Martin  
FROM: A. Cognetti  
SDG: 680-102521-1  
DATE: August 29, 2014

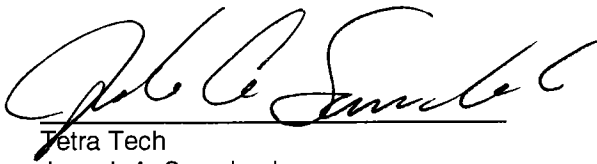
Page: 6

The data for these analyses were reviewed with reference to EPA Method 680 and the USEPA National Functional Guidelines for Organic Data Validation (June 2008).



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Tetra Tech  
Ann Cognetti  
Chemist/Data Validator



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Tetra Tech  
Joseph A. Samchuck  
Data Validation Manager

Attachments:

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



**APPENDIX A**

**QUALIFIED ANALYTICAL RESULTS**

**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 ( $< 2 \times$  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 standard deviations is greater than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed
- Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 05220	NSAMPLE	SD-250-01	SD-250-02	SD-250-03	SD-250-SS				
SDG: 680-102521-1	LAB_ID	680-102521-2	680-102521-3	680-102521-4	680-102521-1				
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	30.8	40.2	46.4	25.2				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	40 UJ	40 UJ	CR	61 U	27 UJ	UJ	C	48 UJ	CRY
DICHLOROBIPHENYL	17 UJ	17 UJ	R	26 U	11 U			20 UJ	RY
HEPTACHLOROBIPHENYL	340 J	340 J	PR	2400 J	3600			190 J	PRY
HEXACHLOROBIPHENYL	670 J	670 J	R	2500	4000			340 J	PRY
MONOCHLOROBIPHENYL	9.3 UJ	9.3 UJ	R	14 U	6.1 U			11 UJ	RY
NONACHLOROBIPHENYL	160 UJ	160 UJ	CR	240 U	110 UJ		C	190 UJ	CRY
OCTACHLOROBIPHENYL	26 UJ	26 UJ	R	540 J	410		NP	31 UJ	RY
PENTACHLOROBIPHENYL	940 J	940 J	R	5100	4000			140 J	PRY
TETRACHLOROBIPHENYL	2200 J	2200 J	R	37000	18000			410 J	RY
TRICHLOROBIPHENYL	68 J	68 J	PR	2500	1300			9.9 UJ	RY

PROJ_NO: 05220	NSAMPLE	SD-251-01	SD-251-02	SD-251-03	SD-251-SS-RE				
SDG: 680-102521-1	LAB_ID	680-102521-6	680-102521-7	680-102521-8	680-102521-5				
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	42.5	49.1	56.3	25.2				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	5.8 UJ	5.1 UJ	C	4.4 UJ	4.4 UJ	C	10 UJ	10 UJ	CR
DICHLOROBIPHENYL	2.4 U	2.1 U		1.9 U	1.9 U		4.4 UJ	4.4 UJ	R
HEPTACHLOROBIPHENYL	3.5 U	3.1 U		2.7 U	2.7 U		1700 J	1700 J	R
HEXACHLOROBIPHENYL	2.3 U	2 U		1.8 U	1.8 U		1100 J	1100 J	R
MONOCHLOROBIPHENYL	1.3 U	1.2 U		1 U	1 U		2.4 UJ	2.4 UJ	R
NONACHLOROBIPHENYL	23 UJ	20 UJ	C	18 UJ	18 UJ	C	41 UJ	41 UJ	CR
OCTACHLOROBIPHENYL	3.7 U	3.2 U		2.8 U	2.8 U		140 J	140 J	R
PENTACHLOROBIPHENYL	2.4 U	5.2 J	P	1.8 U	1.8 U		580 J	580 J	R
TETRACHLOROBIPHENYL	60	8.2 J	P	2.6 J	2.6 J	P	740 J	740 J	R
TRICHLOROBIPHENYL	3.1 J	1 U	P	0.9 U	0.9 U		19 J	19 J	PR

PROJ_NO: 05220	NSAMPLE	SD-262-01	SD-262-02	SD-262-03	SD-262-SS	
SDG: 680-102521-1	LAB_ID	680-102521-10	680-102521-11	680-102521-12	680-102521-9	
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	33.9	40.9	49.4	23.0	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	36 UJ	6.1 UJ	C	5 UJ	11 UJ	CRY
DICHLOROBIPHENYLS	15 U	2.6 U		2.1 U	4.5 UJ	RY
HEPTACHLOROBIPHENYLS	22 U	3.7 U		3 U	98 J	PRY
HEXACHLOROBIPHENYL	140 J	2.4 U	P	2 U	150 J	RY
MONOCHLOROBIPHENYLS	8.3 U	1.4 U		1.1 U	2.5 UJ	RY
NONACHLOROBIPHENYLS	140 UJ	24 UJ	C	20 UJ	43 UJ	CRY
OCTACHLOROBIPHENYLS	23 U	3.9 U		3.2 U	6.8 UJ	RY
PENTACHLOROBIPHENYLS	91 J	2.5 U	P	2.1 U	200 J	RY
TETRACHLOROBIPHENYLS	150 J	2.7 U	P	2.2 U	330 J	GRY
TRICHLOROBIPHENYLS	12 J	1.3 U	P	1 U	2.2 UJ	RY

PROJ_NO: 05220	NSAMPLE	SD-263-01	SD-263-02-RE	SD-263-03	SD-263-SS				
SDG: 680-102521-1	LAB_ID	680-102521-15	680-102521-16	680-102521-17	680-102521-14				
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	25.8	36.2	59.4	20.2				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	9.5 UJ	14 UJ	C	4.2 U	61 UJ	Y			
DICHLOROBIPHENYLS	4 UJ	5.8 U		1.8 U	26 UJ	Y			
HEPTACHLOROBIPHENYLS	470 J	580		2.5 U	83 J	PY			
HEXACHLOROBIPHENYL	670 J	270		1.7 U	240 J	PY			
MONOCHLOROBIPHENYLS	2.2 UJ	3.1 U		0.96 U	14 UJ	Y			
NONACHLOROBIPHENYLS	38 UJ	55 UJ	C	17 U	240 UJ	Y			
OCTACHLOROBIPHENYLS	6.1 UJ	130 J	P	2.7 U	39 UJ	Y			
PENTACHLOROBIPHENYLS	920 J	930		4.8 J	38 J	PY			
TETRACHLOROBIPHENYLS	3300 J	6200		30 J	180 J	PY			
TRICHLOROBIPHENYLS	200 J	470		4.3 J	12 UJ	Y			

PROJ_NO: 05220	NSAMPLE	SD-264-01	SD-264-02	SD-264-03	SD-264-SS				
SDG: 680-102521-1	LAB_ID	680-102521-19	680-102521-20	680-102521-21	680-102521-18				
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	29.2	33.4	52.9	26.8				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	8.5 UJ	74 U	DY	3.1 U	9.2 UJ	RY			
DICHLOROBIPHENYLS	3.6 UJ	31 U	DY	1.3 U	3.9 UJ	RY			
HEPTACHLOROBIPHENYLS	870 J	610 J	DY	1.9 U	95 J	PRY			
HEXACHLOROBIPHENYL	1200 J	650	DY	1.2 U	98 J	RY			
MONOCHLOROBIPHENYLS	2 UJ	17 U	DY	0.72 U	2.1 UJ	RY			
NONACHLOROBIPHENYLS	34 UJ	300 U	DY	12 U	37 UJ	RY			
OCTACHLOROBIPHENYLS	35 J	47 U	DPY	2 U	5.9 UJ	RY			
PENTACHLOROBIPHENYLS	1300 J	2300	DY	1.3 U	70 J	PRY			
TETRACHLOROBIPHENYLS	2700 J	12000	DY	56	92 J	RY			
TRICHLOROBIPHENYLS	1.7 UJ	850	DY	0.64 U	1.9 UJ	RY			

PROJ_NO: 05220	NSAMPLE	SD-265-01	SD-265-02	SD-265-03	SD-265-SS	
SDG: 680-102521-1	LAB_ID	680-102521-23	680-102521-24	680-102521-25	680-102521-22	
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	26.3	30.9	35.0	21.2	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	6.3 UJ	5.4 UR	R	24 U	39 UJ	Y
DICHLOROBIPHENYL	2.7 UJ	2.3 UR	R	10 U	17 UJ	Y
HEPTACHLOROBIPHENYL	130 J	69 J	R	240 J	140 J	PY
HEXACHLOROBIPHENYL	170 J	97 J	R	360	200 J	PY
MONOCHLOROBIPHENYL	1.4 UJ	1.2 UR	R	5.4 U	9 UJ	Y
NONACHLOROBIPHENYL	25 UJ	21 UR	R	94 U	160 UJ	Y
OCTACHLOROBIPHENYL	17 J	9.9 J	PR	57 J	25 UJ	Y
PENTACHLOROBIPHENYL	120 J	79 J	R	790	97 J	PY
TETRACHLOROBIPHENYL	250 J	170 J	R	4500	300 J	PY
TRICHLOROBIPHENYL	1.3 UJ	2.8 J	PR	300	8 UJ	Y



PROJ_NO: 05220	NSAMPLE	SD-268-01	SD-268-02	SD-268-03	SD-268-SS-RE	
SDG: 680-102521-1	LAB_ID	680-102521-27	680-102521-28	680-102521-29	680-102521-26	
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	34.8	48.1	50.3	30.3	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	48 U	17 U		3.3 U	41 UJ	C
DICHLOROBIPHENYLS	20 U	7.2 U		1.4 U	17 U	
HEPTACHLOROBIPHENYLS	3400	10 U		2 U	9100	
HEXACHLOROBIPHENYL	3600	75 J	P	1.3 U	5400	
MONOCHLOROBIPHENYLS	11 U	3.9 U		0.75 U	9.4 U	
NONACHLOROBIPHENYLS	190 U	68 U		13 U	160 UJ	C
OCTACHLOROBIPHENYLS	410 J	11 U	P	2.1 U	1300	
PENTACHLOROBIPHENYLS	2800	99 J		1.3 U	5100	
TETRACHLOROBIPHENYLS	11000	150		5.6 J	20000	
TRICHLOROBIPHENYLS	670	69		0.67 U	1300	

PROJ_NO: 05220	NSAMPLE	SD-269-01	SD-269-02-RE	SD-269-03	SD-269-SS-RE	
SDG: 680-102521-1	LAB_ID	680-102521-36	680-102521-37	680-102521-38	680-102521-35	
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	32.5	41.8	70.5	32.6	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	51 U	5.9 UJ	C	2.3 U	76 U	
DICHLOROBIPHENYLS	21 U	2.5 U		0.99 U	36 J	P
HEPTACHLOROBIPHENYLS	31 U	3.6 U		1.4 U	5600	
HEXACHLOROBIPHENYL	20 U	20 J	P	0.93 U	6300	
MONOCHLOROBIPHENYLS	12 U	1.4 U		0.54 U	17 U	
NONACHLOROBIPHENYLS	200 U	24 UJ	C	9.3 U	300 U	
OCTACHLOROBIPHENYLS	32 U	3.8 U		1.5 U	750 J	P
PENTACHLOROBIPHENYLS	21 U	26 J	P	0.96 U	5700	
TETRACHLOROBIPHENYLS	220 J	7.7 J	P	1 U	35000	
TRICHLOROBIPHENYLS	10 U	2.4 J	P	0.48 U	2800	

PROJ_NO: 05220	NSAMPLE	SD-270-01-RE	SD-270-02-RE	SD-270-03	SD-270-SS-RE				
SDG: 680-102521-1	LAB_ID	680-102521-31	680-102521-32	680-102521-33	680-102521-30				
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	35.9	56.1	73.4	33.0				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	35 UJ	4.4 UJ	C		2.3 U		75 UJ		C
DICHLOROBIPHENYLS	15 U	1.9 U			0.95 U		32 U		
HEPTACHLOROBIPHENYLS	1100	2.7 U			4.7 J	P	26000		
HEXACHLOROBIPHENYL	890	13 J	P		6.8 J	P	25000		
MONOCHLOROBIPHENYLS	7.9 U	1 U			0.52 U		17 U		
NONACHLOROBIPHENYLS	140 UJ	18 UJ	C		8.9 U		360 J		CP
OCTACHLOROBIPHENYLS	79 J	2.8 U	P		1.4 U		3400		
PENTACHLOROBIPHENYLS	1300	13 J	P		5.2 J	P	16000		
TETRACHLOROBIPHENYLS	5500	49			34		34000		
TRICHLOROBIPHENYLS	490	3.3 J	P		2.2 J	P	1800		

PROJ_NO: 05220	NSAMPLE	SD-271-01	SD-271-02	SD-271-SS-RE	SD-273-01-RE				
SDG: 680-102521-1	LAB_ID	680-102521-40	680-102521-41	680-102521-39	680-102521-43				
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	37.7	72.5	30.4	34.5				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	4.4 UJ	1.1 U	D	8.1 UJ	7.2 UJ	C	7.2 UJ	3 U	C
DICHLOROBIPHENYLS	1.8 UJ	0.48 U	D	6.6 J	3 U	P	600		
HEPTACHLOROBIPHENYLS	210 J	0.69 U	D	370	360		360		
HEXACHLOROBIPHENYL	250 J	0.45 U	D	570	1.6 U		1.6 U		
MONOCHLOROBIPHENYLS	1 UJ	0.26 U	D	1.9 U	29 UJ		29 UJ		C
NONACHLOROBIPHENYLS	17 UJ	4.5 U	D	32 UJ	170		170		
OCTACHLOROBIPHENYLS	38 J	0.73 U	DP	34 J	1000		1000		
PENTACHLOROBIPHENYLS	250 J	0.65 J	D	980	1900		1900		
TETRACHLOROBIPHENYLS	1400 J	3.6 J	D	6200	87		87		
TRICHLOROBIPHENYLS	100 J	0.54 J	D	420					

PROJ_NO: 05220	NSAMPLE	SD-273-02	SD-273-03-RE	SD-273-SS	SD-DUP05			
SDG: 680-102521-1	LAB_ID	680-102521-44	680-102521-45	680-102521-42	680-102521-13			
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014	6/18/2014	6/18/2014			
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	FD			
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG			
	PCT_SOLIDS	82.8	52.7	28.4	22.0			
	DUP_OF							
PARAMETER	RESULT	VQL	RESULT	VQL	RESULT	VQL	QLCD	QLCD
DECACHLOROBIPHENYL	10 U		4.7 U	29 UJ		110 UJ		Y
DICHLOROBIPHENYLS	4.2 U		2 U	12 UJ				Y
HEPTACHLOROBIPHENYLS	6 U		2.8 U	480 J				Y
HEXACHLOROBIPHENYL	4 U		1.9 U	780 J				Y
MONOCHLOROBIPHENYLS	2.3 U		1.1 U	6.6 UJ				Y
NONACHLOROBIPHENYLS	40 U		19 U	120 UJ				Y
OCTACHLOROBIPHENYLS	6.4 U		3 U	45 J				PY
PENTACHLOROBIPHENYLS	4.1 U		1.9 U	400 J				Y
TETRACHLOROBIPHENYLS	12 J		3 J	3600 J				Y
TRICHLOROBIPHENYLS	2 U		0.96 U	250 J				Y

PROJ_NO: 05220	NSAMPLE	SD-DUP05	SD-DUP06-RE			
SDG: 680-102521-1	LAB_ID	680-102521-13	680-102521-34			
FRACTION: PCB	SAMP_DATE	6/18/2014	6/18/2014			
MEDIA: SEDIMENT	QC_TYPE	FD	FD			
	UNITS	UG/KG	UG/KG			
	PCT_SOLIDS	22.0	62.2			
	DUP_OF	SD-262-SS	SD-270-02			
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL						
DICHLOROBIPHENYL	48 UJ	Y	C	1.7 U		
HEPTACHLOROBIPHENYL	68 UJ	Y		2.4 U		
HEXACHLOROBIPHENYL	45 UJ	Y		1.6 U		
MONOCHLOROBIPHENYL	26 UJ	Y		0.91 U		
NONACHLOROBIPHENYL	450 UJ	Y		16 UJ	C	
OCTACHLOROBIPHENYL	72 UJ	Y		2.5 U		
PENTACHLOROBIPHENYL	46 UJ	Y		6.6 J	P	
TETRACHLOROBIPHENYL	50 UJ	GY		1.8 U		
TRICHLOROBIPHENYL	23 UJ	Y		1.2 J	P	

**APPENDIX B**

**RESULTS AS REPORTED BY THE LABORATORY**

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-250-01 Lab Sample ID: 680-102521-2  
 Matrix: Solid Lab File ID: XG2112.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:00  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.00(g) Date Analyzed: 07/21/2014 19:21  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 69.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	40	U	830	40
25512-42-9	Dichlorobiphenyl	17	U	160	17
28655-71-2	Heptachlorobiphenyl	340	J	490	24
26601-64-9	Hexachlorobiphenyl	670		330	16
27323-18-8	Monochlorobiphenyl	9.3	U	160	9.3
53742-07-7	Nonachlorobiphenyl	160	U	830	160
55722-26-4	Octachlorobiphenyl	26	U	490	26
25429-29-2	Pentachlorobiphenyl	940		330	17
26914-33-0	Tetrachlorobiphenyl	2200		330	18
25323-68-6	Trichlorobiphenyl	68	J	160	8.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	27	X	30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-250-01 RE Lab Sample ID: 680-102521-2 RE  
 Matrix: Solid Lab File ID: XG2614.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:00  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.02(g) Date Analyzed: 07/27/2014 01:45  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 69.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	40	U	830	40
25512-42-9	Dichlorobiphenyl	17	U	160	17
28655-71-2	Heptachlorobiphenyl	64	J	490	24
26601-64-9	Hexachlorobiphenyl	180	J	330	16
27323-18-8	Monochlorobiphenyl	9.2	U	160	9.2
53742-07-7	Nonachlorobiphenyl	160	U	830	160
55722-26-4	Octachlorobiphenyl	26	U	490	26
25429-29-2	Pentachlorobiphenyl	97	J	330	17
26914-33-0	Tetrachlorobiphenyl	590		330	18
25323-68-6	Trichlorobiphenyl	18	J	160	8.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	8	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-250-02 Lab Sample ID: 680-102521-3  
 Matrix: Solid Lab File ID: XG2406.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:05  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.16(g) Date Analyzed: 07/24/2014 22:24  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 59.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	61	U	1200	61
25512-42-9	Dichlorobiphenyl	26	U	240	26
28655-71-2	Heptachlorobiphenyl	2400		730	37
26601-64-9	Hexachlorobiphenyl	2500		490	24
27323-18-8	Monochlorobiphenyl	14	U	240	14
53742-07-7	Nonachlorobiphenyl	240	U	1200	240
55722-26-4	Octachlorobiphenyl	540	J	730	39
25429-29-2	Pentachlorobiphenyl	5100		490	25
26914-33-0	Tetrachlorobiphenyl	37000		490	27
25323-68-6	Trichlorobiphenyl	2500		240	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-250-03 Lab Sample ID: 680-102521-4  
 Matrix: Solid Lab File ID: XG2114.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:10  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.10(g) Date Analyzed: 07/21/2014 20:18  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 5  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 53.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	27	U	540	27
25512-42-9	Dichlorobiphenyl	11	U	110	11
28655-71-2	Heptachlorobiphenyl	3600		320	16
26601-64-9	Hexachlorobiphenyl	4000		210	11
27323-18-8	Monochlorobiphenyl	6.1	U	110	6.1
53742-07-7	Nonachlorobiphenyl	110	U	540	110
55722-26-4	Octachlorobiphenyl	410		320	17
25429-29-2	Pentachlorobiphenyl	4000		210	11
26914-33-0	Tetrachlorobiphenyl	18000		210	12
25323-68-6	Trichlorobiphenyl	1300		110	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	38		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-250-SS Lab Sample ID: 680-102521-1  
 Matrix: Solid Lab File ID: XG2111.D  
 Analysis Method: 680 Date Collected: 06/18/2014 07:55  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.20(g) Date Analyzed: 07/21/2014 18:53  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 74.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	48	U	990	48
25512-42-9	Dichlorobiphenyl	20	U	190	20
28655-71-2	Heptachlorobiphenyl	190	J	580	29
26601-64-9	Hexachlorobiphenyl	340	J	390	19
27323-18-8	Monochlorobiphenyl	11	U	190	11
53742-07-7	Nonachlorobiphenyl	190	U	990	190
55722-26-4	Octachlorobiphenyl	31	U	580	31
25429-29-2	Pentachlorobiphenyl	140	J	390	20
26914-33-0	Tetrachlorobiphenyl	410		390	22
25323-68-6	Trichlorobiphenyl	9.9	U	190	9.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	24	X	30-130

FORM I  
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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-250-SS RE Lab Sample ID: 680-102521-1 RE  
 Matrix: Solid Lab File ID: XG2613.D  
 Analysis Method: 680 Date Collected: 06/18/2014 07:55  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.04(g) Date Analyzed: 07/27/2014 01:17  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 74.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	49	U	1000	49
25512-42-9	Dichlorobiphenyl	21	U	200	21
28655-71-2	Heptachlorobiphenyl	30	U	590	30
26601-64-9	Hexachlorobiphenyl	43	J	400	20
27323-18-8	Monochlorobiphenyl	11	U	200	11
53742-07-7	Nonachlorobiphenyl	200	U	1000	200
55722-26-4	Octachlorobiphenyl	31	U	590	31
25429-29-2	Pentachlorobiphenyl	20	U	400	20
26914-33-0	Tetrachlorobiphenyl	110	J	400	22
25323-68-6	Trichlorobiphenyl	10	U	200	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	8	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-251-01 Lab Sample ID: 680-102521-6  
 Matrix: Solid Lab File ID: XG2116.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:35  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.13(g) Date Analyzed: 07/21/2014 21:15  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 57.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.8	U	120	5.8
25512-42-9	Dichlorobiphenyl	2.4	U	23	2.4
28655-71-2	Heptachlorobiphenyl	3.5	U	70	3.5
26601-64-9	Hexachlorobiphenyl	2.3	U	47	2.3
27323-18-8	Monochlorobiphenyl	1.3	U	23	1.3
53742-07-7	Nonachlorobiphenyl	23	U	120	23
55722-26-4	Octachlorobiphenyl	3.7	U	70	3.7
25429-29-2	Pentachlorobiphenyl	2.4	U	47	2.4
26914-33-0	Tetrachlorobiphenyl	60		47	2.6
25323-68-6	Trichlorobiphenyl	3.1	J	23	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	32		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-251-02 Lab Sample ID: 680-102521-7  
 Matrix: Solid Lab File ID: XG2117.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:40  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 9.99(g) Date Analyzed: 07/21/2014 21:44  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 50.9 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.1	U	100	5.1
25512-42-9	Dichlorobiphenyl	2.1	U	20	2.1
28655-71-2	Heptachlorobiphenyl	3.1	U	61	3.1
26601-64-9	Hexachlorobiphenyl	2.0	U	41	2.0
27323-18-8	Monochlorobiphenyl	1.2	U	20	1.2
53742-07-7	Nonachlorobiphenyl	20	U	100	20
55722-26-4	Octachlorobiphenyl	3.2	U	61	3.2
25429-29-2	Pentachlorobiphenyl	5.2	J	41	2.1
26914-33-0	Tetrachlorobiphenyl	8.2	J	41	2.3
25323-68-6	Trichlorobiphenyl	1.0	U	20	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	36		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-251-03 Lab Sample ID: 680-102521-8  
 Matrix: Solid Lab File ID: XG2118.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:45  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.03(g) Date Analyzed: 07/21/2014 22:12  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 43.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.4	U	90	4.4
25512-42-9	Dichlorobiphenyl	1.9	U	18	1.9
28655-71-2	Heptachlorobiphenyl	2.7	U	53	2.7
26601-64-9	Hexachlorobiphenyl	1.8	U	36	1.8
27323-18-8	Monochlorobiphenyl	1.0	U	18	1.0
53742-07-7	Nonachlorobiphenyl	18	U	90	18
55722-26-4	Octachlorobiphenyl	2.8	U	53	2.8
25429-29-2	Pentachlorobiphenyl	1.8	U	36	1.8
26914-33-0	Tetrachlorobiphenyl	2.6	J	36	2.0
25323-68-6	Trichlorobiphenyl	0.90	U	18	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	53		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-251-SS Lab Sample ID: 680-102521-5  
 Matrix: Solid Lab File ID: XG2115.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:30  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.01(g) Date Analyzed: 07/21/2014 20:47  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 49%. AC 8/25/14 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	210	10
25512-42-9	Dichlorobiphenyl	4.4	U	41	4.4
28655-71-2	Heptachlorobiphenyl	13	J	130	6.3
26601-64-9	Hexachlorobiphenyl	35	J	84	4.1
27323-18-8	Monochlorobiphenyl	2.4	U	41	2.4
53742-07-7	Nonachlorobiphenyl	41	U	210	41
55722-26-4	Octachlorobiphenyl	6.6	U	130	6.6
25429-29-2	Pentachlorobiphenyl	4.3	U	84	4.3
26914-33-0	Tetrachlorobiphenyl	31	J	84	4.6
25323-68-6	Trichlorobiphenyl	2.1	U	41	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	24	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-251-SS RE Lab Sample ID: 680-102521-5 RE  
 Matrix: Solid Lab File ID: XG2615.D  
 Analysis Method: 680 Date Collected: 06/18/2014 08:30  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.07(g) Date Analyzed: 07/27/2014 02:14  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 49% Ac 8/25/14 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	210	10
25512-42-9	Dichlorobiphenyl	4.4	U	41	4.4
28655-71-2	Heptachlorobiphenyl	1700		120	6.2
26601-64-9	Hexachlorobiphenyl	1100		83	4.1
27323-18-8	Monochlorobiphenyl	2.4	U	41	2.4
53742-07-7	Nonachlorobiphenyl	41	U	210	41
55722-26-4	Octachlorobiphenyl	140		120	6.6
25429-29-2	Pentachlorobiphenyl	580		83	4.2
26914-33-0	Tetrachlorobiphenyl	740		83	4.6
25323-68-6	Trichlorobiphenyl	19	J	41	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	21	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-262-01 Lab Sample ID: 680-102521-10  
 Matrix: Solid Lab File ID: XG2120.D  
 Analysis Method: 680 Date Collected: 06/18/2014 09:20  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.07(g) Date Analyzed: 07/21/2014 23:09  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 66.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	36	U	750	36
25512-42-9	Dichlorobiphenyl	15	U	140	15
28655-71-2	Heptachlorobiphenyl	22	U	440	22
26601-64-9	Hexachlorobiphenyl	140	J	290	14
27323-18-8	Monochlorobiphenyl	8.3	U	140	8.3
53742-07-7	Nonachlorobiphenyl	140	U	750	140
55722-26-4	Octachlorobiphenyl	23	U	440	23
25429-29-2	Pentachlorobiphenyl	91	J	290	15
26914-33-0	Tetrachlorobiphenyl	150	J	290	16
25323-68-6	Trichlorobiphenyl	12	J	140	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	32		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-262-02 Lab Sample ID: 680-102521-11  
 Matrix: Solid Lab File ID: XG2121.D  
 Analysis Method: 680 Date Collected: 06/18/2014 09:25  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 9.96(g) Date Analyzed: 07/21/2014 23:37  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 59.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	6.1	U	130	6.1
25512-42-9	Dichlorobiphenyl	2.6	U	24	2.6
28655-71-2	Heptachlorobiphenyl	3.7	U	74	3.7
26601-64-9	Hexachlorobiphenyl	2.4	U	49	2.4
27323-18-8	Monochlorobiphenyl	1.4	U	24	1.4
53742-07-7	Nonachlorobiphenyl	24	U	130	24
55722-26-4	Octachlorobiphenyl	3.9	U	74	3.9
25429-29-2	Pentachlorobiphenyl	2.5	U	49	2.5
26914-33-0	Tetrachlorobiphenyl	2.7	U	49	2.7
25323-68-6	Trichlorobiphenyl	1.3	U	24	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	39		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-262-03 Lab Sample ID: 680-102521-12  
 Matrix: Solid Lab File ID: XG2122.D  
 Analysis Method: 680 Date Collected: 06/18/2014 09:30  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.06(g) Date Analyzed: 07/22/2014 00:06  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 50.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.0	U	100	5.0
25512-42-9	Dichlorobiphenyl	2.1	U	20	2.1
28655-71-2	Heptachlorobiphenyl	3.0	U	60	3.0
26601-64-9	Hexachlorobiphenyl	2.0	U	40	2.0
27323-18-8	Monochlorobiphenyl	1.1	U	20	1.1
53742-07-7	Nonachlorobiphenyl	20	U	100	20
55722-26-4	Octachlorobiphenyl	3.2	U	60	3.2
25429-29-2	Pentachlorobiphenyl	2.1	U	40	2.1
26914-33-0	Tetrachlorobiphenyl	2.2	U	40	2.2
25323-68-6	Trichlorobiphenyl	1.0	U	20	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	41		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-262-SS Lab Sample ID: 680-102521-9  
 Matrix: Solid Lab File ID: XG2119.D  
 Analysis Method: 680 Date Collected: 06/18/2014 09:15  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.08 (g) Date Analyzed: 07/21/2014 22:41  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 77.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	11	U	220	11
25512-42-9	Dichlorobiphenyl	4.5	U	43	4.5
28655-71-2	Heptachlorobiphenyl	98	J	130	6.5
26601-64-9	Hexachlorobiphenyl	150		87	4.3
27323-18-8	Monochlorobiphenyl	2.5	U	43	2.5
53742-07-7	Nonachlorobiphenyl	43	U	220	43
55722-26-4	Octachlorobiphenyl	6.8	U	130	6.8
25429-29-2	Pentachlorobiphenyl	200		87	4.4
26914-33-0	Tetrachlorobiphenyl	330		87	4.8
25323-68-6	Trichlorobiphenyl	2.2	U	43	2.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	10	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-262-SS RE Lab Sample ID: 680-102521-9 RE  
 Matrix: Solid Lab File ID: XG2616.D  
 Analysis Method: 680 Date Collected: 06/18/2014 09:15  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.00(g) Date Analyzed: 07/27/2014 02:42  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 77.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	11	U	220	11
25512-42-9	Dichlorobiphenyl	4.6	U	43	4.6
28655-71-2	Heptachlorobiphenyl	59	J	130	6.5
26601-64-9	Hexachlorobiphenyl	65	J	87	4.3
27323-18-8	Monochlorobiphenyl	2.5	U	43	2.5
53742-07-7	Nonachlorobiphenyl	43	U	220	43
55722-26-4	Octachlorobiphenyl	6.9	U	130	6.9
25429-29-2	Pentachlorobiphenyl	110		87	4.4
26914-33-0	Tetrachlorobiphenyl	210		87	4.8
25323-68-6	Trichlorobiphenyl	2.2	U	43	2.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	8	X	30-130

FORM I  
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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-263-01 Lab Sample ID: 680-102521-15  
 Matrix: Solid Lab File ID: XG2308.D  
 Analysis Method: 680 Date Collected: 06/18/2014 10:40  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.19(g) Date Analyzed: 07/23/2014 13:23  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 74.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	9.5	U	190	9.5
25512-42-9	Dichlorobiphenyl	4.0	U	38	4.0
28655-71-2	Heptachlorobiphenyl	470		110	5.7
26601-64-9	Hexachlorobiphenyl	670		77	3.8
27323-18-8	Monochlorobiphenyl	2.2	U	38	2.2
53742-07-7	Nonachlorobiphenyl	38	U	190	38
55722-26-4	Octachlorobiphenyl	6.1	U	110	6.1
25429-29-2	Pentachlorobiphenyl	920		77	3.9
26914-33-0	Tetrachlorobiphenyl	3300		77	4.2
25323-68-6	Trichlorobiphenyl	200		38	1.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	41		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-263-02 Lab Sample ID: 680-102521-16  
 Matrix: Solid Lab File ID: XG2309.D  
 Analysis Method: 680 Date Collected: 06/18/2014 10:45  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 9.99(g) Date Analyzed: 07/23/2014 13:52  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 63.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	6.9	U	140	6.9
25512-42-9	Dichlorobiphenyl	3.5	J	27	2.9
28655-71-2	Heptachlorobiphenyl	640		83	4.1
26601-64-9	Hexachlorobiphenyl	880		56	2.7
27323-18-8	Monochlorobiphenyl	1.6	U	27	1.6
53742-07-7	Nonachlorobiphenyl	27	U	140	27
55722-26-4	Octachlorobiphenyl	190		83	4.4
25429-29-2	Pentachlorobiphenyl	1000		56	2.8
26914-33-0	Tetrachlorobiphenyl	4700		56	3.1
25323-68-6	Trichlorobiphenyl	400		27	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	22	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-263-02 RE Lab Sample ID: 680-102521-16 RE  
 Matrix: Solid Lab File ID: XG2642.D  
 Analysis Method: 680 Date Collected: 06/18/2014 10:45  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.02(g) Date Analyzed: 07/27/2014 15:12  
 Con. Extract Vol.: 1(mL) Dilution Factor: 2  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 63.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	14	U	280	14
25512-42-9	Dichlorobiphenyl	5.8	U	55	5.8
28655-71-2	Heptachlorobiphenyl	580		170	8.3
26601-64-9	Hexachlorobiphenyl	270		110	5.5
27323-18-8	Monochlorobiphenyl	3.1	U	55	3.1
53742-07-7	Nonachlorobiphenyl	55	U	280	55
55722-26-4	Octachlorobiphenyl	130	J	170	8.8
25429-29-2	Pentachlorobiphenyl	930		110	5.6
26914-33-0	Tetrachlorobiphenyl	6200		110	6.1
25323-68-6	Trichlorobiphenyl	470		55	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	32		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-263-03 Lab Sample ID: 680-102521-17  
 Matrix: Solid Lab File ID: XG2310.D  
 Analysis Method: 680 Date Collected: 06/18/2014 10:50  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 9.97(g) Date Analyzed: 07/23/2014 14:21  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 40.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.2	U	86	4.2
25512-42-9	Dichlorobiphenyl	1.8	U	17	1.8
28655-71-2	Heptachlorobiphenyl	2.5	U	51	2.5
26601-64-9	Hexachlorobiphenyl	1.7	U	34	1.7
27323-18-8	Monochlorobiphenyl	0.96	U	17	0.96
53742-07-7	Nonachlorobiphenyl	17	U	86	17
55722-26-4	Octachlorobiphenyl	2.7	U	51	2.7
25429-29-2	Pentachlorobiphenyl	4.8	J	34	1.7
26914-33-0	Tetrachlorobiphenyl	30	J	34	1.9
25323-68-6	Trichlorobiphenyl	4.3	J	17	0.86

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	62		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-263-SS Lab Sample ID: 680-102521-14  
 Matrix: Solid Lab File ID: XG2307.D  
 Analysis Method: 680 Date Collected: 06/18/2014 10:35  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.14(g) Date Analyzed: 07/23/2014 12:55  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 79.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	61	U	1200	61
25512-42-9	Dichlorobiphenyl	26	U	240	26
28655-71-2	Heptachlorobiphenyl	83	J	730	37
26601-64-9	Hexachlorobiphenyl	240	J	490	24
27323-18-8	Monochlorobiphenyl	14	U	240	14
53742-07-7	Nonachlorobiphenyl	240	U	1200	240
55722-26-4	Octachlorobiphenyl	39	U	730	39
25429-29-2	Pentachlorobiphenyl	38	J	490	25
26914-33-0	Tetrachlorobiphenyl	180	J	490	27
25323-68-6	Trichlorobiphenyl	12	U	240	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	32		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-264-01 Lab Sample ID: 680-102521-19  
 Matrix: Solid Lab File ID: XG2938.D  
 Analysis Method: 680 Date Collected: 06/18/2014 11:05  
 Extract. Method: 680 Date Extracted: 07/29/2014 14:28  
 Sample wt/vol: 10.00(g) Date Analyzed: 07/30/2014 15:45  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 70.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341486 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	8.5	U	170	8.5
25512-42-9	Dichlorobiphenyl	3.6	U	34	3.6
28655-71-2	Heptachlorobiphenyl	870		100	5.1
26601-64-9	Hexachlorobiphenyl	1200		69	3.4
27323-18-8	Monochlorobiphenyl	2.0	U	34	2.0
53742-07-7	Nonachlorobiphenyl	34	U	170	34
55722-26-4	Octachlorobiphenyl	35	J	100	5.4
25429-29-2	Pentachlorobiphenyl	1300		69	3.5
26914-33-0	Tetrachlorobiphenyl	2700		69	3.8
25323-68-6	Trichlorobiphenyl	1.7	U	34	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	64		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-264-02 Lab Sample ID: 680-102521-20  
 Matrix: Solid Lab File ID: XG2408.D  
 Analysis Method: 680 Date Collected: 06/18/2014 11:10  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.02(g) Date Analyzed: 07/24/2014 23:22  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 66.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	74	U	1500	74
25512-42-9	Dichlorobiphenyl	31	U	300	31
28655-71-2	Heptachlorobiphenyl	610	J	900	45
26601-64-9	Hexachlorobiphenyl	650		600	30
27323-18-8	Monochlorobiphenyl	17	U	300	17
53742-07-7	Nonachlorobiphenyl	300	U	1500	300
55722-26-4	Octachlorobiphenyl	47	U	900	47
25429-29-2	Pentachlorobiphenyl	2300		600	30
26914-33-0	Tetrachlorobiphenyl	12000		600	33
25323-68-6	Trichlorobiphenyl	850		300	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-264-03 Lab Sample ID: 680-102521-21  
 Matrix: Solid Lab File ID: XG2319.D  
 Analysis Method: 680 Date Collected: 06/18/2014 11:15  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.00(g) Date Analyzed: 07/23/2014 18:40  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 47.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.1	U	64	3.1
25512-42-9	Dichlorobiphenyl	1.3	U	12	1.3
28655-71-2	Heptachlorobiphenyl	1.9	U	38	1.9
26601-64-9	Hexachlorobiphenyl	1.2	U	25	1.2
27323-18-8	Monochlorobiphenyl	0.72	U	12	0.72
53742-07-7	Nonachlorobiphenyl	12	U	64	12
55722-26-4	Octachlorobiphenyl	2.0	U	38	2.0
25429-29-2	Pentachlorobiphenyl	1.3	U	25	1.3
26914-33-0	Tetrachlorobiphenyl	56		25	1.4
25323-68-6	Trichlorobiphenyl	0.64	U	12	0.64

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	49		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-264-SS Lab Sample ID: 680-102521-18  
 Matrix: Solid Lab File ID: XG2311.D  
 Analysis Method: 680 Date Collected: 06/18/2014 11:00  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 10.08(g) Date Analyzed: 07/23/2014 14:49  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 73.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	9.2	U	190	9.2
25512-42-9	Dichlorobiphenyl	3.9	U	37	3.9
28655-71-2	Heptachlorobiphenyl	95	J	110	5.6
26601-64-9	Hexachlorobiphenyl	98		74	3.7
27323-18-8	Monochlorobiphenyl	2.1	U	37	2.1
53742-07-7	Nonachlorobiphenyl	37	U	190	37
55722-26-4	Octachlorobiphenyl	5.9	U	110	5.9
25429-29-2	Pentachlorobiphenyl	70	J	74	3.8
26914-33-0	Tetrachlorobiphenyl	92		74	4.1
25323-68-6	Trichlorobiphenyl	1.9	U	37	1.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	13	X	30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-264-SS RE Lab Sample ID: 680-102521-18 RE  
 Matrix: Solid Lab File ID: XG2618.D  
 Analysis Method: 680 Date Collected: 06/18/2014 11:00  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.04(g) Date Analyzed: 07/27/2014 03:40  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 73.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	9.3	U	190	9.3
25512-42-9	Dichlorobiphenyl	3.9	U	37	3.9
28655-71-2	Heptachlorobiphenyl	5.6	U	110	5.6
26601-64-9	Hexachlorobiphenyl	8.0	J	75	3.7
27323-18-8	Monochlorobiphenyl	2.1	U	37	2.1
53742-07-7	Nonachlorobiphenyl	37	U	190	37
55722-26-4	Octachlorobiphenyl	5.9	U	110	5.9
25429-29-2	Pentachlorobiphenyl	3.8	U	75	3.8
26914-33-0	Tetrachlorobiphenyl	13	J	75	4.1
25323-68-6	Trichlorobiphenyl	1.9	U	37	1.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	3	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-265-01 Lab Sample ID: 680-102521-23  
 Matrix: Solid Lab File ID: XG2321.D  
 Analysis Method: 680 Date Collected: 06/18/2014 12:00  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 14.98(g) Date Analyzed: 07/23/2014 19:37  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 73.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	6.3	U	130	6.3
25512-42-9	Dichlorobiphenyl	2.7	U	25	2.7
28655-71-2	Heptachlorobiphenyl	130		76	3.8
26601-64-9	Hexachlorobiphenyl	170		51	2.5
27323-18-8	Monochlorobiphenyl	1.4	U	25	1.4
53742-07-7	Nonachlorobiphenyl	25	U	130	25
55722-26-4	Octachlorobiphenyl	17	J	76	4.0
25429-29-2	Pentachlorobiphenyl	120		51	2.6
26914-33-0	Tetrachlorobiphenyl	250		51	2.8
25323-68-6	Trichlorobiphenyl	1.3	U	25	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	17	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-265-01 RE Lab Sample ID: 680-102521-23 RE  
 Matrix: Solid Lab File ID: XG2619.D  
 Analysis Method: 680 Date Collected: 06/18/2014 12:00  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.00(g) Date Analyzed: 07/27/2014 04:08  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 73.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	9.5	U	190	9.5
25512-42-9	Dichlorobiphenyl	4.0	U	38	4.0
28655-71-2	Heptachlorobiphenyl	160		110	5.7
26601-64-9	Hexachlorobiphenyl	94		76	3.8
27323-18-8	Monochlorobiphenyl	2.2	U	38	2.2
53742-07-7	Nonachlorobiphenyl	38	U	190	38
55722-26-4	Octachlorobiphenyl	6.0	U	110	6.0
25429-29-2	Pentachlorobiphenyl	120		76	3.9
26914-33-0	Tetrachlorobiphenyl	190		76	4.2
25323-68-6	Trichlorobiphenyl	1.9	U	38	1.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	12	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-265-02 Lab Sample ID: 680-102521-24  
 Matrix: Solid Lab File ID: XG2322.D  
 Analysis Method: 680 Date Collected: 06/18/2014 12:05  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.01(g) Date Analyzed: 07/23/2014 20:06  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 69.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.4	U	110	5.4
25512-42-9	Dichlorobiphenyl	2.3	U	21	2.3
28655-71-2	Heptachlorobiphenyl	69		65	3.2
26601-64-9	Hexachlorobiphenyl	97		43	2.1
27323-18-8	Monochlorobiphenyl	1.2	U	21	1.2
53742-07-7	Nonachlorobiphenyl	21	U	110	21
55722-26-4	Octachlorobiphenyl	9.9	J	65	3.4
25429-29-2	Pentachlorobiphenyl	79		43	2.2
26914-33-0	Tetrachlorobiphenyl	170		43	2.4
25323-68-6	Trichlorobiphenyl	2.8	J	21	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	9	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-265-02 RE Lab Sample ID: 680-102521-24 RE  
 Matrix: Solid Lab File ID: XG2643.D  
 Analysis Method: 680 Date Collected: 06/18/2014 12:05  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.05(g) Date Analyzed: 07/27/2014 15:41  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 10  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 69.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	80	U	1600	80
25512-42-9	Dichlorobiphenyl	34	U	320	34
28655-71-2	Heptachlorobiphenyl	48	U	970	48
26601-64-9	Hexachlorobiphenyl	32	U	650	32
27323-18-8	Monochlorobiphenyl	18	U	320	18
53742-07-7	Nonachlorobiphenyl	320	U	1600	320
55722-26-4	Octachlorobiphenyl	51	U	970	51
25429-29-2	Pentachlorobiphenyl	33	U	650	33
26914-33-0	Tetrachlorobiphenyl	36	U	650	36
25323-68-6	Trichlorobiphenyl	16	U	320	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-265-03 Lab Sample ID: 680-102521-25  
 Matrix: Solid Lab File ID: XG2323.D  
 Analysis Method: 680 Date Collected: 06/18/2014 12:10  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.00(g) Date Analyzed: 07/23/2014 20:35  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 65.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	24	U	490	24
25512-42-9	Dichlorobiphenyl	10	U	94	10
28655-71-2	Heptachlorobiphenyl	240	J	290	14
26601-64-9	Hexachlorobiphenyl	360		190	9.4
27323-18-8	Monochlorobiphenyl	5.4	U	94	5.4
53742-07-7	Nonachlorobiphenyl	94	U	490	94
55722-26-4	Octachlorobiphenyl	57	J	290	15
25429-29-2	Pentachlorobiphenyl	790		190	9.7
26914-33-0	Tetrachlorobiphenyl	4500		190	11
25323-68-6	Trichlorobiphenyl	300		94	4.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	27	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-265-03 RE Lab Sample ID: 680-102521-25 RE  
 Matrix: Solid Lab File ID: XG2644.D  
 Analysis Method: 680 Date Collected: 06/18/2014 12:10  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.01(g) Date Analyzed: 07/27/2014 16:09  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 65.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	71	U	1500	71
25512-42-9	Dichlorobiphenyl	30	U	280	30
28655-71-2	Heptachlorobiphenyl	43	U	860	43
26601-64-9	Hexachlorobiphenyl	440	J	570	28
27323-18-8	Monochlorobiphenyl	16	U	280	16
53742-07-7	Nonachlorobiphenyl	280	U	1500	280
55722-26-4	Octachlorobiphenyl	45	U	860	45
25429-29-2	Pentachlorobiphenyl	520	J	570	29
26914-33-0	Tetrachlorobiphenyl	4800		570	32
25323-68-6	Trichlorobiphenyl	310		280	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-265-SS Lab Sample ID: 680-102521-22  
 Matrix: Solid Lab File ID: XG2320.D  
 Analysis Method: 680 Date Collected: 06/18/2014 11:55  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 14.99(g) Date Analyzed: 07/23/2014 19:09  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 78.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	39	U	800	39
25512-42-9	Dichlorobiphenyl	17	U	160	17
28655-71-2	Heptachlorobiphenyl	140	J	470	24
26601-64-9	Hexachlorobiphenyl	200	J	320	16
27323-18-8	Monochlorobiphenyl	9.0	U	160	9.0
53742-07-7	Nonachlorobiphenyl	160	U	800	160
55722-26-4	Octachlorobiphenyl	25	U	470	25
25429-29-2	Pentachlorobiphenyl	97	J	320	16
26914-33-0	Tetrachlorobiphenyl	300	J	320	17
25323-68-6	Trichlorobiphenyl	8.0	U	160	8.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	42		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-268-01 Lab Sample ID: 680-102521-27  
 Matrix: Solid Lab File ID: XG2409.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:25  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.02(g) Date Analyzed: 07/24/2014 23:51  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 65.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	48	U	980	48
25512-42-9	Dichlorobiphenyl	20	U	190	20
28655-71-2	Heptachlorobiphenyl	3400		570	29
26601-64-9	Hexachlorobiphenyl	3600		380	19
27323-18-8	Monochlorobiphenyl	11	U	190	11
53742-07-7	Nonachlorobiphenyl	190	U	980	190
55722-26-4	Octachlorobiphenyl	410	J	570	30
25429-29-2	Pentachlorobiphenyl	2800		380	20
26914-33-0	Tetrachlorobiphenyl	11000		380	21
25323-68-6	Trichlorobiphenyl	670		190	9.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-268-02 Lab Sample ID: 680-102521-28  
 Matrix: Solid Lab File ID: XG2335.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:30  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.05(g) Date Analyzed: 07/24/2014 02:54  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 51.9 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	17	U	350	17
25512-42-9	Dichlorobiphenyl	7.2	U	68	7.2
28655-71-2	Heptachlorobiphenyl	10	U	210	10
26601-64-9	Hexachlorobiphenyl	75	J	140	6.8
27323-18-8	Monochlorobiphenyl	3.9	U	68	3.9
53742-07-7	Nonachlorobiphenyl	68	U	350	68
55722-26-4	Octachlorobiphenyl	11	U	210	11
25429-29-2	Pentachlorobiphenyl	99	J	140	7.0
26914-33-0	Tetrachlorobiphenyl	150		140	7.7
25323-68-6	Trichlorobiphenyl	69		68	3.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	43		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-268-03 Lab Sample ID: 680-102521-29  
 Matrix: Solid Lab File ID: XG2336.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:35  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.12(g) Date Analyzed: 07/24/2014 03:23  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 49.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.3	U	67	3.3
25512-42-9	Dichlorobiphenyl	1.4	U	13	1.4
28655-71-2	Heptachlorobiphenyl	2.0	U	39	2.0
26601-64-9	Hexachlorobiphenyl	1.3	U	26	1.3
27323-18-8	Monochlorobiphenyl	0.75	U	13	0.75
53742-07-7	Nonachlorobiphenyl	13	U	67	13
55722-26-4	Octachlorobiphenyl	2.1	U	39	2.1
25429-29-2	Pentachlorobiphenyl	1.3	U	26	1.3
26914-33-0	Tetrachlorobiphenyl	5.6	J	26	1.5
25323-68-6	Trichlorobiphenyl	0.67	U	13	0.67

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	54		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-268-SS Lab Sample ID: 680-102521-26  
 Matrix: Solid Lab File ID: XG2324.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:20  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.04(g) Date Analyzed: 07/23/2014 21:04  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 69.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.5	U	110	5.5
25512-42-9	Dichlorobiphenyl	2.7	J	22	2.3
28655-71-2	Heptachlorobiphenyl	3700		66	3.3
26601-64-9	Hexachlorobiphenyl	3500		44	2.2
27323-18-8	Monochlorobiphenyl	1.3	U	22	1.3
53742-07-7	Nonachlorobiphenyl	85	J	110	22
55722-26-4	Octachlorobiphenyl	700		66	3.5
25429-29-2	Pentachlorobiphenyl	1400		44	2.2
26914-33-0	Tetrachlorobiphenyl	4000		44	2.4
25323-68-6	Trichlorobiphenyl	220		22	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	9	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-268-SS RE Lab Sample ID: 680-102521-26 RE  
 Matrix: Solid Lab File ID: XG2645.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:20  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.03(g) Date Analyzed: 07/27/2014 16:38  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 69.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	41	U	840	41
25512-42-9	Dichlorobiphenyl	17	U	160	17
28655-71-2	Heptachlorobiphenyl	9100		490	25
26601-64-9	Hexachlorobiphenyl	5400		330	16
27323-18-8	Monochlorobiphenyl	9.4	U	160	9.4
53742-07-7	Nonachlorobiphenyl	160	U	840	160
55722-26-4	Octachlorobiphenyl	1300		490	26
25429-29-2	Pentachlorobiphenyl	5100		330	17
26914-33-0	Tetrachlorobiphenyl	20000		330	18
25323-68-6	Trichlorobiphenyl	1300		160	8.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	36		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-269-01 Lab Sample ID: 680-102521-36  
 Matrix: Solid Lab File ID: XG2412.D  
 Analysis Method: 680 Date Collected: 06/18/2014 14:25  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.06(g) Date Analyzed: 07/25/2014 01:18  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 67.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	51	U	1000	51
25512-42-9	Dichlorobiphenyl	21	U	200	21
28655-71-2	Heptachlorobiphenyl	31	U	610	31
26601-64-9	Hexachlorobiphenyl	20	U	410	20
27323-18-8	Monochlorobiphenyl	12	U	200	12
53742-07-7	Nonachlorobiphenyl	200	U	1000	200
55722-26-4	Octachlorobiphenyl	32	U	610	32
25429-29-2	Pentachlorobiphenyl	21	U	410	21
26914-33-0	Tetrachlorobiphenyl	220	J	410	23
25323-68-6	Trichlorobiphenyl	10	U	200	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-269-02 Lab Sample ID: 680-102521-37  
 Matrix: Solid Lab File ID: XG2344.D  
 Analysis Method: 680 Date Collected: 06/18/2014 14:30  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.04(g) Date Analyzed: 07/24/2014 07:11  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 58.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.0	U	81	4.0
25512-42-9	Dichlorobiphenyl	1.7	U	16	1.7
28655-71-2	Heptachlorobiphenyl	2.4	U	48	2.4
26601-64-9	Hexachlorobiphenyl	2.8	J	32	1.6
27323-18-8	Monochlorobiphenyl	0.91	U	16	0.91
53742-07-7	Nonachlorobiphenyl	16	U	81	16
55722-26-4	Octachlorobiphenyl	2.5	U	48	2.5
25429-29-2	Pentachlorobiphenyl	6.4	J	32	1.6
26914-33-0	Tetrachlorobiphenyl	2.6	J	32	1.8
25323-68-6	Trichlorobiphenyl	0.81	U	16	0.81

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	10	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-269-02 RE Lab Sample ID: 680-102521-37 RE  
 Matrix: Solid Lab File ID: XG2635.D  
 Analysis Method: 680 Date Collected: 06/18/2014 14:30  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.05(g) Date Analyzed: 07/27/2014 11:52  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 58.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.9	U	120	5.9
25512-42-9	Dichlorobiphenyl	2.5	U	24	2.5
28655-71-2	Heptachlorobiphenyl	3.6	U	71	3.6
26601-64-9	Hexachlorobiphenyl	20	J	48	2.4
27323-18-8	Monochlorobiphenyl	1.4	U	24	1.4
53742-07-7	Nonachlorobiphenyl	24	U	120	24
55722-26-4	Octachlorobiphenyl	3.8	U	71	3.8
25429-29-2	Pentachlorobiphenyl	26	J	48	2.4
26914-33-0	Tetrachlorobiphenyl	7.7	J	48	2.6
25323-68-6	Trichlorobiphenyl	2.4	J	24	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	43		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-269-03 Lab Sample ID: 680-102521-38  
 Matrix: Solid Lab File ID: XG2345.D  
 Analysis Method: 680 Date Collected: 06/18/2014 14:35  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.05(g) Date Analyzed: 07/24/2014 07:40  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 29.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.3	U	48	2.3
25512-42-9	Dichlorobiphenyl	0.99	U	9.3	0.99
28655-71-2	Heptachlorobiphenyl	1.4	U	28	1.4
26601-64-9	Hexachlorobiphenyl	0.93	U	19	0.93
27323-18-8	Monochlorobiphenyl	0.54	U	9.3	0.54
53742-07-7	Nonachlorobiphenyl	9.3	U	48	9.3
55722-26-4	Octachlorobiphenyl	1.5	U	28	1.5
25429-29-2	Pentachlorobiphenyl	0.96	U	19	0.96
26914-33-0	Tetrachlorobiphenyl	1.0	U	19	1.0
25323-68-6	Trichlorobiphenyl	0.48	U	9.3	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	52		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-269-SS Lab Sample ID: 680-102521-35  
 Matrix: Solid Lab File ID: XG2411.D  
 Analysis Method: 680 Date Collected: 06/18/2014 14:20  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.01(g) Date Analyzed: 07/25/2014 00:49  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 2  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 67.4 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	210	10
25512-42-9	Dichlorobiphenyl	5.6	J	41	4.3
28655-71-2	Heptachlorobiphenyl	570		120	6.1
26601-64-9	Hexachlorobiphenyl	870		82	4.1
27323-18-8	Monochlorobiphenyl	2.3	U	41	2.3
53742-07-7	Nonachlorobiphenyl	41	U	210	41
55722-26-4	Octachlorobiphenyl	87	J	120	6.5
25429-29-2	Pentachlorobiphenyl	710		82	4.2
26914-33-0	Tetrachlorobiphenyl	2700		82	4.5
25323-68-6	Trichlorobiphenyl	400		41	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	7	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-269-SS RE Lab Sample ID: 680-102521-35 RE  
 Matrix: Solid Lab File ID: XG2763.D  
 Analysis Method: 680 Date Collected: 06/18/2014 14:20  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.09(g) Date Analyzed: 07/29/2014 03:13  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 67.4 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	76	U	1600	76
25512-42-9	Dichlorobiphenyl	36	J	300	32
28655-71-2	Heptachlorobiphenyl	5600		910	46
26601-64-9	Hexachlorobiphenyl	6300		610	30
27323-18-8	Monochlorobiphenyl	17	U	300	17
53742-07-7	Nonachlorobiphenyl	300	U	1600	300
55722-26-4	Octachlorobiphenyl	750	J	910	48
25429-29-2	Pentachlorobiphenyl	5700		610	31
26914-33-0	Tetrachlorobiphenyl	35000		610	34
25323-68-6	Trichlorobiphenyl	2800		300	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-270-01 Lab Sample ID: 680-102521-31  
 Matrix: Solid Lab File ID: XG2338.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:45  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.00(g) Date Analyzed: 07/24/2014 04:20  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 64.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	23	U	470	23
25512-42-9	Dichlorobiphenyl	9.8	U	92	9.8
28655-71-2	Heptachlorobiphenyl	280		280	14
26601-64-9	Hexachlorobiphenyl	350		190	9.2
27323-18-8	Monochlorobiphenyl	5.3	U	92	5.3
53742-07-7	Nonachlorobiphenyl	92	U	470	92
55722-26-4	Octachlorobiphenyl	53	J	280	15
25429-29-2	Pentachlorobiphenyl	970		190	9.5
26914-33-0	Tetrachlorobiphenyl	3000		190	10
25323-68-6	Trichlorobiphenyl	510		92	4.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	25	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-270-01 RE Lab Sample ID: 680-102521-31 RE  
 Matrix: Solid Lab File ID: XG2631.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:45  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.02(g) Date Analyzed: 07/27/2014 09:57  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 64.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	35	U	710	35
25512-42-9	Dichlorobiphenyl	15	U	140	15
28655-71-2	Heptachlorobiphenyl	1100		420	21
26601-64-9	Hexachlorobiphenyl	890		280	14
27323-18-8	Monochlorobiphenyl	7.9	U	140	7.9
53742-07-7	Nonachlorobiphenyl	140	U	710	140
55722-26-4	Octachlorobiphenyl	79	J	420	22
25429-29-2	Pentachlorobiphenyl	1300		280	14
26914-33-0	Tetrachlorobiphenyl	5500		280	15
25323-68-6	Trichlorobiphenyl	490		140	7.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	37		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-270-02 Lab Sample ID: 680-102521-32  
 Matrix: Solid Lab File ID: XG2339.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:50  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.16(g) Date Analyzed: 07/24/2014 04:49  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 43.9 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.9	U	60	2.9
25512-42-9	Dichlorobiphenyl	1.2	U	12	1.2
28655-71-2	Heptachlorobiphenyl	1.8	U	35	1.8
26601-64-9	Hexachlorobiphenyl	7.9	J	24	1.2
27323-18-8	Monochlorobiphenyl	1.8	J	12	0.67
53742-07-7	Nonachlorobiphenyl	12	U	60	12
55722-26-4	Octachlorobiphenyl	1.9	U	35	1.9
25429-29-2	Pentachlorobiphenyl	12	J	24	1.2
26914-33-0	Tetrachlorobiphenyl	9.5	J	24	1.3
25323-68-6	Trichlorobiphenyl	0.60	U	12	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	17	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-270-02 RE Lab Sample ID: 680-102521-32 RE  
 Matrix: Solid Lab File ID: XG2632.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:50  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.03(g) Date Analyzed: 07/27/2014 10:26  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 43.9 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.4	U	91	4.4
25512-42-9	Dichlorobiphenyl	1.9	U	18	1.9
28655-71-2	Heptachlorobiphenyl	2.7	U	53	2.7
26601-64-9	Hexachlorobiphenyl	13	J	36	1.8
27323-18-8	Monochlorobiphenyl	1.0	U	18	1.0
53742-07-7	Nonachlorobiphenyl	18	U	91	18
55722-26-4	Octachlorobiphenyl	2.8	U	53	2.8
25429-29-2	Pentachlorobiphenyl	13	J	36	1.8
26914-33-0	Tetrachlorobiphenyl	49		36	2.0
25323-68-6	Trichlorobiphenyl	3.3	J	18	0.91

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	33		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-270-03 Lab Sample ID: 680-102521-33  
 Matrix: Solid Lab File ID: XG2340.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:55  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.08(g) Date Analyzed: 07/24/2014 05:17  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 26.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.3	U	46	2.3
25512-42-9	Dichlorobiphenyl	0.95	U	8.9	0.95
28655-71-2	Heptachlorobiphenyl	4.7	J	27	1.4
26601-64-9	Hexachlorobiphenyl	6.8	J	18	0.89
27323-18-8	Monochlorobiphenyl	0.52	U	8.9	0.52
53742-07-7	Nonachlorobiphenyl	8.9	U	46	8.9
55722-26-4	Octachlorobiphenyl	1.4	U	27	1.4
25429-29-2	Pentachlorobiphenyl	5.2	J	18	0.92
26914-33-0	Tetrachlorobiphenyl	34		18	1.0
25323-68-6	Trichlorobiphenyl	2.2	J	8.9	0.46

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	53		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-270-SS Lab Sample ID: 680-102521-30  
 Matrix: Solid Lab File ID: XG2410.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:40  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.00(g) Date Analyzed: 07/25/2014 00:20  
 Con. Extract Vol.: 1(mL) Dilution Factor: 2  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 67.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	210	10
25512-42-9	Dichlorobiphenyl	4.5	J	40	4.2
28655-71-2	Heptachlorobiphenyl	390		120	6.1
26601-64-9	Hexachlorobiphenyl	420		81	4.0
27323-18-8	Monochlorobiphenyl	2.3	U	40	2.3
53742-07-7	Nonachlorobiphenyl	40	U	210	40
55722-26-4	Octachlorobiphenyl	84	J	120	6.4
25429-29-2	Pentachlorobiphenyl	740		81	4.1
26914-33-0	Tetrachlorobiphenyl	4700		81	4.5
25323-68-6	Trichlorobiphenyl	330		40	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	12	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-270-SS RE Lab Sample ID: 680-102521-30 RE  
 Matrix: Solid Lab File ID: XG2646.D  
 Analysis Method: 680 Date Collected: 06/18/2014 13:40  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.05(g) Date Analyzed: 07/27/2014 17:07  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 67.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	75	U	1500	75
25512-42-9	Dichlorobiphenyl	32	U	300	32
28655-71-2	Heptachlorobiphenyl	26000		900	45
26601-64-9	Hexachlorobiphenyl	25000		610	30
27323-18-8	Monochlorobiphenyl	17	U	300	17
53742-07-7	Nonachlorobiphenyl	360	J	1500	300
55722-26-4	Octachlorobiphenyl	3400		900	48
25429-29-2	Pentachlorobiphenyl	16000		610	31
26914-33-0	Tetrachlorobiphenyl	34000		610	33
25323-68-6	Trichlorobiphenyl	1800		300	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-271-01 Lab Sample ID: 680-102521-40  
 Matrix: Solid Lab File ID: XG2318.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:00  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.15(g) Date Analyzed: 07/23/2014 18:11  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 62.3 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.4	U	89	4.4
25512-42-9	Dichlorobiphenyl	1.8	U	17	1.8
28655-71-2	Heptachlorobiphenyl	210		53	2.6
26601-64-9	Hexachlorobiphenyl	250		35	1.7
27323-18-8	Monochlorobiphenyl	1.0	U	17	1.0
53742-07-7	Nonachlorobiphenyl	17	U	89	17
55722-26-4	Octachlorobiphenyl	38	J	53	2.8
25429-29-2	Pentachlorobiphenyl	250		35	1.8
26914-33-0	Tetrachlorobiphenyl	1400		35	1.9
25323-68-6	Trichlorobiphenyl	100		17	0.89

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	12	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-271-02 Lab Sample ID: 680-102521-41  
 Matrix: Solid Lab File ID: XG2347.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:05  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.02(g) Date Analyzed: 07/24/2014 08:37  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 27.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.1	U	23	1.1
25512-42-9	Dichlorobiphenyl	0.48	U	4.5	0.48
28655-71-2	Heptachlorobiphenyl	0.69	U	14	0.69
26601-64-9	Hexachlorobiphenyl	0.45	U	9.2	0.45
27323-18-8	Monochlorobiphenyl	0.26	U	4.5	0.26
53742-07-7	Nonachlorobiphenyl	4.5	U	23	4.5
55722-26-4	Octachlorobiphenyl	0.73	U	14	0.73
25429-29-2	Pentachlorobiphenyl	0.65	J	9.2	0.47
26914-33-0	Tetrachlorobiphenyl	3.6	J	9.2	0.51
25323-68-6	Trichlorobiphenyl	0.54	J	4.5	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	68		30-130

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Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102521-1</u>
SDG No.: <u>680102521-1</u>	
Client Sample ID: <u>SD-271-SS</u>	Lab Sample ID: <u>680-102521-39</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2346.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/18/2014 14:55</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/17/2014 12:54</u>
Sample wt/vol: <u>15.04(g)</u>	Date Analyzed: <u>07/24/2014 08:09</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>69.6</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340579</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.4	U	110	5.4
25512-42-9	Dichlorobiphenyl	5.5	J	22	2.3
28655-71-2	Heptachlorobiphenyl	770		66	3.3
26601-64-9	Hexachlorobiphenyl	560		44	2.2
27323-18-8	Monochlorobiphenyl	1.2	U	22	1.2
53742-07-7	Nonachlorobiphenyl	22	U	110	22
55722-26-4	Octachlorobiphenyl	200		66	3.5
25429-29-2	Pentachlorobiphenyl	730		44	2.2
26914-33-0	Tetrachlorobiphenyl	3700		44	2.4
25323-68-6	Trichlorobiphenyl	240		22	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	22	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-271-SS RE Lab Sample ID: 680-102521-39 RE  
 Matrix: Solid Lab File ID: XG2636.D  
 Analysis Method: 680 Date Collected: 06/18/2014 14:55  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.12(g) Date Analyzed: 07/27/2014 12:20  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 69.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	8.1	U	170	8.1
25512-42-9	Dichlorobiphenyl	6.6	J	32	3.4
28655-71-2	Heptachlorobiphenyl	370		98	4.9
26601-64-9	Hexachlorobiphenyl	570		65	3.2
27323-18-8	Monochlorobiphenyl	1.9	U	32	1.9
53742-07-7	Nonachlorobiphenyl	32	U	170	32
55722-26-4	Octachlorobiphenyl	34	J	98	5.2
25429-29-2	Pentachlorobiphenyl	980		65	3.3
26914-33-0	Tetrachlorobiphenyl	6200		65	3.6
25323-68-6	Trichlorobiphenyl	420		32	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	37		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-273-01 Lab Sample ID: 680-102521-43  
 Matrix: Solid Lab File ID: XG2349.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:30  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.14(g) Date Analyzed: 07/24/2014 09:34  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 65.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.4	U	49	2.4
25512-42-9	Dichlorobiphenyl	3.8	J	9.5	1.0
28655-71-2	Heptachlorobiphenyl	91		29	1.4
26601-64-9	Hexachlorobiphenyl	130		19	0.95
27323-18-8	Monochlorobiphenyl	0.55	U	9.5	0.55
53742-07-7	Nonachlorobiphenyl	9.5	U	49	9.5
55722-26-4	Octachlorobiphenyl	19	J	29	1.5
25429-29-2	Pentachlorobiphenyl	260		19	0.98
26914-33-0	Tetrachlorobiphenyl	1800		19	1.1
25323-68-6	Trichlorobiphenyl	160		9.5	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	18	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-273-01 RE Lab Sample ID: 680-102521-43 RE  
 Matrix: Solid Lab File ID: XG2638.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:30  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.03(g) Date Analyzed: 07/27/2014 13:17  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 65.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	7.2	U	150	7.2
25512-42-9	Dichlorobiphenyl	3.0	U	29	3.0
28655-71-2	Heptachlorobiphenyl	600		87	4.3
26601-64-9	Hexachlorobiphenyl	360		58	2.9
27323-18-8	Monochlorobiphenyl	1.6	U	29	1.6
53742-07-7	Nonachlorobiphenyl	29	U	150	29
55722-26-4	Octachlorobiphenyl	170		87	4.6
25429-29-2	Pentachlorobiphenyl	1000		58	2.9
26914-33-0	Tetrachlorobiphenyl	1900		58	3.2
25323-68-6	Trichlorobiphenyl	87		29	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	35		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-273-02 Lab Sample ID: 680-102521-44  
 Matrix: Solid Lab File ID: XG2933.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:35  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.14(g) Date Analyzed: 07/30/2014 13:22  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 17.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341486 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	200	10
25512-42-9	Dichlorobiphenyl	4.2	U	40	4.2
28655-71-2	Heptachlorobiphenyl	6.0	U	120	6.0
26601-64-9	Hexachlorobiphenyl	4.0	U	81	4.0
27323-18-8	Monochlorobiphenyl	2.3	U	40	2.3
53742-07-7	Nonachlorobiphenyl	40	U	200	40
55722-26-4	Octachlorobiphenyl	6.4	U	120	6.4
25429-29-2	Pentachlorobiphenyl	4.1	U	81	4.1
26914-33-0	Tetrachlorobiphenyl	12	J	81	4.4
25323-68-6	Trichlorobiphenyl	2.0	U	40	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-273-03 Lab Sample ID: 680-102521-45  
 Matrix: Solid Lab File ID: XG2351.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:40  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.01(g) Date Analyzed: 07/24/2014 10:32  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 47.3 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.6	U	32	1.6
25512-42-9	Dichlorobiphenyl	0.66	U	6.3	0.66
28655-71-2	Heptachlorobiphenyl	0.95	U	19	0.95
26601-64-9	Hexachlorobiphenyl	0.63	U	13	0.63
27323-18-8	Monochlorobiphenyl	0.36	U	6.3	0.36
53742-07-7	Nonachlorobiphenyl	6.3	U	32	6.3
55722-26-4	Octachlorobiphenyl	1.0	U	19	1.0
25429-29-2	Pentachlorobiphenyl	0.65	U	13	0.65
26914-33-0	Tetrachlorobiphenyl	0.70	U	13	0.70
25323-68-6	Trichlorobiphenyl	0.32	U	6.3	0.32

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	16	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-273-03 RE Lab Sample ID: 680-102521-45 RE  
 Matrix: Solid Lab File ID: XG2612.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:40  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.05(g) Date Analyzed: 07/27/2014 00:48  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 47.3 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.7	U	96	4.7
25512-42-9	Dichlorobiphenyl	2.0	U	19	2.0
28655-71-2	Heptachlorobiphenyl	2.8	U	57	2.8
26601-64-9	Hexachlorobiphenyl	1.9	U	38	1.9
27323-18-8	Monochlorobiphenyl	1.1	U	19	1.1
53742-07-7	Nonachlorobiphenyl	19	U	96	19
55722-26-4	Octachlorobiphenyl	3.0	U	57	3.0
25429-29-2	Pentachlorobiphenyl	1.9	U	38	1.9
26914-33-0	Tetrachlorobiphenyl	3.0	J	38	2.1
25323-68-6	Trichlorobiphenyl	0.96	U	19	0.96

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	49		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-273-SS Lab Sample ID: 680-102521-42  
 Matrix: Solid Lab File ID: XG2413.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:25  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.28(g) Date Analyzed: 07/25/2014 01:47  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 71.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	29	U	590	29
25512-42-9	Dichlorobiphenyl	12	U	120	12
28655-71-2	Heptachlorobiphenyl	480		350	17
26601-64-9	Hexachlorobiphenyl	780		230	12
27323-18-8	Monochlorobiphenyl	6.6	U	120	6.6
53742-07-7	Nonachlorobiphenyl	120	U	590	120
55722-26-4	Octachlorobiphenyl	45	J	350	19
25429-29-2	Pentachlorobiphenyl	400		230	12
26914-33-0	Tetrachlorobiphenyl	3600		230	13
25323-68-6	Trichlorobiphenyl	250		120	5.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-273-SS RE Lab Sample ID: 680-102521-42 RE  
 Matrix: Solid Lab File ID: XG2637.D  
 Analysis Method: 680 Date Collected: 06/18/2014 15:25  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.22(g) Date Analyzed: 07/27/2014 12:49  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 71.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	86	U	1800	86
25512-42-9	Dichlorobiphenyl	36	U	340	36
28655-71-2	Heptachlorobiphenyl	210	J	1000	52
26601-64-9	Hexachlorobiphenyl	750		690	34
27323-18-8	Monochlorobiphenyl	20	U	340	20
53742-07-7	Nonachlorobiphenyl	340	U	1800	340
55722-26-4	Octachlorobiphenyl	55	U	1000	55
25429-29-2	Pentachlorobiphenyl	950		690	35
26914-33-0	Tetrachlorobiphenyl	6800		690	38
25323-68-6	Trichlorobiphenyl	420		340	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102521-1</u>
SDG No.: <u>680102521-1</u>	
Client Sample ID: <u>SD-DUP05</u>	Lab Sample ID: <u>680-102521-13</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2407.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/18/2014 00:00</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/16/2014 12:47</u>
Sample wt/vol: <u>10.01(g)</u>	Date Analyzed: <u>07/24/2014 22:53</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>78.0</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340817</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	110	U	2300	110
25512-42-9	Dichlorobiphenyl	48	U	450	48
28655-71-2	Heptachlorobiphenyl	68	U	1400	68
26601-64-9	Hexachlorobiphenyl	45	U	910	45
27323-18-8	Monochlorobiphenyl	26	U	450	26
53742-07-7	Nonachlorobiphenyl	450	U	2300	450
55722-26-4	Octachlorobiphenyl	72	U	1400	72
25429-29-2	Pentachlorobiphenyl	46	U	910	46
26914-33-0	Tetrachlorobiphenyl	50	U	910	50
25323-68-6	Trichlorobiphenyl	23	U	450	23

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-DUP06 Lab Sample ID: 680-102521-34  
 Matrix: Solid Lab File ID: XG2341.D  
 Analysis Method: 680 Date Collected: 06/18/2014 00:00  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.20(g) Date Analyzed: 07/24/2014 05:46  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 37.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340579 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.6	U	54	2.6
25512-42-9	Dichlorobiphenyl	1.1	U	10	1.1
28655-71-2	Heptachlorobiphenyl	1.6	U	32	1.6
26601-64-9	Hexachlorobiphenyl	3.0	J	21	1.0
27323-18-8	Monochlorobiphenyl	0.60	U	10	0.60
53742-07-7	Nonachlorobiphenyl	10	U	54	10
55722-26-4	Octachlorobiphenyl	1.7	U	32	1.7
25429-29-2	Pentachlorobiphenyl	12	J	21	1.1
26914-33-0	Tetrachlorobiphenyl	6.5	J	21	1.2
25323-68-6	Trichlorobiphenyl	0.54	U	10	0.54

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	25	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: SD-DUP06 RE Lab Sample ID: 680-102521-34 RE  
 Matrix: Solid Lab File ID: XG2633.D  
 Analysis Method: 680 Date Collected: 06/18/2014 00:00  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 10.12(g) Date Analyzed: 07/27/2014 10:54  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 37.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341016 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.0	U	81	4.0
25512-42-9	Dichlorobiphenyl	1.7	U	16	1.7
28655-71-2	Heptachlorobiphenyl	2.4	U	48	2.4
26601-64-9	Hexachlorobiphenyl	1.6	U	32	1.6
27323-18-8	Monochlorobiphenyl	0.91	U	16	0.91
53742-07-7	Nonachlorobiphenyl	16	U	81	16
55722-26-4	Octachlorobiphenyl	2.5	U	48	2.5
25429-29-2	Pentachlorobiphenyl	6.6	J	32	1.6
26914-33-0	Tetrachlorobiphenyl	1.8	U	32	1.8
25323-68-6	Trichlorobiphenyl	1.2	J	16	0.81

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	47		30-130



**APPENDIX C**

**SUPPORT DOCUMENTATION**

## CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Sediments

Report Number: 680-102521-1

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 06/19/2014 and 06/21/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.4 C.

### POLYCHLORINATED BIPHENYLS (PCBS)

Samples SD-250-SS (680-102521-1), SD-250-01 (680-102521-2), SD-250-02 (680-102521-3), SD-250-03 (680-102521-4), SD-251-SS (680-102521-5), SD-251-01 (680-102521-6), SD-251-02 (680-102521-7), SD-251-03 (680-102521-8), SD-262-SS (680-102521-9), SD-262-01 (680-102521-10), SD-262-02 (680-102521-11), SD-262-03 (680-102521-12), SD-DUP05 (680-102521-13), SD-263-SS (680-102521-14), SD-263-01 (680-102521-15), SD-263-02 (680-102521-16), SD-263-03 (680-102521-17), SD-264-SS (680-102521-18), SD-264-01 (680-102521-19), SD-264-02 (680-102521-20), SD-264-03 (680-102521-21), SD-265-SS (680-102521-22), SD-265-01 (680-102521-23), SD-265-02 (680-102521-24), SD-265-03 (680-102521-25), SD-268-SS (680-102521-26), SD-268-01 (680-102521-27), SD-268-02 (680-102521-28), SD-268-03 (680-102521-29), SD-270-SS (680-102521-30), SD-270-01 (680-102521-31), SD-270-02 (680-102521-32), SD-270-03 (680-102521-33), SD-DUP06 (680-102521-34), SD-269-SS (680-102521-35), SD-269-01 (680-102521-36), SD-269-02 (680-102521-37), SD-269-03 (680-102521-38), SD-271-SS (680-102521-39), SD-271-01 (680-102521-40), SD-271-02 (680-102521-41), SD-273-SS (680-102521-42), SD-273-01 (680-102521-43), SD-273-02 (680-102521-44) and SD-273-03 (680-102521-45) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 07/12/2014, 07/16/2014, 07/17/2014, 07/25/2014 and 07/29/2014 and analyzed on 07/21/2014, 07/22/2014, 07/23/2014, 07/24/2014, 07/25/2014, 07/27/2014, 07/29/2014 and 07/30/2014.

Internal standard (ISTD) response for the following sample(s) was outside of acceptance limits when compared to the area of the CCVIS, (680-102521-19 MSD), (LCS 680-341361/12-A), (MB 680-341361/11-A). The 680 method allows that the sample also be compared to the average internal standard area of the calibration(ICISAV). When compared to the ICISAV the samples are within the area range for the internal standard.

The method blank for batch 340880 recovered low outside of control limits for the surrogate. The samples in the batch are reextracts. The original and reextract data are being reported per client request.

The following sample(s) was diluted due to the nature of the sample matrix: SD-250-02 (680-102521-3), SD-265-02 (680-102521-24), SD-265-03 (680-102521-25), SD-269-SS (680-102521-35), SD-270-SS (680-102521-30), SD-273-SS (680-102521-42), SD-273-02 (680-102521-44). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Surrogate recovery for the following sample(s) was outside control limits: SD-250-01 (680-102521-2), SD-250-SS (680-102521-1), SD-251-SS (680-102521-5), SD-262-SS (680-102521-9). Re-extraction and/or re-analysis was performed with concurring results. The samples were extracted at 10g and reextracted at 10g. Both sets of data have been reported.

Surrogate recovery for the following sample(s) was outside control limits: SD-263-02 (680-102521-16), SD-264-SS (680-102521-18), SD-265-01 (680-102521-23), SD-265-02 (680-102521-24). Re-extraction and/or re-analysis was performed with concurring results. Both sets of data have been reported per client request. 102521-16 and 18 were extracted at 10g and reextracted at 10g. 102521-23 and 24 were extracted at 15g and reextracted at 10g.

Surrogate recovery for the following sample(s) was outside acceptance limits: SD-265-03 (680-102521-25), SD-268-SS (680-102521-26). The results have been reported per client request. The samples were extracted at 15g and reextracted at 10g. The samples were reextracted in a batch with the method blank recovering low outside of limits for the surrogate. Per client request, both sets of data have been reported.

Surrogate recovery for the following sample(s) was outside control limits: SD-271-01 (680-102521-40), SD-271-01 (680-102521-40 MS), SD-271-01 (680-102521-40 MSD). The MS/MSD performed on the sample also recovered low for surrogates ; therefore, re-extraction and/or re-analysis was not performed.

Surrogate recovery for the following sample(s) was outside acceptance limits: SD-269-SS (680-102521-35), SD-270-SS (680-102521-30).

The results have been reported per client request. The samples were extracted at 15g and reextracted at 10g. The surrogate for the method blank for the reextract batch recovered low. Both sets of data have been reported per client request.

Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample(s): SD-263-01 (680-102521-15 MS), SD-263-01 (680-102521-15 MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Surrogate recovery for the following sample(s) was outside acceptance limits: SD-269-02 (680-102521-37), SD-270-01 (680-102521-31), SD-270-02 (680-102521-32), SD-271-SS (680-102521-39), SD-273-01 (680-102521-43), SD-273-03 (680-102521-45), SD-DUP06 (680-102521-34). The results have been reported per client request. The samples were reextracted in a batch with a method blank that recovered low for the surrogate. Samples 102521-31,32,34,37 and 39 were extracted at 15g and reextracted at 10g. Samples 102521-42,43,45 were extracted at 30g then reextracted at 10g.

Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample(s): (680-102521-19 MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Several analytes failed the recovery criteria low for the MS of sample 680-102468-43 in batch 680-339960.

For the MSD of sample 680-102468-43 in batch 680-339960, DCB Decachlorobiphenyl, Heptachlorobiphenyl, Monochlorobiphenyl and Octachlorobiphenyl exceeded the recovery criteria low. Tetrachlorobiphenyl recovered the recovery criteria high. Also, Several analytes exceeded the RPD limit.

Several analytes exceeded the recovery criteria low for the MS/MSD of sample SD-263-01MSD (680-102521-15) in batch 680-340118. Pentachlorobiphenyl, Tetrachlorobiphenyl and Trichlorobiphenyl exceeded the RPD limit.

Several analytes exceeded the recovery criteria low for the MSD of sample SD-264-01MSD (680-102521-19) in batch 680-341486. Several analytes exceeded the RPD limit.

Several analytes failed the recovery criteria low for the MS/MSD of sample SD-271-01 (680-102521-40) in batch 680-340459.

Refer to the QC report for details.

Samples SD-250-SS (680-102521-1)[5X], SD-250-01 (680-102521-2)[5X], SD-250-02 (680-102521-3)[10X], SD-250-03 (680-102521-4)[5X], SD-251-SS (680-102521-5)[5X], SD-262-01 (680-102521-10)[5X], SD-DUP05 (680-102521-13)[10X], SD-263-SS (680-102521-14)[5X], SD-263-02 (680-102521-16)[2X], SD-264-02 (680-102521-20)[10X], SD-265-SS (680-102521-22)[5X], SD-265-02 (680-102521-24)[10X], SD-265-03 (680-102521-25)[10X], SD-265-03 (680-102521-25)[5X], SD-268-SS (680-102521-26)[5X], SD-268-01 (680-102521-27)[10X], SD-268-02 (680-102521-28)[5X], SD-270-SS (680-102521-30)[10X], SD-270-SS (680-102521-30)[2X], SD-270-01 (680-102521-31)[5X], SD-269-SS (680-102521-35)[10X], SD-269-SS (680-102521-35)[2X], SD-269-01 (680-102521-36)[10X], SD-273-SS (680-102521-42)[10X] and SD-273-02 (680-102521-44)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **PERCENT SOLIDS/MOISTURE**

Samples SD-250-SS (680-102521-1), SD-250-01 (680-102521-2), SD-250-02 (680-102521-3), SD-250-03 (680-102521-4), SD-251-SS (680-102521-5), SD-251-01 (680-102521-6), SD-251-02 (680-102521-7), SD-251-03 (680-102521-8), SD-262-SS (680-102521-9), SD-262-01 (680-102521-10), SD-262-02 (680-102521-11), SD-262-03 (680-102521-12), SD-DUP05 (680-102521-13), SD-263-SS (680-102521-14), SD-263-01 (680-102521-15), SD-263-02 (680-102521-16), SD-263-03 (680-102521-17), SD-264-SS (680-102521-18), SD-264-01 (680-102521-19), SD-264-02 (680-102521-20), SD-264-03 (680-102521-21), SD-265-SS (680-102521-22), SD-265-01 (680-102521-23), SD-265-02 (680-102521-24), SD-265-03 (680-102521-25), SD-268-SS (680-102521-26), SD-268-01 (680-102521-27), SD-268-02 (680-102521-28), SD-268-03 (680-102521-29), SD-270-SS (680-102521-30), SD-270-01 (680-102521-31), SD-270-02 (680-102521-32), SD-270-03 (680-102521-33), SD-DUP06 (680-102521-34), SD-269-SS (680-102521-35), SD-269-01 (680-102521-36), SD-269-02 (680-102521-37), SD-269-03 (680-102521-38), SD-271-SS (680-102521-39), SD-271-01 (680-102521-40), SD-271-02 (680-102521-41), SD-273-SS (680-102521-42), SD-273-01 (680-102521-43), SD-273-02 (680-102521-44) and SD-273-03 (680-102521-45) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 06/21/2014 and 07/19/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## SAMPLE SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102521-1

Sdg Number: 680102521-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-102521-1	SD-250-SS	Solid	06/18/2014 0755	06/19/2014 0851
680-102521-2	SD-250-01	Solid	06/18/2014 0800	06/19/2014 0851
680-102521-3	SD-250-02	Solid	06/18/2014 0805	06/19/2014 0851
680-102521-4	SD-250-03	Solid	06/18/2014 0810	06/19/2014 0851
680-102521-5	SD-251-SS	Solid	06/18/2014 0830	06/21/2014 0837
680-102521-6	SD-251-01	Solid	06/18/2014 0835	06/19/2014 0851
680-102521-7	SD-251-02	Solid	06/18/2014 0840	06/19/2014 0851
680-102521-8	SD-251-03	Solid	06/18/2014 0845	06/19/2014 0851
680-102521-9	SD-262-SS	Solid	06/18/2014 0915	06/19/2014 0851
680-102521-10	SD-262-01	Solid	06/18/2014 0920	06/19/2014 0851
680-102521-11	SD-262-02	Solid	06/18/2014 0925	06/19/2014 0851
680-102521-12	SD-262-03	Solid	06/18/2014 0930	06/19/2014 0851
680-102521-13FD	SD-DUP05	Solid	06/18/2014 0000	06/19/2014 0851
680-102521-14	SD-263-SS	Solid	06/18/2014 1035	06/19/2014 0851
680-102521-15	SD-263-01	Solid	06/18/2014 1040	06/19/2014 0851
680-102521-15MS	SD-263-01	Solid	06/18/2014 1040	06/19/2014 0851
680-102521-15MSD	SD-263-01	Solid	06/18/2014 1040	06/19/2014 0851
680-102521-16	SD-263-02	Solid	06/18/2014 1045	06/19/2014 0851
680-102521-17	SD-263-03	Solid	06/18/2014 1050	06/19/2014 0851
680-102521-18	SD-264-SS	Solid	06/18/2014 1100	06/19/2014 0851
680-102521-19	SD-264-01	Solid	06/18/2014 1105	06/19/2014 0851
680-102521-20	SD-264-02	Solid	06/18/2014 1110	06/19/2014 0851
680-102521-21	SD-264-03	Solid	06/18/2014 1115	06/19/2014 0851
680-102521-22	SD-265-SS	Solid	06/18/2014 1155	06/19/2014 0851
680-102521-23	SD-265-01	Solid	06/18/2014 1200	06/19/2014 0851
680-102521-24	SD-265-02	Solid	06/18/2014 1205	06/19/2014 0851
680-102521-25	SD-265-03	Solid	06/18/2014 1210	06/19/2014 0851
680-102521-26	SD-268-SS	Solid	06/18/2014 1320	06/19/2014 0851
680-102521-27	SD-268-01	Solid	06/18/2014 1325	06/19/2014 0851
680-102521-28	SD-268-02	Solid	06/18/2014 1330	06/19/2014 0851
680-102521-29	SD-268-03	Solid	06/18/2014 1335	06/19/2014 0851
680-102521-30	SD-270-SS	Solid	06/18/2014 1340	06/19/2014 0851
680-102521-31	SD-270-01	Solid	06/18/2014 1345	06/19/2014 0851
680-102521-32	SD-270-02	Solid	06/18/2014 1350	06/19/2014 0851
680-102521-33	SD-270-03	Solid	06/18/2014 1355	06/19/2014 0851
680-102521-34FD	SD-DUP06	Solid	06/18/2014 0000	06/19/2014 0851
680-102521-35	SD-269-SS	Solid	06/18/2014 1420	06/19/2014 0851
680-102521-36	SD-269-01	Solid	06/18/2014 1425	06/19/2014 0851
680-102521-37	SD-269-02	Solid	06/18/2014 1430	06/19/2014 0851
680-102521-38	SD-269-03	Solid	06/18/2014 1435	06/19/2014 0851
680-102521-39	SD-271-SS	Solid	06/18/2014 1455	06/19/2014 0851
680-102521-40	SD-271-01	Solid	06/18/2014 1500	06/19/2014 0851
680-102521-40MS	SD-271-01	Solid	06/18/2014 1500	06/19/2014 0851
680-102521-40MSD	SD-271-01	Solid	06/18/2014 1500	06/19/2014 0851
680-102521-41	SD-271-02	Solid	06/18/2014 1505	06/19/2014 0851
680-102521-42	SD-273-SS	Solid	06/18/2014 1525	06/19/2014 0851
680-102521-43	SD-273-01	Solid	06/18/2014 1530	06/19/2014 0851
680-102521-44	SD-273-02	Solid	06/18/2014 1535	06/19/2014 0851
680-102521-45	SD-273-03	Solid	06/18/2014 1540	06/19/2014 0851

## METHOD SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102521-1

Sdg Number: 680102521-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Solid</b>			
Polychlorinated Biphenyls (PCBs) (GC/MS)	TAL SAV	EPA 680	
Extraction (Solid PCBs)	TAL SAV		EPA 680
Percent Moisture	TAL SAV	EPA Moisture	

### Lab References:

TAL SAV = TestAmerica Savannah

### Method References:

EPA = US Environmental Protection Agency

PCB

# Chain of Custody Record

<b>Client Information</b> Client Contact: Mike Martin Company: Tetra Tech, Inc. Address: 20251 Century Blvd Suite 200 City: Germantown State, Zip: MD, 20874 Phone: [blank] Email: Michael.Martin@tetratech.com Project Name: Sediments Project #: 68012942 SSON#: [blank]		Sampler: <b>STU Cameron</b> Phone: <b>(703) 342-8389</b> Lab P/N: Lanier, Jerry A E-Mail: jerry.lanier@testamericainc.com Carrier Tracking No(s): [blank]		COC No: 680-56831-24906.43 Page: <b>2 of 5</b> Job #: [blank]	
Due Date Requested: [blank] TAT Requested (days): <b>Standard</b> PO #: [blank] Purchase Order not required WO #: [blank]		<b>Analysis Requested</b> 680 - Local Method 1802 A01R_Th - Standard Target List 6020_7470A GA_01_Ra - (MOD) Radium-226/228 Total Number of Containers: [blank]			
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: [blank]		Preservation Codes: M - Hexane N - None O - AsNO2 P - Na2CO3 Q - Na2BO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)			
Special Instructions/Note: [blank]		Special Instructions/Note: <b>MS/MSD</b>			
<b>Sample Identification</b> Sample ID: SD-262-03 SD-DUP 05 SD-263-55 SD-263-01 SD-263-02 SD-263-03 SD-264-55 SD-264-01 SD-264-02 SD-264-03 SD-265-55		Sample Date: 6/18/14	Sample Time: 0930 0900 1035 1040 1045 1050 1100 1105 1110 1115 1155	Sample Type (C=comp, G=grab) C C C C C C C C C C C C	Matrix (In-water, As-is, On-water, A=As) Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input checked="" type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For [blank] Months			
Deliverable Requested: I, II, III, IV, Other (specify) [blank]		Special Instructions/QC Requirements: <b>680-1025d1</b>			
Empty Kit Relinquished by: [blank]		Method of Shipment: [blank]			
Relinquished by: [Signature]		Date/Time: 6/18/14 - 1600		Company: TTA	
Relinquished by: [Signature]		Date/Time: 6/18/14 - 1700		Company: TTA	
Relinquished by: [Signature]		Date/Time: [blank]		Company: [blank]	
Custody Seals Intact: [blank]		Cooler Temperature(s) °C and Other Remarks: <b>2.4°C</b>			

PCBS

# Chain of Custody Record

<b>Client Information</b>		Sampler: <u>Stu Cameron</u>		Lab PM: <u>Lanier, Jerry A</u>		Carrier Tracking No(s):		COC No: <u>680-56831-24906.42</u>				
Client Contact: <u>Mike Martin</u>		Phone: <u>(703) 342-8389</u>		E-Mail: <u>jerry.lanier@testamericainc.com</u>		Page: <u>42846</u>		Job #: <u>1 of 5</u>				
Company: <u>Tetra Tech, Inc.</u>		Address: <u>20251 Century Blvd Suite 200</u>		City: <u>Germentown</u>		State, Zip: <u>MD, 20874</u>		Phone: <u></u>				
Email: <u>Michael.Martin@tetratech.com</u>		Project #: <u>68012942</u>		SSOW#: <u></u>		Due Date Requested: <u></u>		TAT Requested (days): <u>Standard</u>				
Sediments: <u></u>		Site: <u></u>		Purchase Order not required		PO #: <u></u>		WO #: <u></u>				
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Comminced, Tissue, AAT)	Preservation Codes	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	680 - Local Method / <u>10882</u>	A01 R, Th - Standard Target List	6020, 7470A	GA_01 R, Ra - (MOD) Radium-226/228
<u>SD-250-55</u>	<u>6/18/14</u>	<u>0755</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-250-01</u>	<u></u>	<u>0800</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-250-02</u>	<u></u>	<u>0805</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-250-03</u>	<u></u>	<u>0810</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-251-55</u>	<u></u>	<u>0830</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-251-01</u>	<u></u>	<u>0835</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-251-02</u>	<u></u>	<u>0840</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-251-03</u>	<u></u>	<u>0845</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-262-55</u>	<u></u>	<u>0915</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-262-01</u>	<u></u>	<u>0940</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>SD-262-02</u>	<u></u>	<u>0945</u>	<u>C</u>	<u>Solid</u>	<u></u>	<u></u>	<u>X</u>	<u>X</u>	<u></u>	<u></u>	<u></u>	<u></u>



**Special Instructions/Note:**

680-102521 Chain of Custody

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**

Return To Client  Archive For  Disposal By Lab  Months

Special Instructions/QC Requirements: 680-102521

Method of Shipment:

Time:

Received by: [Signature] Date/Time: 6/18/14 1600 Company: FA

Received by: [Signature] Date/Time: 6/19/14 08:51 Company: FA

Received by: [Signature] Date/Time:  Company:

Cooler Temperature(s) °C and Other Remarks: 2.4 °C

**Chain of Custody Record**

PCBS

<b>Client Information</b>		Lab PW: Lanier, Jerry A	Carrier Tracking No(s):	COC No: 680-56831-24906.43																																																																																																																																																												
Client Contact: Mike Martin		E-Mail: jerry.lanier@testamericainc.com		Page: 3 of 5																																																																																																																																																												
Company: Tetra Tech, Inc.				Job #:																																																																																																																																																												
Address: 20251 Century Blvd Suite 200		<b>Analysis Requested</b>																																																																																																																																																														
City: Germantown																																																																																																																																																																
State Zip: MD, 20874																																																																																																																																																																
Phone:																																																																																																																																																																
Email: Michael.Martin@tetratech.com																																																																																																																																																																
Project Name: Sediments		<table border="1"> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=soil)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>680 - Local Method / 8082</th> <th>AQIR, Th - Standard Target List</th> <th>6020, 7470A</th> <th>GA_01_R_Ra - (MOD) Radium-226/228</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> <tr> <td>SD-265-01</td> <td>6/18/14</td> <td>1245</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-265-02</td> <td></td> <td>1205</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-265-03</td> <td></td> <td>1210</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-268-01</td> <td></td> <td>1320</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-268-02</td> <td></td> <td>1325</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-268-03</td> <td></td> <td>1330</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-270-01</td> <td></td> <td>1335</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-270-02</td> <td></td> <td>1340</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-270-03</td> <td></td> <td>1345</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-270-04</td> <td></td> <td>1350</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> <tr> <td>SD-270-05</td> <td></td> <td>1355</td> <td>C</td> <td>Solid</td> <td>X</td> <td>X</td> <td>X</td> <td>N</td> <td>N</td> <td>N</td> <td></td> <td></td> </tr> </table>			Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	680 - Local Method / 8082	AQIR, Th - Standard Target List	6020, 7470A	GA_01_R_Ra - (MOD) Radium-226/228	Total Number of Containers	Special Instructions/Note:	SD-265-01	6/18/14	1245	C	Solid	X	X	X	N	N	N			SD-265-02		1205	C	Solid	X	X	X	N	N	N			SD-265-03		1210	C	Solid	X	X	X	N	N	N			SD-268-01		1320	C	Solid	X	X	X	N	N	N			SD-268-02		1325	C	Solid	X	X	X	N	N	N			SD-268-03		1330	C	Solid	X	X	X	N	N	N			SD-270-01		1335	C	Solid	X	X	X	N	N	N			SD-270-02		1340	C	Solid	X	X	X	N	N	N			SD-270-03		1345	C	Solid	X	X	X	N	N	N			SD-270-04		1350	C	Solid	X	X	X	N	N	N			SD-270-05		1355	C	Solid	X	X	X	N	N	N		
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	680 - Local Method / 8082	AQIR, Th - Standard Target List	6020, 7470A	GA_01_R_Ra - (MOD) Radium-226/228	Total Number of Containers	Special Instructions/Note:																																																																																																																																																				
SD-265-01	6/18/14	1245	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-265-02		1205	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-265-03		1210	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-268-01		1320	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-268-02		1325	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-268-03		1330	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-270-01		1335	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-270-02		1340	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-270-03		1345	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-270-04		1350	C	Solid	X	X	X	N	N	N																																																																																																																																																						
SD-270-05		1355	C	Solid	X	X	X	N	N	N																																																																																																																																																						
Due Date Requested:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:																																																																																																																																																														
TAT Requested (days): Standard		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)																																																																																																																																																														
PO #: Purchase Order not required		Special Instructions/Note:																																																																																																																																																														
WO #:		Special Instructions/Note:																																																																																																																																																														
Project #: 68012942		Special Instructions/Note:																																																																																																																																																														
SSOW#:		Special Instructions/Note:																																																																																																																																																														
<p><b>Possible Hazard Identification</b>  <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological</p> <p><b>Deliverable Requested:</b> I, II, III, IV, Other (specify)</p> <p><b>Empty Kit Relinquished by:</b> _____ Date: _____</p> <p><b>Relinquished by:</b> <i>[Signature]</i> Date/Time: 6/18/14 1600 Company: Tetra</p> <p><b>Relinquished by:</b> <i>[Signature]</i> Date/Time: 6/18/14 08:51 Company: Tetra</p> <p><b>Relinquished by:</b> <i>[Signature]</i> Date/Time: _____ Company: _____</p> <p><b>Custody Seals Intact:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Δ</p> <p><b>Custody Seal No.:</b> 24 ac</p>																																																																																																																																																																
<p><b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>  <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p><b>Special Instructions/QC Requirements:</b> 680-102521</p>																																																																																																																																																																



**Chain of Custody Record**

9685

<b>Client Information</b> Client Contact: <b>Mike Martin</b> Company: <b>Tetra Tech, Inc.</b> Address: <b>20251 Century Blvd Suite 200</b> City: <b>Germentown</b> State, Zip: <b>MD, 20674</b> Phone: _____ Email: <b>Michael.Martin@tetratech.com</b> Project Name: <b>Sediments</b> Site: _____		Lab P/N: <b>Lanier, Jerry A</b> E-Mail: <b>jerry.lanier@testamericainc.com</b> Sampler: <b>STU Cameron</b> Phone: <b>(703) 342-8389</b>		Carrier Tracking No(s): _____ COC No: <b>680-56831-24906.43</b> Page: <b>4 of 5</b> Job #: _____		
Due Date Requested: _____ TAT Requested (days): <b>Standard</b> PO #: _____ Purchase Order not required W/O #: _____ Project #: <b>68012942</b> SSO/W#: _____		Analysis Requested GA_01_R_Ra - (MCD) Radium-226/228 6020_7470A A01R_Th - Standard Target Let 680 - Local Method / 8082 Field Filtered Sample (Yes or No)				
Sample Identification <b>SD-269-06</b> <b>SD-269-01</b> <b>SD-269-02</b> <b>SD-269-03</b> <b>SD-271-01</b> <b>SD-271-02</b> <b>SD-273-01</b> <b>SD-273-02</b>		Sample Date <b>6/18/14</b>	Sample Time <b>0000</b> <b>1420</b> <b>1445</b> <b>1430</b> <b>1435</b> <b>1555</b> <b>1500</b> <b>1505</b> <b>1545</b> <b>1530</b> <b>1535</b>	Sample Type (C=Comp, G=grab) <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b> <b>C</b>	Matrix (W=water, B=soil, O=other, H=hydrocarbon, A=air) Preservation Code <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b> <b>Solid</b>	Special Instructions/Note: <b>MS/MSD</b>
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Polson B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: <b>680-102521</b>				
Empty Kit Relinquished by: _____ Relinquished by: <b>STU Cameron</b> Relinquished by: <b>Michael Martin</b> Relinquished by: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____		Date: _____ Date/Time: <b>6/18/14 - 1600</b> Date/Time: <b>6/23/14 1700</b> Date/Time: _____		Method of Shipment: _____ Received by: <b>Michael Martin</b> Received by: <b>Michael Martin</b> Received by: _____ Cooler Temperature(s) °C and Other Remarks: <b>24°C</b>		

**Chain of Custody Record**

<b>Client Information</b> Client Contact: Mike Martin Company: Tetra Tech, Inc. Address: 20251 Century Blvd Suite 200 City: Germantown State, Zip: MD, 20874 Phone: Email: Michael.Martin@tetratech.com Project Name: Sediments Site:		Sampler: <b>STU CAMERON</b> Lab PM: Lanier, Jerry A Phone: (703) 347-8389 E-Mail: jerry.lanier@testamericainc.com		Carrier Tracking No(s): COC No: 680-56831-24906.43 Page: 5 of 5 Job #:	
Due Date Requested: TAT Requested (days): <b>Standard</b> PO #: Purchase Order not required WFO #:		Analysis Requested Field Filtered Sample (Yes or No)		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Sample Identification 50-273-03 Sample Date: 6/18/14 Sample Time: 1540 Matrix (W=water, S=solid, O=other): Solid Sample Type (C=comp, G=grab): G Preservation Code:		Total Number of Containers:		Special Instructions/Note:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		Return To Client <input type="checkbox"/> <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Empty Kit Relinquished by:		Special Instructions/QC Requirements:		680-102521	
Relinquished by: <i>[Signature]</i> Date/Time: 6/18/14 1600 Company: T4		Relinquished by: <i>[Signature]</i> Date/Time: 6/18/14 1700 Company: T4		Relinquished by: <i>[Signature]</i> Date/Time: 6/18/14 08:51 Company: T4	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 24°C		Method of Shipment:	

# HOLDTIME

SDG 680-102521-1

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	SD-262-SS	680-102521-9	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-250-01	680-102521-2	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-265-02	680-102521-24	NM	06/18/2014	07/17/2014	07/23/2014	29	6	35
PCB	UG/KG	SD-265-01	680-102521-23	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-265-01	680-102521-23	NM	06/18/2014	07/17/2014	07/23/2014	29	6	35
PCB	UG/KG	SD-264-SS	680-102521-18	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-264-SS	680-102521-18	NM	06/18/2014	07/16/2014	07/23/2014	28	7	35
PCB	UG/KG	SD-264-03	680-102521-21	NM	06/18/2014	07/17/2014	07/23/2014	29	6	35
PCB	UG/KG	SD-264-02	680-102521-20	NM	06/18/2014	07/16/2014	07/24/2014	28	8	36
PCB	UG/KG	SD-264-01	680-102521-19	NM	06/18/2014	07/29/2014	07/30/2014	41	1	42
PCB	UG/KG	SD-263-SS	680-102521-14	NM	06/18/2014	07/16/2014	07/23/2014	28	7	35
PCB	UG/KG	SD-263-03	680-102521-17	NM	06/18/2014	07/16/2014	07/23/2014	28	7	35
PCB	UG/KG	SD-263-02	680-102521-16	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-263-02	680-102521-16	NM	06/18/2014	07/16/2014	07/23/2014	28	7	35
PCB	UG/KG	SD-265-03	680-102521-25	NM	06/18/2014	07/17/2014	07/23/2014	29	6	35

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	SD-251-03	680-102521-8	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-250-01	680-102521-2	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-250-02	680-102521-3	NM	06/18/2014	07/16/2014	07/24/2014	28	8	36
PCB	UG/KG	SD-250-03	680-102521-4	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-250-SS	680-102521-1	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-250-SS	680-102521-1	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-263-01	680-102521-15	NM	06/18/2014	07/16/2014	07/23/2014	28	7	35
PCB	UG/KG	SD-251-02	680-102521-7	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-262-SS	680-102521-9	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-251-SS	680-102521-5	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-251-SS	680-102521-5	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-262-01	680-102521-10	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-262-02	680-102521-11	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-262-03	680-102521-12	NM	06/18/2014	07/16/2014	07/22/2014	28	6	34
PCB	UG/KG	SD-265-03	680-102521-25	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-251-01	680-102521-6	NM	06/18/2014	07/16/2014	07/21/2014	28	5	33
PCB	UG/KG	SD-270-01	680-102521-31	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-273-SS	680-102521-42	NM	06/18/2014	07/12/2014	07/25/2014	24	13	37

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	SD-273-03	680-102521-45	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-273-03	680-102521-45	NM	06/18/2014	07/12/2014	07/24/2014	24	12	36
PCB	UG/KG	SD-273-02	680-102521-44	NM	06/18/2014	07/12/2014	07/30/2014	24	18	42
PCB	UG/KG	SD-273-01	680-102521-43	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-273-01	680-102521-43	NM	06/18/2014	07/12/2014	07/24/2014	24	12	36
PCB	UG/KG	SD-271-SS	680-102521-39	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-271-SS	680-102521-39	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-271-02	680-102521-41	NM	06/18/2014	07/12/2014	07/24/2014	24	12	36
PCB	UG/KG	SD-271-01	680-102521-40	NM	06/18/2014	07/17/2014	07/23/2014	29	6	35
PCB	UG/KG	SD-270-SS	680-102521-30	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-270-SS	680-102521-30	NM	06/18/2014	07/17/2014	07/25/2014	29	8	37
PCB	UG/KG	SD-270-03	680-102521-33	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-265-02	680-102521-24	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-269-02	680-102521-37	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-265-SS	680-102521-22	NM	06/18/2014	07/17/2014	07/23/2014	29	6	35
PCB	UG/KG	SD-268-01	680-102521-27	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-268-02	680-102521-28	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-268-03	680-102521-29	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	SD-268-SS	680-102521-26	NM	06/18/2014	07/17/2014	07/23/2014	29	6	35
PCB	UG/KG	SD-270-02	680-102521-32	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-269-01	680-102521-36	NM	06/18/2014	07/17/2014	07/25/2014	29	8	37
PCB	UG/KG	SD-270-02	680-102521-32	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-269-02	680-102521-37	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-269-03	680-102521-38	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-269-SS	680-102521-35	NM	06/18/2014	07/17/2014	07/25/2014	29	8	37
PCB	UG/KG	SD-269-SS	680-102521-35	NM	06/18/2014	07/25/2014	07/29/2014	37	4	41
PCB	UG/KG	SD-270-01	680-102521-31	NM	06/18/2014	07/17/2014	07/24/2014	29	7	36
PCB	UG/KG	SD-273-SS	680-102521-42	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39
PCB	UG/KG	SD-268-SS	680-102521-26	NM	06/18/2014	07/25/2014	07/27/2014	37	2	39

Field Duplicate Precision

ANALYTE	SD-Dup-05	SD-262-SS	RPD	DIFFERENCE
HEPTACHLOROBIPHENYL	ND	98	200.00	30
HEXACHLOROBIPHENYL	ND	150	200.00	105
PENTACHLOROBIPHENYL	ND	200	200.00	154
TETRACHLOROBIPHENYL	ND	330	200.00	280

Field Duplicate Precision

ANALYTE	SD-Dup-06	SD-270-02	RPD	DIFFERENCE
HEXACHLOROBIPHENYL	ND	13	200.00	11.4
PENTACHLOROBIPHENYL	6.6	13	65.31	6.4
TETRACHLOROBIPHENYL	ND	49	200.00	47.2
TRICHLOROBIPHENYL	1.2	3.3	93.33	2.1

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG1907.D DFTPP Injection Date: 07/19/2014  
 Instrument ID: CMSX DFTPP Injection Time: 21:51  
 Analysis Batch No.: 339932

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	54.3
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.9
275	10 - 30% of mass 198	30.0
365	Greater than 1% of mass 198	4.8
441	Present but, less than mass 443	13.3 (84.6) 2
442	Greater than 40% of mass 198	86.0
443	17 - 23% of mass 442	15.7 (18.3) 1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-339932/4	XG1909.D	07/19/2014	22:52
	IC 680-339932/5	XG1910.D	07/19/2014	23:20
	IC 680-339932/6	XG1911.D	07/19/2014	23:49
	IC 680-339932/7	XG1912.D	07/20/2014	00:17
	IC 680-339932/8	XG1913.D	07/20/2014	00:46
	ICV 680-339932/9	XG1914.D	07/20/2014	01:14



FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102521-1

Analy Batch No.: 339932

SDG No.: 680102521-1

Instrument ID: CMSX

GC Column: DB-5MS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2014 22:52

Calibration End Date: 07/20/2014 00:46

Calibration ID: 32129

Calibration Files:

LEVEL:	IAB SAMPLE ID:	IAB FILE ID:
Level 1	IC 680-339932/8	XG1913.D
Level 2	IC 680-339932/7	XG1912.D
Level 3	ICISAV 680-339932/4	XG1909.D
Level 4	IC 680-339932/6	XG1911.D
Level 5	IC 680-339932/5	XG1910.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1								
Monochlorobiphenyl	0.8353	0.8456	0.9098	0.8813	0.8734	Ave				3.4			20.0			
Dichlorobiphenyl	0.5776	0.5823	0.6122	0.6067	0.5987	Ave				2.5			20.0			
Trichlorobiphenyl	0.3996	0.4135	0.4348	0.4389	0.4410	Ave				4.3			20.0			
PCB-104			0.3302			Ave							30.0			
Tetrachlorobiphenyl	0.2755	0.2817	0.3033	0.2909	0.2951	Ave				3.8			20.0			
Pentachlorobiphenyl	0.2123	0.2203	0.2262	0.2270	0.2357	Ave				3.9			20.0			
PCB-77			0.4767			Ave							30.0			
Hexachlorobiphenyl	0.1966	0.2022	0.2225	0.2132	0.2185	Ave				5.2			20.0			
Heptachlorobiphenyl	0.1540	0.1656	0.1696	0.1700	0.1695	Ave				4.1			20.0			
Octachlorobiphenyl	0.1373	0.1488	0.1535	0.1521	0.1669	Ave				7.0			20.0			
PCB-208			0.0569			Ave							30.0			
Nonachlorobiphenyl			0.0443			Ave							20.0			
DCB Decachlorobiphenyl	0.0321	0.0328	0.0379	0.0370	0.0414	Ave				11.0			20.0			
Decachlorobiphenyl-13Cl2	0.0407	0.0484	0.0517	0.0504	0.0567	Ave				12.0			20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah

Job No.: 680-102521-1

SDG No.: 680102521-1

Lab Sample ID: ICV 680-339932/9

Calibration Date: 07/20/2014 01:14

Instrument ID: CMSX

Calib Start Date: 07/19/2014 22:52

GC Column: DB-5MS ID: 0.25(mm)

Calib End Date: 07/20/2014 00:46

Lab File ID: XG1914.D

Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8287		0.953	1.00	-4.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5788		0.972	1.00	-2.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.4300		1.01	1.00	1.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2870		1.98	2.00	-0.8	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2168		1.93	2.00	-3.3	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2122		2.02	2.00	0.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1650		2.99	3.00	-0.4	20.0
Octachlorobiphenyl	Ave	0.1517	0.1560		3.08	3.00	2.8	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0351		4.84	5.00	-3.1	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2002.D DFTPP Injection Date: 07/20/2014  
 Instrument ID: CMSX DFTPP Injection Time: 15:46  
 Analysis Batch No.: 339960

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	52.2
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.5
275	10 - 30% of mass 198	28.8
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	13.4 (84.0) 2
442	Greater than 40% of mass 198	84.3
443	17 - 23% of mass 442	16.0 (18.9) 1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-339960/3	XG2003.D	07/20/2014	16:16
	CCVIS 680-339960/4	XG2004.D	07/20/2014	16:47
	MB 680-338712/15-A	XG2012.D	07/20/2014	20:35
	LCS 680-338712/16-A	XG2013.D	07/20/2014	21:03
	CCV 680-339960/23	XG2025.D	07/21/2014	02:44

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-339960/4 Calibration Date: 07/20/2014 16:47  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2004.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8723		1.00	1.00	0.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.5927		0.995	1.00	-0.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.4215		0.990	1.00	-1.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2855		1.97	2.00	-1.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2086		1.86	2.00	-7.0	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2050		1.95	2.00	-2.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1563		2.83	3.00	-5.7	20.0
Octachlorobiphenyl	Ave	0.1517	0.1399		2.77	3.00	-7.8	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0503		5.55	4.00	38.7*	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0300		4.13	5.00	-17.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0402		4.05	5.00	-18.9	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-339960/23 Calibration Date: 07/21/2014 02:44  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2025.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8474		0.975	1.00	-2.5	20.0
Dichlorobiphenyl	Ave	0.5955	0.5905		0.992	1.00	-0.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.4195		0.986	1.00	-1.4	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2829		1.96	2.00	-2.2	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2112		1.88	2.00	-5.8	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2079		1.97	2.00	-1.3	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1593		2.88	3.00	-3.9	20.0
Octachlorobiphenyl	Ave	0.1517	0.1440		2.85	3.00	-5.1	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0310		4.27	5.00	-14.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0434		4.38	5.00	-12.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2102.D DFTPP Injection Date: 07/21/2014  
 Instrument ID: CMSX DFTPP Injection Time: 14:32  
 Analysis Batch No.: 340118

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	52.7
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.5
275	10 - 30% of mass 198	28.1
365	Greater than 1% of mass 198	4.4
441	Present but less than mass 443	12.4 (81.7) 2
442	Greater than 40% of mass 198	80.2
443	17 - 23% of mass 442	15.2 (19.0) 1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340118/3	XG2103.D	07/21/2014	15:02
	CCVIS 680-340118/4	XG2104.D	07/21/2014	15:33
	MB 680-339176/21-A	XG2106.D	07/21/2014	16:30
	LCS 680-339176/22-A	XG2107.D	07/21/2014	16:59
SD-263-01 MS	680-102521-15 MS	XG2108.D	07/21/2014	17:28
SD-263-01 MSD	680-102521-15 MSD	XG2109.D	07/21/2014	17:56
SD-250-SS	680-102521-1	XG2111.D	07/21/2014	18:53
SD-250-01	680-102521-2	XG2112.D	07/21/2014	19:21
SD-250-03	680-102521-4	XG2114.D	07/21/2014	20:18
SD-251-SS	680-102521-5	XG2115.D	07/21/2014	20:47
SD-251-01	680-102521-6	XG2116.D	07/21/2014	21:15
SD-251-02	680-102521-7	XG2117.D	07/21/2014	21:44
SD-251-03	680-102521-8	XG2118.D	07/21/2014	22:12
SD-262-SS	680-102521-9	XG2119.D	07/21/2014	22:41
SD-262-01	680-102521-10	XG2120.D	07/21/2014	23:09
SD-262-02	680-102521-11	XG2121.D	07/21/2014	23:37
SD-262-03	680-102521-12	XG2122.D	07/22/2014	00:06
	CCV 680-340118/24	XG2124.D	07/22/2014	01:03

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-340118/4 Calibration Date: 07/21/2014 15:33  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2104.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8954		1.03	1.00	3.0	20.0
Dichlorobiphenyl	Ave	0.5955	0.6077		1.02	1.00	2.0	20.0
Trichlorobiphenyl	Ave	0.4256	0.4221		0.992	1.00	-0.8	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2907		2.01	2.00	0.5	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2026		1.81	2.00	-9.7	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2026		1.92	2.00	-3.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1500		2.71	3.00	-9.5	20.0
Octachlorobiphenyl	Ave	0.1517	0.1284		2.54	3.00	-15.4	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0269		3.71	5.00	-25.8	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0369		3.72	5.00	-25.6	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-340118/24 Calibration Date: 07/22/2014 01:03  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2124.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8720		1.00	1.00	0.3	20.0
Dichlorobiphenyl	Ave	0.5955	0.6038		1.01	1.00	1.4	20.0
Trichlorobiphenyl	Ave	0.4256	0.4309		1.01	1.00	1.3	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2892		2.00	2.00	-0.0	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2181		1.94	2.00	-2.8	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2127		2.02	2.00	1.0	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1622		2.94	3.00	-2.2	20.0
Octachlorobiphenyl	Ave	0.1517	0.1406		2.78	3.00	-7.3	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0293		4.03	5.00	-19.3	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0400		4.04	5.00	-19.3	20.0



FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2302.D DFTPP Injection Date: 07/23/2014  
 Instrument ID: CMSX DFTPP Injection Time: 10:28  
 Analysis Batch No.: 340459

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.3
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.3
275	10 - 30% of mass 198	29.1
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	14.1 (82.2)2
442	Greater than 40% of mass 198	90.1
443	17 - 23% of mass 442	17.2 (19.0)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340459/3	XG2303.D	07/23/2014	10:58
	CCVIS 680-340459/4	XG2304.D	07/23/2014	11:29
SD-263-SS	680-102521-14	XG2307.D	07/23/2014	12:55
SD-263-01	680-102521-15	XG2308.D	07/23/2014	13:23
SD-263-02	680-102521-16	XG2309.D	07/23/2014	13:52
SD-263-03	680-102521-17	XG2310.D	07/23/2014	14:21
SD-264-SS	680-102521-18	XG2311.D	07/23/2014	14:49
	MB 680-339369/21-A	XG2314.D	07/23/2014	16:16
	LCS 680-339369/22-A	XG2315.D	07/23/2014	16:44
SD-271-01 MS	680-102521-40 MS	XG2316.D	07/23/2014	17:13
SD-271-01 MSD	680-102521-40 MSD	XG2317.D	07/23/2014	17:42
SD-271-01	680-102521-40	XG2318.D	07/23/2014	18:11
SD-264-03	680-102521-21	XG2319.D	07/23/2014	18:40
SD-265-SS	680-102521-22	XG2320.D	07/23/2014	19:09
SD-265-01	680-102521-23	XG2321.D	07/23/2014	19:37
SD-265-02	680-102521-24	XG2322.D	07/23/2014	20:06
SD-265-03	680-102521-25	XG2323.D	07/23/2014	20:35
SD-268-SS	680-102521-26	XG2324.D	07/23/2014	21:04
	CCV 680-340459/25	XG2325.D	07/23/2014	21:32

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-340459/4 Calibration Date: 07/23/2014 11:29  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2304.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8487		0.977	1.00	-2.3	20.0
Dichlorobiphenyl	Ave	0.5955	0.5709		0.959	1.00	-4.1	20.0
Trichlorobiphenyl	Ave	0.4256	0.3975		0.934	1.00	-6.6	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2692		1.86	2.00	-7.0	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2086		1.86	2.00	-7.0	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2069		1.97	2.00	-1.7	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1530		2.77	3.00	-7.7	20.0
Octachlorobiphenyl	Ave	0.1517	0.1436		2.84	3.00	-5.4	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0367		5.07	5.00	1.3	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0503		5.07	5.00	1.5	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-340459/25 Calibration Date: 07/23/2014 21:32  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2325.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8091		0.931	1.00	-6.9	20.0
Dichlorobiphenyl	Ave	0.5955	0.5536		0.930	1.00	-7.0	20.0
Trichlorobiphenyl	Ave	0.4256	0.3908		0.918	1.00	-8.2	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2595		1.79	2.00	-10.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2058		1.83	2.00	-8.3	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2003		1.90	2.00	-4.9	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1506		2.73	3.00	-9.1	20.0
Octachlorobiphenyl	Ave	0.1517	0.1460		2.89	3.00	-3.7	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0336		4.63	5.00	-7.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0472		4.76	5.00	-4.8	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2330.D DFTPP Injection Date: 07/24/2014  
 Instrument ID: CMSX DFTPP Injection Time: 00:27  
 Analysis Batch No.: 340579

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.6
275	10 - 30% of mass 198	29.4
365	Greater than 1% of mass 198	4.1
441	Present but less than mass 443	13.8 (81.4)2
442	Greater than 40% of mass 198	89.1
443	17 - 23% of mass 442	16.9 (19.0)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340579/3	XG2331.D	07/24/2014	00:58
	CCVIS 680-340579/4	XG2332.D	07/24/2014	01:28
SD-268-02	680-102521-28	XG2335.D	07/24/2014	02:54
SD-268-03	680-102521-29	XG2336.D	07/24/2014	03:23
SD-270-01	680-102521-31	XG2338.D	07/24/2014	04:20
SD-270-02	680-102521-32	XG2339.D	07/24/2014	04:49
SD-270-03	680-102521-33	XG2340.D	07/24/2014	05:17
SD-DUP06	680-102521-34	XG2341.D	07/24/2014	05:46
SD-269-02	680-102521-37	XG2344.D	07/24/2014	07:11
SD-269-03	680-102521-38	XG2345.D	07/24/2014	07:40
SD-271-SS	680-102521-39	XG2346.D	07/24/2014	08:09
SD-271-02	680-102521-41	XG2347.D	07/24/2014	08:37
SD-273-01	680-102521-43	XG2349.D	07/24/2014	09:34
SD-273-03	680-102521-45	XG2351.D	07/24/2014	10:32
	CCV 680-340579/24	XG2352.D	07/24/2014	11:00

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-340579/4 Calibration Date: 07/24/2014 01:28  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2332.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8427		0.970	1.00	-3.0	20.0
Dichlorobiphenyl	Ave	0.5955	0.5745		0.965	1.00	-3.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.4025		0.946	1.00	-5.4	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2654		1.83	2.00	-8.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2036		1.82	2.00	-9.2	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1968		1.87	2.00	-6.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1522		2.76	3.00	-8.2	20.0
Octachlorobiphenyl	Ave	0.1517	0.1382		2.73	3.00	-8.9	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0316		4.35	5.00	-12.9	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0444		4.48	5.00	-10.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-340579/24 Calibration Date: 07/24/2014 11:00  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2352.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8123		0.935	1.00	-6.5	20.0
Dichlorobiphenyl	Ave	0.5955	0.5586		0.938	1.00	-6.2	20.0
Trichlorobiphenyl	Ave	0.4256	0.3878		0.911	1.00	-8.9	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2616		1.81	2.00	-9.6	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1992		1.78	2.00	-11.2	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1922		1.83	2.00	-8.7	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1483		2.68	3.00	-10.5	20.0
Octachlorobiphenyl	Ave	0.1517	0.1346		2.66	3.00	-11.2	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0298		4.10	5.00	-17.9	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0404		4.07	5.00	-18.5	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2401.D DFTPP Injection Date: 07/24/2014  
 Instrument ID: CMSX DFTPP Injection Time: 20:22  
 Analysis Batch No.: 340817

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	47.9
197	Less than 1 % of mass 198	0.3
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	28.1
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	8.2 (50.0)2
442	Greater than 40% of mass 198	84.4
443	17 - 23% of mass 442	16.4 (19.5)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340817/3	XG2403.D	07/24/2014	20:55
	CCVIS 680-340817/4	XG2404.D	07/24/2014	21:26
SD-250-02	680-102521-3	XG2406.D	07/24/2014	22:24
SD-DUP05	680-102521-13	XG2407.D	07/24/2014	22:53
SD-264-02	680-102521-20	XG2408.D	07/24/2014	23:22
SD-268-01	680-102521-27	XG2409.D	07/24/2014	23:51
SD-270-SS	680-102521-30	XG2410.D	07/25/2014	00:20
SD-269-SS	680-102521-35	XG2411.D	07/25/2014	00:49
SD-269-01	680-102521-36	XG2412.D	07/25/2014	01:18
SD-273-SS	680-102521-42	XG2413.D	07/25/2014	01:47
	CCV 680-340817/24	XG2424.D	07/25/2014	07:04

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-340817/4 Calibration Date: 07/24/2014 21:26  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2404.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.9678		1.11	1.00	11.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.6292		1.06	1.00	5.7	20.0
Trichlorobiphenyl	Ave	0.4256	0.4222		0.992	1.00	-0.8	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2970		2.05	2.00	2.7	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2158		1.92	2.00	-3.8	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2048		1.95	2.00	-2.7	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1633		2.96	3.00	-1.5	20.0
Octachlorobiphenyl	Ave	0.1517	0.1477		2.92	3.00	-2.6	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0355		4.90	5.00	-2.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0491		4.95	5.00	-1.0	20.0



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-340817/24 Calibration Date: 07/25/2014 07:04  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2424.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8198		0.943	1.00	-5.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5624		0.945	1.00	-5.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.4042		0.950	1.00	-5.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2629		1.82	2.00	-9.1	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2071		1.85	2.00	-7.7	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1977		1.88	2.00	-6.1	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1616		2.93	3.00	-2.5	20.0
Octachlorobiphenyl	Ave	0.1517	0.1462		2.89	3.00	-3.6	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0335		4.62	5.00	-7.6	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0459		4.63	5.00	-7.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2602.D DFTPP Injection Date: 07/26/2014  
 Instrument ID: CMSX DFTPP Injection Time: 19:57  
 Analysis Batch No.: 341015

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.8
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.5
275	10 - 30% of mass 198	29.5
365	Greater than 1% of mass 198	4.8
441	Present but less than mass 443	14.9 (80.6)2
442	Greater than 40% of mass 198	97.6
443	17 - 23% of mass 442	18.4 (18.9)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341015/3	XG2603.D	07/26/2014	20:28
	CCVIS 680-341015/4	XG2604.D	07/26/2014	20:58
	MB 680-340880/21-A	XG2608.D	07/26/2014	22:53
	LCS 680-340880/22-A	XG2609.D	07/26/2014	23:22
SD-273-03 MS RE	680-102521-45 MS RE	XG2610.D	07/26/2014	23:51
SD-273-03 MSD RE	680-102521-45 MSD RE	XG2611.D	07/27/2014	00:19
SD-273-03 RE	680-102521-45 RE	XG2612.D	07/27/2014	00:48
SD-250-SS RE	680-102521-1 RE	XG2613.D	07/27/2014	01:17
SD-250-01 RE	680-102521-2 RE	XG2614.D	07/27/2014	01:45
SD-251-SS RE	680-102521-5 RE	XG2615.D	07/27/2014	02:14
SD-262-SS RE	680-102521-9 RE	XG2616.D	07/27/2014	02:42
SD-264-SS RE	680-102521-18 RE	XG2618.D	07/27/2014	03:40
SD-265-01 RE	680-102521-23 RE	XG2619.D	07/27/2014	04:08
	CCV 680-341015/23	XG2623.D	07/27/2014	06:02

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-341015/4 Calibration Date: 07/26/2014 20:58  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2604.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8343		0.960	1.00	-4.0	20.0
Dichlorobiphenyl	Ave	0.5955	0.5627		0.945	1.00	-5.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.4020		0.945	1.00	-5.5	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2673		1.85	2.00	-7.6	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2025		1.81	2.00	-9.7	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1919		1.82	2.00	-8.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1474		2.67	3.00	-11.1	20.0
Octachlorobiphenyl	Ave	0.1517	0.1349		2.67	3.00	-11.1	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0305		4.21	5.00	-15.8	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0414		4.18	5.00	-16.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-341015/23 Calibration Date: 07/27/2014 06:02  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2623.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8085		0.930	1.00	-7.0	20.0
Dichlorobiphenyl	Ave	0.5955	0.5626		0.945	1.00	-5.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.3929		0.923	1.00	-7.7	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2611		1.80	2.00	-9.8	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2017		1.80	2.00	-10.1	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1889		1.79	2.00	-10.3	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1546		2.80	3.00	-6.8	20.0
Octachlorobiphenyl	Ave	0.1517	0.1382		2.73	3.00	-8.9	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0294		4.05	5.00	-19.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0415		4.19	5.00	-16.2	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2626.D DFTPP Injection Date: 07/27/2014  
 Instrument ID: CMSX DFTPP Injection Time: 07:30  
 Analysis Batch No.: 341016

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.4
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	28.7
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	13.6 (80.9)2
442	Greater than 40% of mass 198	87.3
443	17 - 23% of mass 442	16.8 (19.3)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341016/3	XG2627.D	07/27/2014	08:01
	CCVIS 680-341016/4	XG2628.D	07/27/2014	08:31
SD-270-01 RE	680-102521-31 RE	XG2631.D	07/27/2014	09:57
SD-270-02 RE	680-102521-32 RE	XG2632.D	07/27/2014	10:26
SD-DUP06 RE	680-102521-34 RE	XG2633.D	07/27/2014	10:54
SD-269-02 RE	680-102521-37 RE	XG2635.D	07/27/2014	11:52
SD-271-SS RE	680-102521-39 RE	XG2636.D	07/27/2014	12:20
SD-273-SS RE	680-102521-42 RE	XG2637.D	07/27/2014	12:49
SD-273-01 RE	680-102521-43 RE	XG2638.D	07/27/2014	13:17
SD-263-02 RE	680-102521-16 RE	XG2642.D	07/27/2014	15:12
SD-265-02 RE	680-102521-24 RE	XG2643.D	07/27/2014	15:41
SD-265-03 RE	680-102521-25 RE	XG2644.D	07/27/2014	16:09
SD-268-SS RE	680-102521-26 RE	XG2645.D	07/27/2014	16:38
SD-270-SS RE	680-102521-30 RE	XG2646.D	07/27/2014	17:07
	CCV 680-341016/24	XG2649.D	07/27/2014	18:32

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-341016/4 Calibration Date: 07/27/2014 08:31  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2628.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8106		0.933	1.00	-6.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5587		0.938	1.00	-6.2	20.0
Trichlorobiphenyl	Ave	0.4256	0.3986		0.937	1.00	-6.3	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2623		1.81	2.00	-9.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2049		1.83	2.00	-8.6	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1967		1.87	2.00	-6.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1540		2.79	3.00	-7.1	20.0
Octachlorobiphenyl	Ave	0.1517	0.1405		2.78	3.00	-7.4	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0328		4.52	5.00	-9.7	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0440		4.44	5.00	-11.2	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-341016/24 Calibration Date: 07/27/2014 18:32  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2649.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8017		0.922	1.00	-7.8	20.0
Dichlorobiphenyl	Ave	0.5955	0.5372		0.902	1.00	-9.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.3825		0.899	1.00	-10.1	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2566		1.77	2.00	-11.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1991		1.78	2.00	-11.2	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1900		1.80	2.00	-9.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1465		2.65	3.00	-11.6	20.0
Octachlorobiphenyl	Ave	0.1517	0.1304		2.58	3.00	-14.0	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0287		3.95	5.00	-20.9*	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0399		4.03	5.00	-19.5	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2755.D DFTPP Injection Date: 07/28/2014  
 Instrument ID: CMSX DFTPP Injection Time: 23:17  
 Analysis Batch No.: 341035

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	49.3
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	29.3
365	Greater than 1% of mass 198	4.3
441	Present but less than mass 443	11.1 (57.5)2
442	Greater than 40% of mass 198	98.4
443	17 - 23% of mass 442	19.2 (19.6)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341035/3	XG2756.D	07/28/2014	23:48
	CCVIS 680-341035/4	XG2757.D	07/29/2014	00:19
SD-269-SS RE	680-102521-35 RE	XG2763.D	07/29/2014	03:13
	CCV 680-341035/15	XG2768.D	07/29/2014	05:37



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-341035/4 Calibration Date: 07/29/2014 00:19  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2757.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8217		0.946	1.00	-5.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.5489		0.922	1.00	-7.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.3870		0.909	1.00	-9.1	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2653		1.83	2.00	-8.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1976		1.76	2.00	-11.9	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1929		1.83	2.00	-8.4	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1563		2.83	3.00	-5.7	20.0
Octachlorobiphenyl	Ave	0.1517	0.1413		2.79	3.00	-6.9	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0323		4.45	5.00	-11.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0454		4.58	5.00	-8.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-341035/15 Calibration Date: 07/29/2014 05:37  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2768.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8152		0.938	1.00	-6.2	20.0
Dichlorobiphenyl	Ave	0.5955	0.5621		0.944	1.00	-5.6	20.0
Trichlorobiphenyl	Ave	0.4256	0.3947		0.927	1.00	-7.3	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2684		1.86	2.00	-7.2	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2062		1.84	2.00	-8.1	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1987		1.89	2.00	-5.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1598		2.89	3.00	-3.6	20.0
Octachlorobiphenyl	Ave	0.1517	0.1476		2.92	3.00	-2.7	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0349		4.81	5.00	-3.8	20.0
Decachlorobiphenyl-13Cl2	Ave	0.0496	0.0472		4.76	5.00	-4.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2906.D DFTPP Injection Date: 07/29/2014  
 Instrument ID: CMSX DFTPP Injection Time: 22:19  
 Analysis Batch No.: 341490

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.8
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.6
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	4.6
441	Present but less than mass 443	15.1 (81.7)2
442	Greater than 40% of mass 198	93.1
443	17 - 23% of mass 442	18.4 (19.8)1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-341490/3	XG2908.D	07/29/2014	23:20
	IC 680-341490/4	XG2909.D	07/29/2014	23:49
	IC 680-341490/5	XG2910.D	07/30/2014	00:17
	IC 680-341490/6	XG2911.D	07/30/2014	00:46
	IC 680-341490/7	XG2912.D	07/30/2014	01:15
	ICV 680-341490/8	XG2913.D	07/30/2014	01:43

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102521-1

Analy Batch No.: 341490

SDG No.: 680102521-1

Instrument ID: CMSX

GC Column: DB-5MS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/29/2014 23:20

Calibration End Date: 07/30/2014 01:15

Calibration ID: 32707

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341490/7	XG2912.D
Level 2	IC 680-341490/6	XG2911.D
Level 3	ICISAV 680-341490/3	XG2908.D
Level 4	IC 680-341490/5	XG2910.D
Level 5	IC 680-341490/4	XG2909.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1								
Monochlorobiphenyl	0.7921	0.7705	0.8099	0.7988	0.7964	Ave	0.7935			1.8	20.0					
Dichlorobiphenyl	0.5284	0.5186	0.5209	0.5416	0.5248	Ave	0.5269			1.7	20.0					
Trichlorobiphenyl	0.3754	0.3671	0.3622	0.3850	0.3830	Ave	0.3745			2.6	20.0					
PCB-104			0.2799			Ave	0.2799			30.0	30.0					
Tetrachlorobiphenyl	0.2501	0.2513	0.2524	0.2552	0.2537	Ave	0.2526			0.8	20.0					
Pentachlorobiphenyl	0.1969	0.1993	0.1832	0.2038	0.2132	Ave	0.1993			5.5	20.0					
PCB-77			0.3725			Ave	0.3725			30.0	30.0					
Hexachlorobiphenyl	0.1822	0.1911	0.1904	0.1957	0.2013	Ave	0.1922			3.7	20.0					
Heptachlorobiphenyl	0.1478	0.1500	0.1425	0.1568	0.1664	Ave	0.1527			6.0	20.0					
Octachlorobiphenyl	0.1288	0.1424	0.1289	0.1458	0.1571	Ave	0.1406			8.6	20.0					
PCB-208			0.0459			Ave	0.0459			30.0	30.0					
Nonachlorobiphenyl			0.0367			Ave	0.0349			9.9	20.0					
DCB Decachlorobiphenyl	0.0323	0.0337	0.0316	0.0368	0.0399	Ave	0.0349			9.9	20.0					
Decachlorobiphenyl-13C12	0.0428	0.0516	0.0426	0.0504	0.0560	Ave	0.0487			12.0	20.0					

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: ICV 680-341490/8 Calibration Date: 07/30/2014 01:43  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2913.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7728		0.974	1.00	-2.6	20.0
Dichlorobiphenyl	Ave	0.5269	0.5308		1.01	1.00	0.7	20.0
Trichlorobiphenyl	Ave	0.3745	0.3902		1.04	1.00	4.2	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2598		2.06	2.00	2.9	20.0
Pentachlorobiphenyl	Ave	0.1993	0.2014		2.02	2.00	1.1	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1898		1.98	2.00	-1.2	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1595		3.13	3.00	4.4	20.0
Octachlorobiphenyl	Ave	0.1406	0.1416		3.02	3.00	0.7	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0347		4.98	5.00	-0.5	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2929.D DFTPP Injection Date: 07/30/2014  
 Instrument ID: CMSX DFTPP Injection Time: 11:13  
 Analysis Batch No.: 341486

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.6
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	28.3
365	Greater than 1% of mass 198	4.1
441	Present but less than mass 443	14.0 (77.5)2
442	Greater than 40% of mass 198	92.4
443	17 - 23% of mass 442	18.0 (19.5)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341486/3	XG2930.D	07/30/2014	11:54
	CCVIS 680-341486/4	XG2931.D	07/30/2014	12:25
SD-273-02	680-102521-44	XG2933.D	07/30/2014	13:22
	MB 680-341361/11-A	XG2934.D	07/30/2014	13:50
	LCS 680-341361/12-A	XG2935.D	07/30/2014	14:19
SD-264-01 MS	680-102521-19 MS	XG2936.D	07/30/2014	14:48
SD-264-01 MSD	680-102521-19 MSD	XG2937.D	07/30/2014	15:16
SD-264-01	680-102521-19	XG2938.D	07/30/2014	15:45
	CCV 680-341486/25	XG2948.D	07/30/2014	20:32

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCVIS 680-341486/4 Calibration Date: 07/30/2014 12:25  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2931.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7474		0.942	1.00	-5.8	20.0
Dichlorobiphenyl	Ave	0.5269	0.4977		0.945	1.00	-5.5	20.0
Trichlorobiphenyl	Ave	0.3745	0.3563		0.951	1.00	-4.9	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2392		1.89	2.00	-5.3	20.0
Pentachlorobiphenyl	Ave	0.1993	0.1878		1.89	2.00	-5.7	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1832		1.91	2.00	-4.7	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1420		2.79	3.00	-7.0	20.0
Octachlorobiphenyl	Ave	0.1406	0.1325		2.83	3.00	-5.8	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0320		4.59	5.00	-8.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0487	0.0438		4.50	5.00	-10.0	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab Sample ID: CCV 680-341486/25 Calibration Date: 07/30/2014 20:32  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2948.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7557		0.952	1.00	-4.8	20.0
Dichlorobiphenyl	Ave	0.5269	0.5175		0.982	1.00	-1.8	20.0
Trichlorobiphenyl	Ave	0.3745	0.3666		0.979	1.00	-2.1	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2497		1.98	2.00	-1.1	20.0
Pentachlorobiphenyl	Ave	0.1993	0.2811		2.82	2.00	41.1*	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1891		1.97	2.00	-1.6	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1432		2.81	3.00	-6.2	20.0
Octachlorobiphenyl	Ave	0.1406	0.1364		2.91	3.00	-3.0	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0317		4.55	5.00	-9.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0487	0.0433		4.45	5.00	-11.0	20.0



FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102521-1

SDG No.: 680102521-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #
SD-250-SS	680-102521-1	24 X
SD-250-SS RE	680-102521-1 RE	8 X
SD-250-01	680-102521-2	27 X
SD-250-01 RE	680-102521-2 RE	8 X
SD-250-02	680-102521-3	0 D
SD-250-03	680-102521-4	38
SD-251-SS	680-102521-5	24 X
SD-251-SS RE	680-102521-5 RE	21 X
SD-251-01	680-102521-6	32
SD-251-02	680-102521-7	36
SD-251-03	680-102521-8	53
SD-262-SS	680-102521-9	10 X
SD-262-SS RE	680-102521-9 RE	8 X
SD-262-01	680-102521-10	32
SD-262-02	680-102521-11	39
SD-262-03	680-102521-12	41
SD-DUP05	680-102521-13	0 D
SD-263-SS	680-102521-14	32
SD-263-01	680-102521-15	41
SD-263-02	680-102521-16	22 X
SD-263-02 RE	680-102521-16 RE	32
SD-263-03	680-102521-17	62
SD-264-SS	680-102521-18	13 X
SD-264-SS RE	680-102521-18 RE	3 X
SD-264-01	680-102521-19	64
SD-264-02	680-102521-20	0 D
SD-264-03	680-102521-21	49
SD-265-SS	680-102521-22	42
SD-265-01	680-102521-23	17 X
SD-265-01 RE	680-102521-23 RE	12 X
SD-265-02	680-102521-24	9 X
SD-265-02 RE	680-102521-24 RE	0 D
SD-265-03	680-102521-25	27 X
SD-265-03 RE	680-102521-25 RE	0 D
SD-268-SS	680-102521-26	9 X

QC LIMITS  
30-130

13DCB = Decachlorobiphenyl-13C12

# Column to be used to flag recovery values

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102521-1

SDG No.: 680102521-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #
SD-268-SS RE	680-102521-26 RE	36
SD-268-01	680-102521-27	0 D
SD-268-02	680-102521-28	43
SD-268-03	680-102521-29	54
SD-270-SS	680-102521-30	12 X
SD-270-SS RE	680-102521-30 RE	0 D
SD-270-01	680-102521-31	25 X
SD-270-01 RE	680-102521-31 RE	37
SD-270-02	680-102521-32	17 X
SD-270-02 RE	680-102521-32 RE	33
SD-270-03	680-102521-33	53
SD-DUP06	680-102521-34	25 X
SD-DUP06 RE	680-102521-34 RE	47
SD-269-SS	680-102521-35	7 X
SD-269-SS RE	680-102521-35 RE	0 D
SD-269-01	680-102521-36	0 D
SD-269-02	680-102521-37	10 X
SD-269-02 RE	680-102521-37 RE	43
SD-269-03	680-102521-38	52
SD-271-SS	680-102521-39	22 X
SD-271-SS RE	680-102521-39 RE	37
SD-271-01	680-102521-40	12 X
SD-271-02	680-102521-41	68
SD-273-SS	680-102521-42	0 D
SD-273-SS RE	680-102521-42 RE	0 D
SD-273-01	680-102521-43	18 X
SD-273-01 RE	680-102521-43 RE	35
SD-273-02	680-102521-44	0 D
SD-273-03	680-102521-45	16 X
SD-273-03 RE	680-102521-45 RE	49
	MB 680-338712/15-A	51
	MB 680-339176/21-A	40
	MB 680-339369/21-A	58

QC LIMITS  
30-130

13DCB = Decachlorobiphenyl-13C12

# Column to be used to flag recovery values

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102521-1

SDG No.: 680102521-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #	
	MB 680-340880/21-A	21	X
	MB 680-341361/11-A	34	*
	LCS 680-338712/16-A	69	
	LCS 680-339176/22-A	70	
	LCS 680-339369/22-A	42	
	LCS 680-340880/22-A	53	
	LCS 680-341361/12-A	47	*
SD-263-01 MS	680-102521-15 MS	13	X
SD-264-01 MS	680-102521-19 MS	55	
SD-271-01 MS	680-102521-40 MS	2	X
SD-273-03 MS RE	680-102521-45 MS RE	70	
SD-263-01 MSD	680-102521-15 MSD	19	X
SD-264-01 MSD	680-102521-19 MSD	16	* X
SD-271-01 MSD	680-102521-40 MSD	2	X
SD-273-03 MSD RE	680-102521-45 MSD RE	46	

13DCB = Decachlorobiphenyl-13C12

QC LIMITS  
30-130

# Column to be used to flag recovery values

FORM II 680

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2314.D Lab Sample ID: MB 680-339369/21-A  
 Matrix: Solid Date Extracted: 07/17/2014 12:54  
 Instrument ID: CMSX Date Analyzed: 07/23/2014 16:16  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-339369/22-A	XG2315.D	07/23/2014 16:44
SD-271-01 MS	680-102521-40 MS	XG2316.D	07/23/2014 17:13
SD-271-01 MSD	680-102521-40 MSD	XG2317.D	07/23/2014 17:42
SD-271-01	680-102521-40	XG2318.D	07/23/2014 18:11
SD-264-03	680-102521-21	XG2319.D	07/23/2014 18:40
SD-265-SS	680-102521-22	XG2320.D	07/23/2014 19:09
SD-265-01	680-102521-23	XG2321.D	07/23/2014 19:37
SD-265-02	680-102521-24	XG2322.D	07/23/2014 20:06
SD-265-03	680-102521-25	XG2323.D	07/23/2014 20:35
SD-268-SS	680-102521-26	XG2324.D	07/23/2014 21:04
SD-268-02	680-102521-28	XG2335.D	07/24/2014 02:54
SD-268-03	680-102521-29	XG2336.D	07/24/2014 03:23
SD-270-01	680-102521-31	XG2338.D	07/24/2014 04:20
SD-270-02	680-102521-32	XG2339.D	07/24/2014 04:49
SD-270-03	680-102521-33	XG2340.D	07/24/2014 05:17
SD-DUP06	680-102521-34	XG2341.D	07/24/2014 05:46
SD-269-02	680-102521-37	XG2344.D	07/24/2014 07:11
SD-269-03	680-102521-38	XG2345.D	07/24/2014 07:40
SD-271-SS	680-102521-39	XG2346.D	07/24/2014 08:09
SD-268-01	680-102521-27	XG2409.D	07/24/2014 23:51
SD-270-SS	680-102521-30	XG2410.D	07/25/2014 00:20
SD-269-SS	680-102521-35	XG2411.D	07/25/2014 00:49
SD-269-01	680-102521-36	XG2412.D	07/25/2014 01:18

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-339369/21-A  
 Matrix: Solid Lab File ID: XG2314.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/17/2014 12:54  
 Sample wt/vol: 15.02(g) Date Analyzed: 07/23/2014 16:16  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.7	U	34	1.7
25512-42-9	Dichlorobiphenyl	0.70	U	6.6	0.70
28655-71-2	Heptachlorobiphenyl	1.0	U	20	1.0
26601-64-9	Hexachlorobiphenyl	0.66	U	13	0.66
27323-18-8	Monochlorobiphenyl	0.38	U	6.6	0.38
53742-07-7	Nonachlorobiphenyl	6.6	U	34	6.6
55722-26-4	Octachlorobiphenyl	1.1	U	20	1.1
25429-29-2	Pentachlorobiphenyl	0.68	U	13	0.68
26914-33-0	Tetrachlorobiphenyl	0.74	U	13	0.74
25323-68-6	Trichlorobiphenyl	0.34	U	6.6	0.34

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	58		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2315.D  
 Lab ID: LCS 680-339369/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	668	285	43	30-130	
Dichlorobiphenyl	134	59.4	45	30-130	
Heptachlorobiphenyl	401	185	46	40-140	
Hexachlorobiphenyl	267	124	47	40-140	
Monochlorobiphenyl	134	57.7	43	30-130	
Nonachlorobiphenyl	668	476	71	30-130	
Octachlorobiphenyl	401	179	45	40-140	
Pentachlorobiphenyl	267	121	45	40-140	
Tetrachlorobiphenyl	267	120	45	40-140	
Trichlorobiphenyl	134	59.5	45	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2316.D  
 Lab ID: 680-102521-40 MS Client ID: SD-271-01 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	1800	4.4 U	39.6 J	2	30-130	F1
Dichlorobiphenyl	360	1.8 U	7.74 J	2	30-130	F1
Heptachlorobiphenyl	1080	210	24.9 J	-17	40-140	F1
Hexachlorobiphenyl	720	250	37.8	-29	40-140	F1
Monochlorobiphenyl	360	1.0 U	7.19 J	2	30-130	F1
Nonachlorobiphenyl	1800	17 U	78.7 J	4	30-130	F1
Octachlorobiphenyl	1080	38 J	25.5 J	-1	40-140	F1
Pentachlorobiphenyl	720	250	49.4	-28	40-140	F1
Tetrachlorobiphenyl	720	1400	251	-157	40-140	F1
Trichlorobiphenyl	360	100	25.1	-27	30-130	F1

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2317.D  
 Lab ID: 680-102521-40 MSD Client ID: SD-271-01 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	1680	37.9 J	2	4	50	30-130	F1
Dichlorobiphenyl	337	8.35 J	2	8	50	30-130	F1
Heptachlorobiphenyl	1010	25.9 J	-18	4	50	40-140	F1
Hexachlorobiphenyl	673	32.9 J	-32	14	50	40-140	F1
Monochlorobiphenyl	337	8.06 J	2	11	50	30-130	F1
Nonachlorobiphenyl	1680	76.2 J	5	3	50	30-130	F1
Octachlorobiphenyl	1010	25.5 J	-1	0	50	40-140	F1
Pentachlorobiphenyl	673	57.8	-29	16	50	40-140	F1
Tetrachlorobiphenyl	673	283	-164	12	50	40-140	F1
Trichlorobiphenyl	337	28.0	-22	11	50	30-130	F1

# Column to be used to flag recovery and RPD values



FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2608.D Lab Sample ID: MB 680-340880/21-A  
 Matrix: Solid Date Extracted: 07/25/2014 14:50  
 Instrument ID: CMSX Date Analyzed: 07/26/2014 22:53  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-340880/22-A	XG2609.D	07/26/2014 23:22
SD-273-03 MS RE	680-102521-45 MS RE	XG2610.D	07/26/2014 23:51
SD-273-03 MSD RE	680-102521-45 MSD RE	XG2611.D	07/27/2014 00:19
SD-273-03 RE	680-102521-45 RE	XG2612.D	07/27/2014 00:48
SD-250-SS RE	680-102521-1 RE	XG2613.D	07/27/2014 01:17
SD-250-01 RE	680-102521-2 RE	XG2614.D	07/27/2014 01:45
SD-251-SS RE	680-102521-5 RE	XG2615.D	07/27/2014 02:14
SD-262-SS RE	680-102521-9 RE	XG2616.D	07/27/2014 02:42
SD-264-SS RE	680-102521-18 RE	XG2618.D	07/27/2014 03:40
SD-265-01 RE	680-102521-23 RE	XG2619.D	07/27/2014 04:08
SD-270-01 RE	680-102521-31 RE	XG2631.D	07/27/2014 09:57
SD-270-02 RE	680-102521-32 RE	XG2632.D	07/27/2014 10:26
SD-DUP06 RE	680-102521-34 RE	XG2633.D	07/27/2014 10:54
SD-269-02 RE	680-102521-37 RE	XG2635.D	07/27/2014 11:52
SD-271-SS RE	680-102521-39 RE	XG2636.D	07/27/2014 12:20
SD-273-SS RE	680-102521-42 RE	XG2637.D	07/27/2014 12:49
SD-273-01 RE	680-102521-43 RE	XG2638.D	07/27/2014 13:17
SD-263-02 RE	680-102521-16 RE	XG2642.D	07/27/2014 15:12
SD-265-02 RE	680-102521-24 RE	XG2643.D	07/27/2014 15:41
SD-265-03 RE	680-102521-25 RE	XG2644.D	07/27/2014 16:09
SD-268-SS RE	680-102521-26 RE	XG2645.D	07/27/2014 16:38
SD-270-SS RE	680-102521-30 RE	XG2646.D	07/27/2014 17:07
SD-269-SS RE	680-102521-35 RE	XG2763.D	07/29/2014 03:13

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-340880/21-A  
 Matrix: Solid Lab File ID: XG2608.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
 Sample wt/vol: 30.04(g) Date Analyzed: 07/26/2014 22:53  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341015 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	21	X	30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2609.D  
 Lab ID: LCS 680-340880/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	199	60	30-130	
Dichlorobiphenyl	66.6	34.1	51	30-130	
Heptachlorobiphenyl	200	113	57	40-140	
Hexachlorobiphenyl	133	74.9	56	40-140	
Monochlorobiphenyl	66.6	33.2	50	30-130	
Nonachlorobiphenyl	333	290	87	30-130	
Octachlorobiphenyl	200	113	57	40-140	
Pentachlorobiphenyl	133	72.5	54	40-140	
Tetrachlorobiphenyl	133	68.4	51	40-140	
Trichlorobiphenyl	66.6	34.0	51	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2610.D  
 Lab ID: 680-102521-45 MS RE Client ID: SD-273-03 MS RE

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	1890	4.7 U	1390	73	30-130	
Dichlorobiphenyl	379	2.0 U	235	62	30-130	
Heptachlorobiphenyl	1140	2.8 U	864	76	40-140	
Hexachlorobiphenyl	758	1.9 U	562	74	40-140	
Monochlorobiphenyl	379	1.1 U	221	58	30-130	
Nonachlorobiphenyl	1890	19 U	2130	112	30-130	
Octachlorobiphenyl	1140	3.0 U	861	76	40-140	
Pentachlorobiphenyl	758	1.9 U	536	71	40-140	
Tetrachlorobiphenyl	758	3.0 U	497	65	40-140	
Trichlorobiphenyl	379	0.96 U	250	66	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2611.D  
 Lab ID: 680-102521-45 MSD RE Client ID: SD-273-03 MSD RE

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	1880	881	47	45	50	30-130	
Dichlorobiphenyl	377	156	41	41	50	30-130	
Heptachlorobiphenyl	1130	592	52	37	50	40-140	
Hexachlorobiphenyl	753	381	51	39	50	40-140	
Monochlorobiphenyl	377	147	39	40	50	30-130	
Nonachlorobiphenyl	1880	1380	73	43	50	30-130	
Octachlorobiphenyl	1130	584	52	38	50	40-140	
Pentachlorobiphenyl	753	353	47	41	50	40-140	
Tetrachlorobiphenyl	753	320	42	43	50	40-140	
Trichlorobiphenyl	377	169	45	39	50	30-130	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
SDG No.: 680102521-1  
Lab File ID: XG2934.D Lab Sample ID: MB 680-341361/11-A  
Matrix: Solid Date Extracted: 07/29/2014 14:28  
Instrument ID: CMSX Date Analyzed: 07/30/2014 13:50  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-341361/12-A	XG2935.D	07/30/2014 14:19
SD-264-01 MS	680-102521-19 MS	XG2936.D	07/30/2014 14:48
SD-264-01 MSD	680-102521-19 MSD	XG2937.D	07/30/2014 15:16
SD-264-01	680-102521-19	XG2938.D	07/30/2014 15:45

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-341361/11-A  
 Matrix: Solid Lab File ID: XG2934.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/29/2014 14:28  
 Sample wt/vol: 30.05(g) Date Analyzed: 07/30/2014 13:50  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341486 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	34	*	30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2935.D  
 Lab ID: LCS 680-341361/12-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	162	49	30-130	*
Dichlorobiphenyl	66.6	30.2	45	30-130	*
Heptachlorobiphenyl	200	101	51	40-140	*
Hexachlorobiphenyl	133	66.3	50	40-140	*
Monochlorobiphenyl	66.6	27.4	41	30-130	*
Nonachlorobiphenyl	333	249	75	30-130	*
Octachlorobiphenyl	200	101	51	40-140	*
Pentachlorobiphenyl	133	66.6	50	40-140	*
Tetrachlorobiphenyl	133	63.9	48	40-140	*
Trichlorobiphenyl	66.6	31.5	47	30-130	*

# Column to be used to flag recovery and RPD values



FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2936.D  
 Lab ID: 680-102521-19 MS Client ID: SD-264-01 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	3420	8.5 U	1970	58	30-130	
Dichlorobiphenyl	684	3.6 U	433	63	30-130	
Heptachlorobiphenyl	2050	870	1860	48	40-140	
Hexachlorobiphenyl	1370	1200	2070	63	40-140	
Monochlorobiphenyl	684	2.0 U	384	56	30-130	
Nonachlorobiphenyl	3420	34 U	3170	93	30-130	
Octachlorobiphenyl	2050	35 J	1330	63	40-140	
Pentachlorobiphenyl	1370	1300	2220	67	40-140	
Tetrachlorobiphenyl	1370	2700	3500	55	40-140	
Trichlorobiphenyl	684	1.7 U	535	78	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2937.D  
 Lab ID: 680-102521-19 MSD Client ID: SD-264-01 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	3420	558	16	112	50	30-130	* F1 F2
Dichlorobiphenyl	684	117	17	115	50	30-130	* F1 F2
Heptachlorobiphenyl	2050	589	14	104	50	40-140	* F1 F2
Hexachlorobiphenyl	1370	547	48	116	50	40-140	* F1 F2
Monochlorobiphenyl	684	104	15	115	50	30-130	* F1 F2
Nonachlorobiphenyl	3420	934	27	109	50	30-130	* F1 F2
Octachlorobiphenyl	2050	406	18	106	50	40-140	* F1 F2
Pentachlorobiphenyl	1370	571	54	118	50	40-140	* F1 F2
Tetrachlorobiphenyl	1370	784	143	127	50	40-140	* F1 F2
Trichlorobiphenyl	684	143	21	116	50	30-130	* F1 F2

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Lab File ID: XG2106.D Lab Sample ID: MB 680-339176/21-A  
 Matrix: Solid Date Extracted: 07/16/2014 12:47  
 Instrument ID: CMSX Date Analyzed: 07/21/2014 16:30  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-339176/22-A	XG2107.D	07/21/2014 16:59
SD-263-01 MS	680-102521-15 MS	XG2108.D	07/21/2014 17:28
SD-263-01 MSD	680-102521-15 MSD	XG2109.D	07/21/2014 17:56
SD-250-SS	680-102521-1	XG2111.D	07/21/2014 18:53
SD-250-01	680-102521-2	XG2112.D	07/21/2014 19:21
SD-250-03	680-102521-4	XG2114.D	07/21/2014 20:18
SD-251-SS	680-102521-5	XG2115.D	07/21/2014 20:47
SD-251-01	680-102521-6	XG2116.D	07/21/2014 21:15
SD-251-02	680-102521-7	XG2117.D	07/21/2014 21:44
SD-251-03	680-102521-8	XG2118.D	07/21/2014 22:12
SD-262-SS	680-102521-9	XG2119.D	07/21/2014 22:41
SD-262-01	680-102521-10	XG2120.D	07/21/2014 23:09
SD-262-02	680-102521-11	XG2121.D	07/21/2014 23:37
SD-262-03	680-102521-12	XG2122.D	07/22/2014 00:06
SD-263-SS	680-102521-14	XG2307.D	07/23/2014 12:55
SD-263-01	680-102521-15	XG2308.D	07/23/2014 13:23
SD-263-02	680-102521-16	XG2309.D	07/23/2014 13:52
SD-263-03	680-102521-17	XG2310.D	07/23/2014 14:21
SD-264-SS	680-102521-18	XG2311.D	07/23/2014 14:49
SD-250-02	680-102521-3	XG2406.D	07/24/2014 22:24
SD-DUP05	680-102521-13	XG2407.D	07/24/2014 22:53
SD-264-02	680-102521-20	XG2408.D	07/24/2014 23:22

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-339176/21-A  
 Matrix: Solid Lab File ID: XG2106.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/16/2014 12:47  
 Sample wt/vol: 15.00(g) Date Analyzed: 07/21/2014 16:30  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.7	U	34	1.7
25512-42-9	Dichlorobiphenyl	0.70	U	6.6	0.70
28655-71-2	Heptachlorobiphenyl	1.0	U	20	1.0
26601-64-9	Hexachlorobiphenyl	0.66	U	13	0.66
27323-18-8	Monochlorobiphenyl	0.38	U	6.6	0.38
53742-07-7	Nonachlorobiphenyl	6.6	U	34	6.6
55722-26-4	Octachlorobiphenyl	1.1	U	20	1.1
25429-29-2	Pentachlorobiphenyl	0.68	U	13	0.68
26914-33-0	Tetrachlorobiphenyl	0.74	U	13	0.74
25323-68-6	Trichlorobiphenyl	0.34	U	6.6	0.34

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	40		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2107.D  
 Lab ID: LCS 680-339176/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	668	442	66	30-130	
Dichlorobiphenyl	134	103	77	30-130	
Heptachlorobiphenyl	401	314	78	40-140	
Hexachlorobiphenyl	267	206	77	40-140	
Monochlorobiphenyl	134	101	76	30-130	
Nonachlorobiphenyl	668	775	116	30-130	
Octachlorobiphenyl	401	306	76	40-140	
Pentachlorobiphenyl	267	206	77	40-140	
Tetrachlorobiphenyl	267	211	79	40-140	
Trichlorobiphenyl	134	107	80	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2108.D  
 Lab ID: 680-102521-15 MS Client ID: SD-263-01 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	3980	9.5 U	499	13	30-130	F1
Dichlorobiphenyl	795	4.0 U	133	17	30-130	F1
Heptachlorobiphenyl	2390	470	537	3	40-140	F1
Hexachlorobiphenyl	1590	670	502	-11	40-140	F1
Monochlorobiphenyl	795	2.2 U	125	16	30-130	F1
Nonachlorobiphenyl	3980	38 U	918	23	30-130	F1
Octachlorobiphenyl	2390	6.1 U	358	15	40-140	F1
Pentachlorobiphenyl	1590	920	542	-24	40-140	F1
Tetrachlorobiphenyl	1590	3300	1060	-140	40-140	F1
Trichlorobiphenyl	795	200	162	-4	30-130	F1

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2109.D  
 Lab ID: 680-102521-15 MSD Client ID: SD-263-01 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	3720	670	18	29	50	30-130	F1
Dichlorobiphenyl	744	170	23	25	50	30-130	F1
Heptachlorobiphenyl	2230	698	10	26	50	40-140	F1
Hexachlorobiphenyl	1490	693	1	32	50	40-140	F1
Monochlorobiphenyl	744	156	21	22	50	30-130	F1
Nonachlorobiphenyl	3720	1160	31	23	50	30-130	
Octachlorobiphenyl	2230	487	22	31	50	40-140	F1
Pentachlorobiphenyl	1490	962	3	56	50	40-140	F1 F2
Tetrachlorobiphenyl	1490	2730	-37	88	50	40-140	F1 F2
Trichlorobiphenyl	744	330	18	69	50	30-130	F1 F2

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
SDG No.: 680102521-1  
Lab File ID: XG2012.D Lab Sample ID: MB 680-338712/15-A  
Matrix: Solid Date Extracted: 07/12/2014 13:20  
Instrument ID: CMSX Date Analyzed: 07/20/2014 20:35  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-338712/16-A	XG2013.D	07/20/2014 21:03
SD-271-02	680-102521-41	XG2347.D	07/24/2014 08:37
SD-273-01	680-102521-43	XG2349.D	07/24/2014 09:34
SD-273-03	680-102521-45	XG2351.D	07/24/2014 10:32
SD-273-SS	680-102521-42	XG2413.D	07/25/2014 01:47
SD-273-02	680-102521-44	XG2933.D	07/30/2014 13:22



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-338712/15-A  
 Matrix: Solid Lab File ID: XG2012.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.10(g) Date Analyzed: 07/20/2014 20:35  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	51		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Matrix: Solid Level: Low Lab File ID: XG2013.D  
 Lab ID: LCS 680-338712/16-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	332	243	73	30-130	
Dichlorobiphenyl	66.3	47.5	72	30-130	
Heptachlorobiphenyl	199	153	77	40-140	
Hexachlorobiphenyl	133	100	75	40-140	
Monochlorobiphenyl	66.3	45.5	69	30-130	
Nonachlorobiphenyl	332	385	116	30-130	
Octachlorobiphenyl	199	157	79	40-140	
Pentachlorobiphenyl	133	101	76	40-140	
Tetrachlorobiphenyl	133	95.3	72	40-140	
Trichlorobiphenyl	66.3	47.7	72	30-130	

# Column to be used to flag recovery and RPD values

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		160628	10.11	229918	16.23		
UPPER LIMIT		240942	10.61	344877	16.73		
LOWER LIMIT		80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-339932/9		166018	10.11	232985	16.22		
CCVIS 680-339960/4		156930	10.13	160983	16.24		
MB 680-338712/15-A		147280	10.13	155989	16.24		
LCS 680-338712/16-A		139972	10.13	145084	16.24		
CCV 680-339960/23		146361	10.13	150656	16.24		
CCVIS 680-340118/4		152714	10.13	135608	16.24		
MB 680-339176/21-A		137516	10.13	115228	16.24		
LCS 680-339176/22-A		136593	10.13	129008	16.24		
680-102521-15 MS	SD-263-01 MS	126896	10.13	135163	16.24		
680-102521-15 MSD	SD-263-01 MSD	139120	10.13	157094	16.24		
680-102521-1	SD-250-SS	158437	10.13	172205	16.24		
680-102521-2	SD-250-01	153467	10.13	154191	16.24		
680-102521-4	SD-250-03	151186	10.13	162765	16.24		
680-102521-5	SD-251-SS	156057	10.13	154000	16.24		
680-102521-6	SD-251-01	150453	10.13	150341	16.24		
680-102521-7	SD-251-02	150432	10.13	153958	16.24		
680-102521-8	SD-251-03	137861	10.13	126980	16.24		
680-102521-9	SD-262-SS	144340	10.13	138662	16.24		
680-102521-10	SD-262-01	156931	10.13	157374	16.24		
680-102521-11	SD-262-02	154129	10.13	159156	16.24		
680-102521-12	SD-262-03	148104	10.13	139085	16.24		
CCV 680-340118/24		152797	10.13	138511	16.24		
CCVIS 680-340459/4		151625	10.05	174856	16.16		
680-102521-14	SD-263-SS	158929	10.05	186679	16.16		
680-102521-15	SD-263-01	137207	10.05	163341	16.16		
680-102521-16	SD-263-02	146681	10.05	175161	16.16		
680-102521-17	SD-263-03	148325	10.05	164394	16.16		
680-102521-18	SD-264-SS	152630	10.05	182815	16.16		
MB 680-339369/21-A		136504	10.05	142334	16.16		
LCS 680-339369/22-A		141946	10.05	148683	16.16		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		160628	10.11	229918	16.23		
UPPER LIMIT		240942	10.61	344877	16.73		
LOWER LIMIT		80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102521-40 MS	SD-271-01 MS	138602	10.05	159835	16.16		
680-102521-40 MSD	SD-271-01 MSD	149274	10.05	162109	16.16		
680-102521-40	SD-271-01	144760	10.05	183383	16.16		
680-102521-21	SD-264-03	166768	10.07	191320	16.16		
680-102521-22	SD-265-SS	161958	10.05	200300	16.16		
680-102521-23	SD-265-01	158941	10.05	189491	16.16		
680-102521-24	SD-265-02	168692	10.05	191423	16.16		
680-102521-25	SD-265-03	162325	10.05	187223	16.16		
680-102521-26	SD-268-SS	135068	10.05	169716	16.16		
CCV 680-340459/25		142389	10.07	161879	16.16		
CCVIS 680-340579/4		152615	10.05	152178	16.16		
680-102521-28	SD-268-02	154463	10.05	178848	16.16		
680-102521-29	SD-268-03	146902	10.05	174756	16.16		
680-102521-31	SD-270-01	160769	10.05	193424	16.16		
680-102521-32	SD-270-02	148070	10.05	182856	16.16		
680-102521-33	SD-270-03	150135	10.05	172182	16.16		
680-102521-34	SD-DUP06	139014	10.05	174581	16.16		
680-102521-37	SD-269-02	154631	10.05	168677	16.16		
680-102521-38	SD-269-03	137796	10.05	152488	16.16		
680-102521-39	SD-271-SS	138252	10.05	167388	16.16		
680-102521-41	SD-271-02	136752	10.05	162205	16.16		
680-102521-43	SD-273-01	147976	10.07	180659	16.16		
680-102521-45	SD-273-03	146207	10.07	155828	16.16		
CCV 680-340579/24		159741	10.05	164762	16.16		
CCVIS 680-340817/4		127048	9.98	129555	16.08		
680-102521-3	SD-250-02	150442	9.98	182340*	16.08		OK
680-102521-13	SD-DUP05	143762	9.98	153102	16.08		
680-102521-20	SD-264-02	148172	9.98	165904	16.08		
680-102521-27	SD-268-01	138249	9.98	161604	16.08		
680-102521-30	SD-270-SS	149955	9.98	183101*	16.08		OK

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		160628	10.11	229918	16.23		
UPPER LIMIT		240942	10.61	344877	16.73		
LOWER LIMIT		80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102521-35	SD-269-SS	145505	9.98	160062	16.08		
680-102521-36	SD-269-01	145127	9.98	164827	16.08		
680-102521-42	SD-273-SS	141042	9.98	156859	16.08		
CCV 680-340817/24		139441	9.98	163441	16.09		
CCVIS 680-341015/4		124030	9.91	126025	16.01		
MB 680-340880/21-A		106412	9.91	122373	16.01		
LCS 680-340880/22-A		109391	9.91	120547	16.01		
680-102521-45 MS RE	SD-273-03 MS RE	110325	9.91	116880	16.01		
680-102521-45 MSD RE	SD-273-03 MSD RE	121701	9.91	127419	16.01		
680-102521-45 RE	SD-273-03 RE	103809	9.91	118843	16.01		
680-102521-1 RE	SD-250-SS RE	118326	9.91	129375	16.01		
680-102521-2 RE	SD-250-01 RE	130080	9.91	140693	16.01		
680-102521-5 RE	SD-251-SS RE	127307	9.91	135480	16.01		
680-102521-9 RE	SD-262-SS RE	117566	9.91	137520	16.01		
680-102521-18 RE	SD-264-SS RE	128887	9.91	138188	16.01		
680-102521-23 RE	SD-265-01 RE	121986	9.91	138464	16.01		
CCV 680-341015/23		129921	9.91	134816	16.01		
CCVIS 680-341016/4		122752	9.91	127507	16.01		
680-102521-31 RE	SD-270-01 RE	133538	9.91	151508	16.01		
680-102521-32 RE	SD-270-02 RE	106386	9.91	125867	16.01		
680-102521-34 RE	SD-DUP06 RE	105258	9.91	127362	16.01		
680-102521-37 RE	SD-269-02 RE	103329	9.91	119010	16.02		
680-102521-39 RE	SD-271-SS RE	113054	9.91	137048	16.01		
680-102521-42 RE	SD-273-SS RE	123784	9.91	137575	16.01		
680-102521-43 RE	SD-273-01 RE	114208	9.91	145193	16.01		
680-102521-16 RE	SD-263-02 RE	122763	9.91	136014	16.01		
680-102521-24 RE	SD-265-02 RE	123932	9.91	127888	16.01		
680-102521-25 RE	SD-265-03 RE	130659	9.91	152458	16.01		
680-102521-26 RE	SD-268-SS RE	129155	9.91	152401	16.01		
680-102521-30 RE	SD-270-SS RE	142585	9.91	161777	16.01		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	160628	10.11	229918	16.23		
UPPER LIMIT	240942	10.61	344877	16.73		
LOWER LIMIT	80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCV 680-341016/24			130503	9.91	139114	16.01
CCVIS 680-341035/4			134601	9.84	144937	15.92
680-102521-35 RE	SD-269-SS RE		141231	9.84	167093	15.92
CCV 680-341035/15			133837	9.84	149601	15.92

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-339960/4 Date Analyzed: 07/20/2014 16:47  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2004.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	156930	10.13	160983	16.24		
UPPER LIMIT	204009	10.63	209278	16.74		
LOWER LIMIT	109851	9.63	112688	15.74		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-338712/15-A	147280	10.13	155989	16.24		
LCS 680-338712/16-A	139972	10.13	145084	16.24		
CCV 680-339960/23	146361	10.13	150656	16.24		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-340118/4 Date Analyzed: 07/21/2014 15:33  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2104.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		152714	10.13	135608	16.24		
UPPER LIMIT		198528	10.63	176290	16.74		
LOWER LIMIT		106900	9.63	94926	15.74		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-339176/21-A		137516	10.13	115228	16.24		
LCS 680-339176/22-A		136593	10.13	129008	16.24		
680-102521-15 MS	SD-263-01 MS	126896	10.13	135163	16.24		
680-102521-15 MSD	SD-263-01 MSD	139120	10.13	157094	16.24		
680-102521-1	SD-250-SS	158437	10.13	172205	16.24		
680-102521-2	SD-250-01	153467	10.13	154191	16.24		
680-102521-4	SD-250-03	151186	10.13	162765	16.24		
680-102521-5	SD-251-SS	156057	10.13	154000	16.24		
680-102521-6	SD-251-01	150453	10.13	150341	16.24		
680-102521-7	SD-251-02	150432	10.13	153958	16.24		
680-102521-8	SD-251-03	137861	10.13	126980	16.24		
680-102521-9	SD-262-SS	144340	10.13	138662	16.24		
680-102521-10	SD-262-01	156931	10.13	157374	16.24		
680-102521-11	SD-262-02	154129	10.13	159156	16.24		
680-102521-12	SD-262-03	148104	10.13	139085	16.24		
CCV 680-340118/24		152797	10.13	138511	16.24		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits



FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-340459/4 Date Analyzed: 07/23/2014 11:29  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2304.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	151625	10.05	174856	16.16		
UPPER LIMIT	197113	10.55	227313	16.66		
LOWER LIMIT	106138	9.55	122399	15.66		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102521-14	SD-263-SS		158929	10.05	186679	16.16
680-102521-15	SD-263-01		137207	10.05	163341	16.16
680-102521-16	SD-263-02		146681	10.05	175161	16.16
680-102521-17	SD-263-03		148325	10.05	164394	16.16
680-102521-18	SD-264-SS		152630	10.05	182815	16.16
MB 680-339369/21-A			136504	10.05	142334	16.16
LCS 680-339369/22-A			141946	10.05	148683	16.16
680-102521-40 MS	SD-271-01 MS		138602	10.05	159835	16.16
680-102521-40 MSD	SD-271-01 MSD		149274	10.05	162109	16.16
680-102521-40	SD-271-01		144760	10.05	183383	16.16
680-102521-21	SD-264-03		166768	10.07	191320	16.16
680-102521-22	SD-265-SS		161958	10.05	200300	16.16
680-102521-23	SD-265-01		158941	10.05	189491	16.16
680-102521-24	SD-265-02		168692	10.05	191423	16.16
680-102521-25	SD-265-03		162325	10.05	187223	16.16
680-102521-26	SD-268-SS		135068	10.05	169716	16.16
CCV 680-340459/25			142389	10.07	161879	16.16

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-340579/4 Date Analyzed: 07/24/2014 01:28  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2332.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	152615	10.05	152178	16.16		
UPPER LIMIT	198400	10.55	197831	16.66		
LOWER LIMIT	106831	9.55	106525	15.66		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102521-28	SD-268-02	154463	10.05	178848	16.16	
680-102521-29	SD-268-03	146902	10.05	174756	16.16	
680-102521-31	SD-270-01	160769	10.05	193424	16.16	
680-102521-32	SD-270-02	148070	10.05	182856	16.16	
680-102521-33	SD-270-03	150135	10.05	172182	16.16	
680-102521-34	SD-DUP06	139014	10.05	174581	16.16	
680-102521-37	SD-269-02	154631	10.05	168677	16.16	
680-102521-38	SD-269-03	137796	10.05	152488	16.16	
680-102521-39	SD-271-SS	138252	10.05	167388	16.16	
680-102521-41	SD-271-02	136752	10.05	162205	16.16	
680-102521-43	SD-273-01	147976	10.07	180659	16.16	
680-102521-45	SD-273-03	146207	10.07	155828	16.16	
CCV 680-340579/24		159741	10.05	164762	16.16	

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-340817/4 Date Analyzed: 07/24/2014 21:26  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2404.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	127048	9.98	129555	16.08		
UPPER LIMIT	165162	10.48	168422	16.58		
LOWER LIMIT	88934	9.48	90689	15.58		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102521-3	SD-250-02	✓	150442	9.98	182340*	16.08
680-102521-13	SD-DUP05		143762	9.98	153102	16.08
680-102521-20	SD-264-02		148172	9.98	165904	16.08
680-102521-27	SD-268-01		138249	9.98	161604	16.08
680-102521-30	SD-270-SS	✓	149955	9.98	183101*	16.08
680-102521-35	SD-269-SS		145505	9.98	160062	16.08
680-102521-36	SD-269-01		145127	9.98	164827	16.08
680-102521-42	SD-273-SS		141042	9.98	156859	16.08
CCV 680-340817/24			139441	9.98	163441	16.09

+50%  
245/161

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-341015/4 Date Analyzed: 07/26/2014 20:58  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2604.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	124030	9.91	126025	16.01		
UPPER LIMIT	161239	10.41	163833	16.51		
LOWER LIMIT	86821	9.41	88218	15.51		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-340880/21-A	106412	9.91	122373	16.01		
LCS 680-340880/22-A	109391	9.91	120547	16.01		
680-102521-45 MS RE	SD-273-03 MS RE	110325	9.91	116880	16.01	
680-102521-45 MSD RE	SD-273-03 MSD RE	121701	9.91	127419	16.01	
680-102521-45 RE	SD-273-03 RE	103809	9.91	118843	16.01	
680-102521-1 RE	SD-250-SS RE	118326	9.91	129375	16.01	
680-102521-2 RE	SD-250-01 RE	130080	9.91	140693	16.01	
680-102521-5 RE	SD-251-SS RE	127307	9.91	135480	16.01	
680-102521-9 RE	SD-262-SS RE	117566	9.91	137520	16.01	
680-102521-18 RE	SD-264-SS RE	128887	9.91	138188	16.01	
680-102521-23 RE	SD-265-01 RE	121986	9.91	138464	16.01	
CCV 680-341015/23		129921	9.91	134816	16.01	

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-341016/4 Date Analyzed: 07/27/2014 08:31  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2628.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	122752	9.91	127507	16.01		
UPPER LIMIT	159578	10.41	165759	16.51		
LOWER LIMIT	85926	9.41	89255	15.51		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102521-31 RE	SD-270-01 RE	133538	9.91	151508	16.01	
680-102521-32 RE	SD-270-02 RE	106386	9.91	125867	16.01	
680-102521-34 RE	SD-DUP06 RE	105258	9.91	127362	16.01	
680-102521-37 RE	SD-269-02 RE	103329	9.91	119010	16.02	
680-102521-39 RE	SD-271-SS RE	113054	9.91	137048	16.01	
680-102521-42 RE	SD-273-SS RE	123784	9.91	137575	16.01	
680-102521-43 RE	SD-273-01 RE	114208	9.91	145193	16.01	
680-102521-16 RE	SD-263-02 RE	122763	9.91	136014	16.01	
680-102521-24 RE	SD-265-02 RE	123932	9.91	127888	16.01	
680-102521-25 RE	SD-265-03 RE	130659	9.91	152458	16.01	
680-102521-26 RE	SD-268-SS RE	129155	9.91	152401	16.01	
680-102521-30 RE	SD-270-SS RE	142585	9.91	161777	16.01	
CCV 680-341016/24		130503	9.91	139114	16.01	

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Instrument ID: CMSX Calibration Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/30/2014 01:15  
 Calibration ID: 32707

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		146426	9.77	207821	15.85		
UPPER LIMIT		219639	10.27	311732	16.35		
LOWER LIMIT		73213	9.27	103911	15.35		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-341490/8		132962	9.77	182303	15.85		
CCVIS 680-341486/4		153596	9.78	178136	15.86		
680-102521-44	SD-273-02	133113	9.78	157033	15.86		
MB 680-341361/11-A		97803*	9.78	101835*	15.86		
LCS 680-341361/12-A		100926*	9.78	104813*	15.86		
680-102521-19 MS	SD-264-01 MS	120161	9.78	137081	15.86		
680-102521-19 MSD	SD-264-01 MSD	102293*	9.78	117878*	15.86		
680-102521-19	SD-264-01	119549	9.78	137761	15.86		
CCV 680-341486/25		159901	9.78	181465	15.86		

-50%  
90,732

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
 SDG No.: 680102521-1  
 Sample No.: CCVIS 680-341486/4 Date Analyzed: 07/30/2014 12:25  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2931.D Heated Purge: (Y/N) N  
 Calibration ID: 32707

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		153596	9.78	178136	15.86		
UPPER LIMIT		199675	10.28	231577	16.36		
LOWER LIMIT		107517	9.28	124695	15.36		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102521-44	SD-273-02	133113	9.78	157033	15.86		
MB 680-341361/11-A		<u>97803*</u>	9.78	<u>101835*</u>	15.86		
LCS 680-341361/12-A		<u>100926*</u>	9.78	<u>104813*</u>	15.86		
680-102521-19 MS	SD-264-01 MS	120161	9.78	137081	15.86		
680-102521-19 MSD	SD-264-01 MSD	<u>102293*</u>	9.78	<u>117878*</u>	15.86		
680-102521-19	SD-264-01	119549	9.78	137761	15.86		
CCV 680-341486/25		159901	9.78	181465	15.86		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

SAMPLE ID SD-269-SS-Re

SAMPLE CALC for tetrachlorobiphenyl

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/mL)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PPB
141231	10	621760	0.75	1	0.2893	34697.39

Sample Weight (g)

10.09

Percent Solids

32.6



Sample Calculation

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102521-1  
SDG No.: 680102521-1  
Client Sample ID: SD-269-SS RE Lab Sample ID: 680-102521-35 RE  
Matrix: Solid Lab File ID: XG2763.D  
Analysis Method: 680 Date Collected: 06/18/2014 14:20  
Extract. Method: 680 Date Extracted: 07/25/2014 14:50  
Sample wt/vol: 10.09(g) Date Analyzed: 07/29/2014 03:13  
Con. Extract Vol.: 1(mL) Dilution Factor: 10  
Injection Volume: 1(uL) Level: (low/med) Low  
% Moisture: 67.4 GPC Cleanup: (Y/N) N  
Analysis Batch No.: 341035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	76	U	1600	76
25512-42-9	Dichlorobiphenyl	36	J	300	32
28655-71-2	Heptachlorobiphenyl	5600		910	46
26601-64-9	Hexachlorobiphenyl	6300		610	30
27323-18-8	Monochlorobiphenyl	17	U	300	17
53742-07-7	Nonachlorobiphenyl	300	U	1600	300
55722-26-4	Octachlorobiphenyl	750	J	910	48
25429-29-2	Pentachlorobiphenyl	5700		610	31
26914-33-0	Tetrachlorobiphenyl	35000		610	34
25323-68-6	Trichlorobiphenyl	2800		300	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

TestAmerica Savannah  
Target Compound Quantitation Report

*Sample Calculation*

Data File: \\SAVCHROM\ChromData\CMSX\20140727-11357.b\XG2763.D  
 Lims ID: 680-102521-A-35-B Lab Sample ID: 680-102521-35  
 Client ID: SD-269-SS  
 Sample Type: Client  
 Inject. Date: 29-Jul-2014 03:13:30 ALS Bottle#: 52 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 10.0000  
 Sample Info: 680-102521-A-35-B DL=10  
 Misc. Info.: 680-0011357-010  
 Operator ID: nmd Instrument ID: CMSX  
 Method: \\SAVCHROM\ChromData\CMSX\20140727-11357.b\680\CMSX.m  
 Limit Group: 680  
 Last Update: 29-Jul-2014 09:06:12 Calib Date: 20-Jul-2014 00:46:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\SAVCHROM\ChromData\CMSX\20140719-11146.b\XG1913.D  
 Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: davisn Date: 29-Jul-2014 06:53:39

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/ml	Flags
A 24 Dichlorobiphenyl	222	9.105	8.187 - 10.024		0	1312	0.0117	
* 5 Phenanthrene-d10	188	9.840	9.840 0.0		66	141231	0.7500	
A 25 Trichlorobiphenyl	256	10.717	9.409 - 12.026		0	74578	0.9306	
A 26 Tetrachlorobiphenyl	292	12.199	10.504 - 13.894		0	621760	11.4	
A 27 Pentachlorobiphenyl	326	13.593	11.768 - 15.418		0	78921	1.87	
A 28 1,1'-Biphenyl, hexachloro-	360	14.873	12.928 - 16.819		0	81798	2.06	
* 15 Chrysene-d12	240	15.918	15.918 0.0		100	167093	0.7500	
A 29 1,1'-Biphenyl, heptachloro-	394	16.001	14.540 - 17.462		0	57761	1.85	
A 30 1,1'-Biphenyl, octachloro-	430	17.081	16.015 - 18.147		0	7013	0.2455	

Reagents:

SM-680istd\_00028 Amount Added: 30.00 Units: uL Run Reagent

Sample Calculation

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102521-1 Analy Batch No.: 339932

SDG No.: 680102521-1

Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2014 22:52 Calibration End Date: 07/20/2014 00:46 Calibration ID: 32129

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-339932/8	XG1913.D
Level 2	IC 680-339932/7	XG1912.D
Level 3	ICISAV 680-339932/4	XG1909.D
Level 4	IC 680-339932/6	XG1911.D
Level 5	IC 680-339932/5	XG1910.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			MIN RRF	%RSD	#	MAX \$RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2							
Monochlorobiphenyl	0.8353	0.8456	0.9098	0.8813	0.8734	Ave				3.4		20.0				
Dichlorobiphenyl	0.5776	0.5823	0.6122	0.6067	0.5987	Ave				2.5		20.0				
Trichlorobiphenyl	0.3996	0.4135	0.4348	0.4389	0.4410	Ave				4.3		20.0				
PCB-104			0.3302			Ave				0.3302		30.0				
Tetrachlorobiphenyl	0.2755	0.2817	0.3033	0.2909	0.2951	Ave				3.8		20.0				
Pentachlorobiphenyl	0.2123	0.2203	0.2262	0.2270	0.2357	Ave				3.9		20.0				
PCB-77			0.4767			Ave				0.4767		30.0				
Hexachlorobiphenyl	0.1966	0.2022	0.2225	0.2132	0.2185	Ave				5.2		20.0				
Heptachlorobiphenyl	0.1540	0.1656	0.1696	0.1700	0.1695	Ave				4.1		20.0				
Octachlorobiphenyl	0.1373	0.1488	0.1535	0.1521	0.1669	Ave				7.0		20.0				
PCB-208			0.0569			Ave				0.0569		30.0				
Nonachlorobiphenyl			0.0443			Ave				11.0		20.0				
DCB Decachlorobiphenyl	0.0321	0.0328	0.0379	0.0370	0.0414	Ave				11.0		20.0				
Decachlorobiphenyl-13C12	0.0407	0.0484	0.0517	0.0504	0.0567	Ave				12.0		20.0				

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.



Minor

- The Percent Solids (% Solids) was less than 30% in the following samples:

<u>Sample</u>	<u>% Solids</u>
SD-254-SS	29.5
SD-260-SS	29.3
SD-261-SS	21.6
SD-266-01	23.5
SD-266-02	27.5
SD-266-SS	21.1
SD-267-SS	20.6

The detected and non-detected results reported for the PCB homologs and Aroclors (sample SD254-SS) in these samples were qualified as estimated, (J) and (UJ), respectively.

- The closing Continuing Calibration Verification (CCV) performed on instrument CMSX on 07/30/14 @ 20:32 had a Percent Difference (%D) for pentachlorobiphenyl greater than the 20% quality control limit. Samples SD-255-SS, SD-261-03, SD-266-01, SD-267-03, and SD-Dup08 were affected. The detected and non-detected results reported for pentachlorobiphenyl in these samples were qualified as estimated, (J) and (UJ), respectively.
- The surrogate spike compound, 13DCB, had %Rs below the lower quality control limit in samples SD-267-02, SD-266-SS, and SD-266-03. According to the laboratory case narrative, the sample was re-extracted and reanalyzed with similar results. Only the original analysis was reported. The detected and non-detected reported for the PCB homologs in this sample were qualified as estimated, (J) and rejected, (UR), respectively.
- The internal standard areas for chrysene-d12 were above the 130% quality control limit in sample SD-274-SS and below the 70% quality control limit in sample SD-266-01. The detected and non-detected results reported for the PCB homologs associated with these internal standards were qualified as estimated, (J) and (UJ), respectively.
- The internal standard areas for phenanthrene-d10 and chrysene-d12 were below the 70% quality control limit in samples SD-255-SS and SD-261-03. The detected and non-detected results reported for the PCB homologs associated with these internal standards were qualified as estimated, (J) and (UJ), respectively.
- The Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses performed on sample SD-276-SS had %Rs for hexachlorobiphenyl, pentachlorobiphenyl, and tetrachlorobiphenyl below the lower quality control limits. The detected results reported these PCB homologs in the parent sample were qualified as estimated, (J).
- Detected results reported below the RL limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

Samples SD-253-SS, SD-254-SS, SD-260-01, SD-260-SS, SD-261-01, SD-261-02, SD-261-SS, SD-266-02, and SD-267-01 were not qualified for low surrogate %Rs because these samples were analyzed at 10X dilutions.

TO: M. MARTIN  
SDG: 680-102558-1

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The following samples were diluted due to sample matrix and/or concentrations of PCB homologs.

<u>Sample</u>	<u>Dilution</u>
SD-253-SS	10X
SD-254-SS	10X
SD-260-01	10X
SD-260-SS	10X
<u>Sample</u>	<u>Dilution</u>
SD-261-01	10X
SD-261-02	10X
SD-261-SS	10X
SD-266-02	10X
SD-267-01	10X
SD-274-01	5X
SD-274-SS	5X
SD-27402	5X


Non-detected results were reported to the MDL.

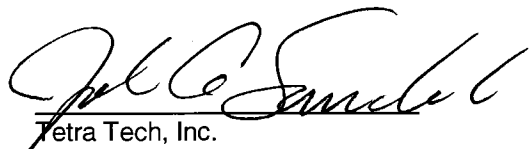
### **Executive Summary**

**Laboratory Performance:** The %Solids exceeded 30% in some samples. A closing CCV had a %D for pentachlorobiphenyl above 20%. One sample had the surrogate 13DCB below 10%. Three samples in the PCB homolog fraction had low surrogate %Rs. Several samples had high internal standard areas.

**Other Factors Affecting Data Quality:** Many samples were diluted. The MS/MSD analyses had noncompliant %Rs. Results below the RL were estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (June 2008) and SW846 Method 8082A and EPA Method 680 analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.

  
\_\_\_\_\_  
Tetra Tech, Inc.  
Michelle L. Allen  
Chemist/Data Validator

  
\_\_\_\_\_  
Tetra Tech, Inc.  
Joseph A. Samchuck  
Data Validation Manager

#### Attachments:

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

**Appendix A**

Qualified Analytical Results

**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 ( $< 2 \times$  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 standard deviations is greater than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed
- Z3 = Tentatively Identified Compound aldol condensate



PROJ_NO: 05220	NSAMPLE	SD-252-SS	SD-253-SS	SD-254-SS	SD-255-SS-RE	
SDG: 680-102558-1	LAB_ID	680-102558-27	680-102558-28	680-102558-29	680-102558-30	
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	31.8	34.6	29.5	36.2	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	7.7 U	69 U		83 UJ	6.9 UJ	N
DICHLOROBIPHENYLS	3.3 U	29 U		35 UJ	2.9 UJ	N
HEPTACHLOROBIPHENYLS	97	42 U		100 J	4.1 UJ	N
HEXACHLOROBIPHENYL	110	53 J	P	480 J	2.7 UJ	N
MONOCHLOROBIPHENYLS	1.8 U	16 U		19 UJ	1.6 UJ	N
NONACHLOROBIPHENYLS	31 U	280 U		330 UJ	27 UJ	N
OCTACHLOROBIPHENYLS	4.9 U	44 U		53 UJ	4.4 UJ	N
PENTACHLOROBIPHENYLS	160	28 U		34 UJ	2.8 UJ	CN
TETRACHLOROBIPHENYLS	230	67 J	P	1000 J	4.4 J	NP
TRICHLOROBIPHENYLS	1.6 U	14 U		27 J	1.4 UJ	N

PROJ_NO: 05220	NSAMPLE	SD-260-01	SD-260-02	SD-260-03	SD-260-SS	
SDG: 680-102558-1	LAB_ID	680-102558-6	680-102558-7	680-102558-8	680-102558-5	
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	32.0	53.7	40.2	29.3	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	78 U	4.6 U		6.2 U	85 UJ	Y
DICHLOROBIPHENYLS	33 U	1.9 U		2.6 U	36 UJ	Y
HEPTACHLOROBIPHENYLS	47 U	2.8 U		3.7 U	110 J	PY
HEXACHLOROBIPHENYL	180 J	1.8 U	P	2.4 U	520 J	PY
MONOCHLOROBIPHENYLS	18 U	1.1 U		1.4 U	19 UJ	Y
NONACHLOROBIPHENYLS	310 U	18 U		24 U	340 UJ	Y
OCTACHLOROBIPHENYLS	50 U	2.9 U		3.9 U	54 UJ	Y
PENTACHLOROBIPHENYLS	170 J	1.9 U	P	2.5 U	390 J	PY
TETRACHLOROBIPHENYLS	580 J	2 U	P	2.7 U	1300 J	Y
TRICHLOROBIPHENYLS	58 J	0.94 U	P	1.3 U	52 J	PY

PROJ_NO: 05220	NSAMPLE	SD-261-01	SD-261-02	SD-261-03	SD-261-SS				
SDG: 680-102558-1	LAB_ID	680-102558-22	680-102558-23	680-102558-24	680-102558-21				
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	30.5	37.2	42.7	21.6				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	81 U	64 U		5.8 UJ	110 UJ	Y			
DICHLOROBIPHENYL	34 U	27 U		2.5 UJ	48 UJ	Y			
HEPTACHLOROBIPHENYL	49 U	39 U		3.5 UJ	68 UJ	Y			
HEXACHLOROBIPHENYL	370 J	26 U	P	2.3 UJ	45 UJ	Y			
MONOCHLOROBIPHENYL	19 U	15 U		1.3 UJ	26 UJ	Y			
NONACHLOROBIPHENYL	320 U	260 U		23 UJ	450 UJ	Y			
OCTACHLOROBIPHENYL	52 U	41 U		3.7 UJ	72 UJ	Y			
PENTACHLOROBIPHENYL	700	26 U		2.4 UJ	46 UJ	Y			
TETRACHLOROBIPHENYL	3100	29 U		2.6 UJ	50 UJ	Y			
TRICHLOROBIPHENYL	190 J	13 U	P	1.2 UJ	23 UJ	Y			

PROJ_NO: 05220	NSAMPLE	SD-266-01	SD-266-02	SD-266-03	SD-266-SS				
SDG: 680-102558-1	LAB_ID	680-102558-18	680-102558-19	680-102558-20	680-102558-17				
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	23.5	27.5	42.9	21.1				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL		11 UJ	NY	89 UJ	Y	Y	5.7 UJ	12 UJ	RY
DICHLOROBIPHENYLS		4.5 UJ	Y	38 UJ	Y	Y	2.4 UJ	4.9 UJ	RY
HEPTACHLOROBIPHENYLS		450 J	NY	54 UJ	Y	Y	3.5 UJ	41 J	PRY
HEXACHLOROBIPHENYL		580 J	Y	300 J	PY	Y	14 J	57 J	PRY
MONOCHLOROBIPHENYLS		2.4 UJ	Y	20 UJ	Y	Y	1.3 UJ	2.7 UJ	RY
NONACHLOROBIPHENYLS		42 UJ	NY	360 UJ	Y	Y	23 UJ	46 UJ	RY
OCTACHLOROBIPHENYLS		6.8 UJ	NY	57 UJ	Y	Y	3.7 UJ	7.5 UJ	RY
PENTACHLOROBIPHENYLS		360 J	CY	460 J	PY	Y	15 J	15 J	PRY
TETRACHLOROBIPHENYLS		720 J	Y	970 J	Y	Y	73 J	44 J	PRY
TRICHLOROBIPHENYLS		2.2 UJ	Y	26 J	PY	Y	3.1 J	2.4 UJ	RY

PROJ_NO: 05220	NSAMPLE	SD-267-01	SD-267-02	SD-267-03	SD-267-SS	
SDG: 680-102558-1	LAB_ID	680-102558-14	680-102558-15	680-102558-16	680-102558-13	
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	33.1	31.1	45.8	20.6	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	75 U	7.9 UJ	R	5.4 U	12 UR	RY
DICHLOROBIPHENYLS	31 U	5.2 J	PR	2.3 U	5.1 UR	RY
HEPTACHLOROBIPHENYLS	5200	13 J	PR	3.3 U	47 J	PRY
HEXACHLOROBIPHENYL	8200	96 J	R	35 J	71 J	PRY
MONOCHLOROBIPHENYLS	17 U	1.8 UJ	R	1.2 U	2.7 UR	RY
NONACHLOROBIPHENYLS	300 U	31 UJ	R	22 U	48 UR	RY
OCTACHLOROBIPHENYLS	1100	5 UJ	R	3.5 U	7.7 UR	RY
PENTACHLOROBIPHENYLS	9000	270 J	R	120 J	16 J	PRY
TETRACHLOROBIPHENYLS	31000	930 J	R	57	130 J	RY
TRICHLOROBIPHENYLS	1600	120 J	R	1.1 U	2.5 UR	RY

PROJ_NO: 05220	NSAMPLE	SD-272-01	SD-272-02	SD-272-SS					
SDG: 680-102558-1	LAB_ID	680-102558-11	680-102558-12	680-102558-10					
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014					
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM					
	UNITS	UG/KG	UG/KG	UG/KG					
	PCT_SOLIDS	78.3	81.3	78.3					
	DUP_OF	SD-272-01							
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	3.2 U				3 U			3.2 U	
DICHLOROBIPHENYL		1.3 U			1.3 U			1.3 U	
HEPTACHLOROBIPHENYL		1.9 U			1.8 U			8.1 J	P
HEXACHLOROBIPHENYL		1.3 U			1.2 U			17 J	P
MONOCHLOROBIPHENYL		0.73 U			0.7 U			0.72 U	
NONACHLOROBIPHENYL		13 U			12 U			13 U	
OCTACHLOROBIPHENYL		2 U			1.9 U			2 U	
PENTACHLOROBIPHENYL		1.3 U			1.2 U			1.3 U	
TETRACHLOROBIPHENYL		1.9 J	P		1.4 U			200	
TRICHLOROBIPHENYL		0.65 U			0.62 U			17	

PROJ_NO: 05220	NSAMPLE	SD-274-01	SD-274-02	SD-274-03	SD-274-SS				
SDG: 680-102558-1	LAB_ID	680-102558-2	680-102558-3	680-102558-4	680-102558-1				
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	33.4	33.8	50.3	30.1				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	36 U	36 U		4.8 U	40 UJ	N			
DICHLOROBIPHENYLS	15 U	15 U		2 U	17 U				
HEPTACHLOROBIPHENYLS	62 J	62 J	P	2.9 U	240 J	NP			
HEXACHLOROBIPHENYL	370	120 J	P	3.1 J	750				
MONOCHLOROBIPHENYLS	8.3 U	8.3 U		16 J	9.3 U				
NONACHLOROBIPHENYLS	140 U	140 U		19 U	160 U				
OCTACHLOROBIPHENYLS	23 U	23 U		3.1 U	26 U				
PENTACHLOROBIPHENYLS	870	50 J	P	3.9 J	1700				
TETRACHLOROBIPHENYLS	4600	130 J	P	2.1 U	8100				
TRICHLOROBIPHENYLS	330	11 J	P	0.99 U	530				

PROJ_NO: 05220	NSAMPLE	SD-275-SS	SD-276-SS	SD-DUP07	SD-DUP08
SDG: 680-102558-1	LAB_ID	680-102558-26	680-102558-25	680-102558-9	680-102558-31
FRACTION: PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014
MEDIA: SEDIMENT	QC_TYPE	NM	NM	FD	FD
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG
	PCT_SOLIDS	33.4	31.0	79.1	36.2
	DUP_OF				
	PARAMETER	RESULT	RESULT	RESULT	RESULT
		VQL	VQL	VQL	VQL
		QLCD	QLCD	QLCD	QLCD
		RESULT	RESULT	RESULT	RESULT
		VQL	VQL	VQL	VQL
		QLCD	QLCD	QLCD	QLCD
DECACHLOROBIPHENYL		7.5 U	8 U	3.1 U	6.9 U
DICHLOROBIPHENYLS		3.1 U	3.4 U	1.3 U	
HEPTACHLOROBIPHENYLS		180	320	1.9 U	
HEXACHLOROBIPHENYL		250	540 J	1.3 U	
MONOCHLOROBIPHENYLS		1.7 U	1.8 U	0.72 U	
NONACHLOROBIPHENYLS		30 U	32 U	13 U	
OCTACHLOROBIPHENYLS		4.8 U	5.1 U	2 U	
PENTACHLOROBIPHENYLS		160	450 J	1.3 U	
TETRACHLOROBIPHENYLS		450	550 J	1.8 J	P
TRICHLOROBIPHENYLS		1.5 U	20 J	0.64 U	



PROJ_NO: 05220	NSAMPLE	SD-DUP08	
SDG: 680-102558-1	LAB_ID	680-102558-31	
FRACTION: PCB	SAMP_DATE	6/19/2014	
MEDIA: SEDIMENT	QC_TYPE	FD	
	UNITS	UG/KG	
	PCT_SOLIDS	36.2	
	DUP_OF	SD-255-SS	
PARAMETER	RESULT	VQL	QLCD
DECACHLOROBIPHENYL			
DICHLOROBIPHENYL	2.9 U		
HEPTACHLOROBIPHENYL	4.1 U		
HEXACHLOROBIPHENYL	2.7 U		
MONOCHLOROBIPHENYL	1.6 U		
NONACHLOROBIPHENYL	27 U		
OCTACHLOROBIPHENYL	4.4 U		
PENTACHLOROBIPHENYL	2.8 UJ		C
TETRACHLOROBIPHENYL	3.1 U		
TRICHLOROBIPHENYL	1.4 U		

PROJ_NO: 05220	NSAMPLE	SD-252-SS	SD-253-SS-RE	SD-254-SS-RE	SD-255-SS	
SDG: 680-102558-1	LAB_ID	680-102558-27	680-102558-28	680-102558-29	680-102558-30	
FRACTION: PEST/PCB	SAMP_DATE	6/19/2014	6/19/2014	6/19/2014	6/19/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	31.8	34.6	29.5	36.2	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016	51 U	47 U		56 UJ	44 U	
AROCLOR-1221	70 U	64 U		76 UJ	61 U	
AROCLOR-1232	24 U	22 U		26 UJ	21 U	
AROCLOR-1242	23 U	21 U		25 UJ	20 U	
AROCLOR-1248	38 U	35 U		42 UJ	33 U	
AROCLOR-1254	46 U	43 U		51 UJ	40 U	
AROCLOR-1260	990	890		960 J	840	

<b>PROJ_NO: 05220</b>	<b>NSAMPLE</b>	<b>SD-275-SS</b>	<b>SD-276-SS</b>
<b>SDG: 680-102558-1</b>	<b>LAB_ID</b>	680-102558-26	680-102558-25
<b>FRACTION: PEST/PCB</b>	<b>SAMP_DATE</b>	6/19/2014	6/19/2014
<b>MEDIA: SEDIMENT</b>	<b>QC_TYPE</b>	NM	NM
	<b>UNITS</b>	UG/KG	UG/KG
	<b>PCT_SOLIDS</b>	33.4	31.0
	<b>DUP_OF</b>		
<b>PARAMETER</b>	<b>RESULT</b>	<b>VQL</b>	<b>QLCD</b>
AROCLOR-1016	49 U	53 U	
AROCLOR-1221	67 U	72 U	
AROCLOR-1232	23 U	25 U	
AROCLOR-1242	22 U	24 U	
AROCLOR-1248	37 U	39 U	
AROCLOR-1254	45 U	48 U	
AROCLOR-1260	920	1200	

**Appendix B**

Results as Reported by the Laboratory

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-252-SS

Lab Sample ID: 680-102558-27

Date Sampled: 06/19/2014 1335

Client Matrix: Solid

% Moisture: 68.2

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341490	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-341037	Lab File ID: XG2924.D
Dilution: 1.0		Initial Weight/Volume: 10.13 g
Analysis Date: 07/30/2014 0833		Final Weight/Volume: 1 mL
Prep Date: 07/28/2014 1355		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		7.7	U	7.7	160
Dichlorobiphenyl		3.3	U	3.3	31
Heptachlorobiphenyl		97		4.6	93
Hexachlorobiphenyl		110		3.1	62
Monochlorobiphenyl		1.8	U	1.8	31
Nonachlorobiphenyl		31	U	31	160
Octachlorobiphenyl		4.9	U	4.9	93
Pentachlorobiphenyl		160		3.2	62
Tetrachlorobiphenyl		230		3.4	62
Trichlorobiphenyl		1.6	U	1.6	31

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	35		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-253-SS

Lab Sample ID: 680-102558-28

Date Sampled: 06/19/2014 1340

Client Matrix: Solid

% Moisture: 65.4

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341034	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339371	Lab File ID: XG2751.D
Dilution: 10		Initial Weight/Volume: 10.37 g
Analysis Date: 07/28/2014 2119		Final Weight/Volume: 1 mL
Prep Date: 07/21/2014 1706		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		69	U	69	1400
Dichlorobiphenyl		29	U	29	280
Heptachlorobiphenyl		42	U	42	840
Hexachlorobiphenyl		53	J	28	560
Monochlorobiphenyl		16	U	16	280
Nonachlorobiphenyl		280	U	280	1400
Octachlorobiphenyl		44	U	44	840
Pentachlorobiphenyl		28	U	28	560
Tetrachlorobiphenyl		67	J	31	560
Trichlorobiphenyl		14	U	14	280

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-254-SS

Lab Sample ID: 680-102558-29

Date Sampled: 06/19/2014 1450

Client Matrix: Solid

% Moisture: 70.5

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341035	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339371	Lab File ID: XG2760.D	
Dilution: 10		Initial Weight/Volume: 10.20 g	
Analysis Date: 07/29/2014 0146		Final Weight/Volume: 1 mL	
Prep Date: 07/21/2014 1706		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		83	U	83	1700
Dichlorobiphenyl		35	U	35	330
Heptachlorobiphenyl		100	J	50	1000
Hexachlorobiphenyl		480	J	33	670
Monochlorobiphenyl		19	U	19	330
Nonachlorobiphenyl		330	U	330	1700
Octachlorobiphenyl		53	U	53	1000
Pentachlorobiphenyl		34	U	34	670
Tetrachlorobiphenyl		1000		37	670
Trichlorobiphenyl		27	J	17	330

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-255-SS

Lab Sample ID: 680-102558-30

Date Sampled: 06/19/2014 1505

Client Matrix: Solid

% Moisture: 63.8

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341486	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-341361	Lab File ID: XG2941.D	
Dilution: 1.0		Initial Weight/Volume: 10.00 g	
Analysis Date: 07/30/2014 1711		Final Weight/Volume: 1 mL	
Prep Date: 07/29/2014 1428		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		6.9	U*	6.9	140
Dichlorobiphenyl		2.9	U*	2.9	27
Heptachlorobiphenyl		4.1	U*	4.1	83
Hexachlorobiphenyl		2.7	U*	2.7	56
Monochlorobiphenyl		1.6	U*	1.6	27
Nonachlorobiphenyl		27	U*	27	140
Octachlorobiphenyl		4.4	U*	4.4	83
Pentachlorobiphenyl		2.8	U*	2.8	56
Tetrachlorobiphenyl		4.4	J*	3.1	56
Trichlorobiphenyl		1.4	U*	1.4	27

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	66	*	30 - 130



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-260-01

Lab Sample ID: 680-102558-6

Date Sampled: 06/19/2014 0830

Client Matrix: Solid

% Moisture: 68.0

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2718.D
Dilution: 10		Initial Weight/Volume: 10.02 g
Analysis Date: 07/28/2014 0537		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		78	U	78	1600
Dichlorobiphenyl		33	U	33	310
Heptachlorobiphenyl		47	U	47	940
Hexachlorobiphenyl		180	J	31	630
Monochlorobiphenyl		18	U	18	310
Nonachlorobiphenyl		310	U	310	1600
Octachlorobiphenyl		50	U	50	940
Pentachlorobiphenyl		170	J	32	630
Tetrachlorobiphenyl		580	J	35	630
Trichlorobiphenyl		58	J	16	310

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-260-02

Lab Sample ID: 680-102558-7

Date Sampled: 06/19/2014 0835

Client Matrix: Solid

% Moisture: 46.3

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2719.D	
Dilution: 1.0		Initial Weight/Volume: 10.09 g	
Analysis Date: 07/28/2014 0605		Final Weight/Volume: 1 mL	
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		4.6	U	4.6	94
Dichlorobiphenyl		1.9	U	1.9	18
Heptachlorobiphenyl		2.8	U	2.8	55
Hexachlorobiphenyl		1.8	U	1.8	37
Monochlorobiphenyl		1.1	U	1.1	18
Nonachlorobiphenyl		18	U	18	94
Octachlorobiphenyl		2.9	U	2.9	55
Pentachlorobiphenyl		1.9	U	1.9	37
Tetrachlorobiphenyl		2.0	U	2.0	37
Trichlorobiphenyl		0.94	U	0.94	18

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	41		30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-260-03

Lab Sample ID: 680-102558-8

Date Sampled: 06/19/2014 0840

Client Matrix: Solid

% Moisture: 59.8

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2720.D	
Dilution: 1.0		Initial Weight/Volume: 10.06 g	
Analysis Date: 07/28/2014 0634		Final Weight/Volume: 1 mL	
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		6.2	U	6.2	130
Dichlorobiphenyl		2.6	U	2.6	24
Heptachlorobiphenyl		3.7	U	3.7	74
Hexachlorobiphenyl		2.4	U	2.4	50
Monochlorobiphenyl		1.4	U	1.4	24
Nonachlorobiphenyl		24	U	24	130
Octachlorobiphenyl		3.9	U	3.9	74
Pentachlorobiphenyl		2.5	U	2.5	50
Tetrachlorobiphenyl		2.7	U	2.7	50
Trichlorobiphenyl		1.3	U	1.3	24

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	41		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-260-SS

Lab Sample ID: 680-102558-5

Date Sampled: 06/19/2014 0825

Client Matrix: Solid

% Moisture: 70.7

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method:	680	Analysis Batch:	680-341033	Instrument ID:	CMSX
Prep Method:	680	Prep Batch:	680-339370	Lab File ID:	XG2717.D
Dilution:	10			Initial Weight/Volume:	10.05 g
Analysis Date:	07/28/2014 0508			Final Weight/Volume:	1 mL
Prep Date:	07/22/2014 1812			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		85	U	85	1700
Dichlorobiphenyl		36	U	36	340
Heptachlorobiphenyl		110	J	51	1000
Hexachlorobiphenyl		520	J	34	680
Monochlorobiphenyl		19	U	19	340
Nonachlorobiphenyl		340	U	340	1700
Octachlorobiphenyl		54	U	54	1000
Pentachlorobiphenyl		390	J	35	680
Tetrachlorobiphenyl		1300		38	680
Trichlorobiphenyl		52	J	17	340

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-261-01

Lab Sample ID: 680-102558-22

Date Sampled: 06/19/2014 1105

Client Matrix: Solid

% Moisture: 69.5

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method:	680	Analysis Batch:	680-341034	Instrument ID:	CMSX
Prep Method:	680	Prep Batch:	680-339371	Lab File ID:	XG2745.D
Dilution:	10			Initial Weight/Volume:	10.08 g
Analysis Date:	07/28/2014 1823			Final Weight/Volume:	1 mL
Prep Date:	07/21/2014 1706			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		81	U	81	1700
Dichlorobiphenyl		34	U	34	320
Heptachlorobiphenyl		49	U	49	980
Hexachlorobiphenyl		370	J	32	650
Monochlorobiphenyl		19	U	19	320
Nonachlorobiphenyl		320	U	320	1700
Octachlorobiphenyl		52	U	52	980
Pentachlorobiphenyl		700		33	650
Tetrachlorobiphenyl		3100		36	650
Trichlorobiphenyl		190	J	17	320

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-261-02

Lab Sample ID: 680-102558-23

Date Sampled: 06/19/2014 1110

Client Matrix: Solid

% Moisture: 62.8

Date Received: 06/20/2014 0935

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**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method:	680	Analysis Batch:	680-341490	Instrument ID:	CMSX
Prep Method:	680	Prep Batch:	680-339371	Lab File ID:	XG2917.D
Dilution:	10			Initial Weight/Volume:	10.39 g
Analysis Date:	07/30/2014 0338			Final Weight/Volume:	1 mL
Prep Date:	07/21/2014 1706			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		64	U	64	1300
Dichlorobiphenyl		27	U	27	260
Heptachlorobiphenyl		39	U	39	780
Hexachlorobiphenyl		26	U	26	520
Monochlorobiphenyl		15	U	15	260
Nonachlorobiphenyl		260	U	260	1300
Octachlorobiphenyl		41	U	41	780
Pentachlorobiphenyl		26	U	26	520
Tetrachlorobiphenyl		29	U	29	520
Trichlorobiphenyl		13	U	13	260

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-261-03

Lab Sample ID: 680-102558-24  
Client Matrix: Solid

% Moisture: 57.3

Date Sampled: 06/19/2014 1115  
Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method:	680	Analysis Batch:	680-341486	Instrument ID:	CMSX
Prep Method:	680	Prep Batch:	680-341361	Lab File ID:	XG2940.D
Dilution:	1.0			Initial Weight/Volume:	10.02 g
Analysis Date:	07/30/2014 1642			Final Weight/Volume:	1 mL
Prep Date:	07/29/2014 1428			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		5.8	U *	5.8	120
Dichlorobiphenyl		2.5	U *	2.5	23
Heptachlorobiphenyl		3.5	U *	3.5	70
Hexachlorobiphenyl		2.3	U *	2.3	47
Monochlorobiphenyl		1.3	U *	1.3	23
Nonachlorobiphenyl		23	U *	23	120
Octachlorobiphenyl		3.7	U *	3.7	70
Pentachlorobiphenyl		2.4	U *	2.4	47
Tetrachlorobiphenyl		2.6	U *	2.6	47
Trichlorobiphenyl		1.2	U *	1.2	23

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	41	*	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-261-SS

Lab Sample ID: 680-102558-21

Date Sampled: 06/19/2014 1100

Client Matrix: Solid

% Moisture: 78.4

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341490	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339371	Lab File ID: XG2916.D
Dilution: 10		Initial Weight/Volume: 10.23 g
Analysis Date: 07/30/2014 0309		Final Weight/Volume: 1 mL
Prep Date: 07/21/2014 1706		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		110	U	110	2300
Dichlorobiphenyl		48	U	48	450
Heptachlorobiphenyl		68	U	68	1400
Hexachlorobiphenyl		45	U	45	910
Monochlorobiphenyl		26	U	26	450
Nonachlorobiphenyl		450	U	450	2300
Octachlorobiphenyl		72	U	72	1400
Pentachlorobiphenyl		46	U	46	910
Tetrachlorobiphenyl		50	U	50	910
Trichlorobiphenyl		23	U	23	450

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-266-01

Lab Sample ID: 680-102558-18

Date Sampled: 06/19/2014 1035

Client Matrix: Solid

% Moisture: 76.5

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341486	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-341361	Lab File ID: XG2943.D
Dilution: 1.0		Initial Weight/Volume: 10.02 g
Analysis Date: 07/30/2014 1809		Final Weight/Volume: 1 mL
Prep Date: 07/29/2014 1428		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		11	U	11	220
Dichlorobiphenyl		4.5	U	4.5	42
Heptachlorobiphenyl		450		6.4	130
Hexachlorobiphenyl		580		4.2	85
Monochlorobiphenyl		2.4	U	2.4	42
Nonachlorobiphenyl		42	U	42	220
Octachlorobiphenyl		6.8	U	6.8	130
Pentachlorobiphenyl		360		4.3	85
Tetrachlorobiphenyl		720		4.7	85
Trichlorobiphenyl		2.2	U	2.2	42

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	44		30 - 130

Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-266-02

Lab Sample ID: 680-102558-19

Date Sampled: 06/19/2014 1040

Client Matrix: Solid

% Moisture: 72.5

Date Received: 06/20/2014 0935

680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method:	680	Analysis Batch:	680-341034	Instrument ID:	CMSX
Prep Method:	680	Prep Batch:	680-339370	Lab File ID:	XG2738.D
Dilution:	10			Initial Weight/Volume:	10.11 g
Analysis Date:	07/28/2014 1458			Final Weight/Volume:	1 mL
Prep Date:	07/22/2014 1812			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		89	U	89	1800
Dichlorobiphenyl		38	U	38	360
Heptachlorobiphenyl		54	U	54	1100
Hexachlorobiphenyl		300	J	36	720
Monochlorobiphenyl		20	U	20	360
Nonachlorobiphenyl		360	U	360	1800
Octachlorobiphenyl		57	U	57	1100
Pentachlorobiphenyl		460	J	37	720
Tetrachlorobiphenyl		970		40	720
Trichlorobiphenyl		26	J	18	360

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-266-03

Lab Sample ID: 680-102558-20

Date Sampled: 06/19/2014 1045

Client Matrix: Solid

% Moisture: 57.1

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2712.D	
Dilution: 1.0		Initial Weight/Volume: 10.13 g	
Analysis Date: 07/28/2014 0245		Final Weight/Volume: 1 mL	
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		5.7	U	5.7	120
Dichlorobiphenyl		2.4	U	2.4	23
Heptachlorobiphenyl		3.5	U	3.5	69
Hexachlorobiphenyl		14	J	2.3	46
Monochlorobiphenyl		1.3	U	1.3	23
Nonachlorobiphenyl		23	U	23	120
Octachlorobiphenyl		3.7	U	3.7	69
Pentachlorobiphenyl		15	J	2.3	46
Tetrachlorobiphenyl		73		2.6	46
Trichlorobiphenyl		3.1	J	1.2	23

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	13	X	30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-266-SS

Lab Sample ID: 680-102558-17

Date Sampled: 06/19/2014 1030

Client Matrix: Solid

% Moisture: 78.9

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341034	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2736.D	
Dilution: 1.0		Initial Weight/Volume: 10.13 g	
Analysis Date: 07/28/2014 1401		Final Weight/Volume: 1 mL	
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		12	U	12	240
Dichlorobiphenyl		4.9	U	4.9	46
Heptachlorobiphenyl		41	J	7.0	140
Hexachlorobiphenyl		57	J	4.6	94
Monochlorobiphenyl		2.7	U	2.7	46
Nonachlorobiphenyl		46	U	46	240
Octachlorobiphenyl		7.5	U	7.5	140
Pentachlorobiphenyl		15	J	4.8	94
Tetrachlorobiphenyl		44	J	5.2	94
Trichlorobiphenyl		2.4	U	2.4	46

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	11	X	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-267-01

Lab Sample ID: 680-102558-14  
Client Matrix: Solid

% Moisture: 66.9

Date Sampled: 06/19/2014 1005  
Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341034	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2733.D
Dilution: 10		Initial Weight/Volume: 10.09 g
Analysis Date: 07/28/2014 1234		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		75	U	75	1500
Dichlorobiphenyl		31	U	31	300
Heptachlorobiphenyl		5200		45	900
Hexachlorobiphenyl		8200		30	600
Monochlorobiphenyl		17	U	17	300
Nonachlorobiphenyl		300	U	300	1500
Octachlorobiphenyl		1100		48	900
Pentachlorobiphenyl		9000		31	600
Tetrachlorobiphenyl		31000		33	600
Trichlorobiphenyl		1600		15	300

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	0	D	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-267-02

Lab Sample ID: 680-102558-15  
Client Matrix: Solid

% Moisture: 68.9

Date Sampled: 06/19/2014 1010  
Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341034	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2734.D
Dilution: 1.0		Initial Weight/Volume: 10.16 g
Analysis Date: 07/28/2014 1303		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		7.9	U	7.9	160
Dichlorobiphenyl		5.2	J	3.3	31
Heptachlorobiphenyl		13	J	4.7	95
Hexachlorobiphenyl		96		3.1	64
Monochlorobiphenyl		1.8	U	1.8	31
Nonachlorobiphenyl		31	U	31	160
Octachlorobiphenyl		5.0	U	5.0	95
Pentachlorobiphenyl		270		3.2	64
Tetrachlorobiphenyl		930		3.5	64
Trichlorobiphenyl		120		1.6	31

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	10	X	30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-267-03

Lab Sample ID: 680-102558-16  
Client Matrix: Solid

% Moisture: 54.2

Date Sampled: 06/19/2014 1015  
Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341486	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-341361	Lab File ID: XG2939.D
Dilution: 1.0		Initial Weight/Volume: 10.00 g
Analysis Date: 07/30/2014 1614		Final Weight/Volume: 1 mL
Prep Date: 07/29/2014 1428		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		5.4	U	5.4	110
Dichlorobiphenyl		2.3	U	2.3	22
Heptachlorobiphenyl		3.3	U	3.3	66
Hexachlorobiphenyl		35	J	2.2	44
Monochlorobiphenyl		1.2	U	1.2	22
Nonachlorobiphenyl		22	U	22	110
Octachlorobiphenyl		3.5	U	3.5	66
Pentachlorobiphenyl		120		2.2	44
Tetrachlorobiphenyl		57		2.4	44
Trichlorobiphenyl		1.1	U	1.1	22

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	88		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-267-SS

Lab Sample ID: 680-102558-13

Date Sampled: 06/19/2014 1000

Client Matrix: Solid

% Moisture: 79.4

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2725.D
Dilution: 1.0		Initial Weight/Volume: 10.10 g
Analysis Date: 07/28/2014 0857		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		12	U	12	250
Dichlorobiphenyl		5.1	U	5.1	48
Heptachlorobiphenyl		47	J	7.2	140
Hexachlorobiphenyl		71	J	4.8	97
Monochlorobiphenyl		2.7	U	2.7	48
Nonachlorobiphenyl		48	U	48	250
Octachlorobiphenyl		7.7	U	7.7	140
Pentachlorobiphenyl		16	J	4.9	97
Tetrachlorobiphenyl		130		5.3	97
Trichlorobiphenyl		2.5	U	2.5	48

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	9	X	30 - 130



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-272-01

Lab Sample ID: 680-102558-11

Date Sampled: 06/19/2014 0930

Client Matrix: Solid

% Moisture: 21.7

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2723.D
Dilution: 1.0		Initial Weight/Volume: 10.02 g
Analysis Date: 07/28/2014 0800		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		3.2	U	3.2	65
Dichlorobiphenyl		1.3	U	1.3	13
Heptachlorobiphenyl		1.9	U	1.9	38
Hexachlorobiphenyl		1.3	U	1.3	26
Monochlorobiphenyl		0.73	U	0.73	13
Nonachlorobiphenyl		13	U	13	65
Octachlorobiphenyl		2.0	U	2.0	38
Pentachlorobiphenyl		1.3	U	1.3	26
Tetrachlorobiphenyl		1.9	J	1.4	26
Trichlorobiphenyl		0.65	U	0.65	13

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	50		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-272-02

Lab Sample ID: 680-102558-12

Date Sampled: 06/19/2014 0935

Client Matrix: Solid

% Moisture: 18.7

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2724.D
Dilution: 1.0		Initial Weight/Volume: 10.09 g
Analysis Date: 07/28/2014 0829		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		3.0	U	3.0	62
Dichlorobiphenyl		1.3	U	1.3	12
Heptachlorobiphenyl		1.8	U	1.8	37
Hexachlorobiphenyl		1.2	U	1.2	25
Monochlorobiphenyl		0.70	U	0.70	12
Nonachlorobiphenyl		12	U	12	62
Octachlorobiphenyl		1.9	U	1.9	37
Pentachlorobiphenyl		1.2	U	1.2	25
Tetrachlorobiphenyl		1.4	U	1.4	25
Trichlorobiphenyl		0.62	U	0.62	12

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	63		30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-272-SS

Lab Sample ID: 680-102558-10

Date Sampled: 06/19/2014 0925

Client Matrix: Solid

% Moisture: 21.7

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2722.D	
Dilution: 1.0		Initial Weight/Volume: 10.04 g	
Analysis Date: 07/28/2014 0731		Final Weight/Volume: 1 mL	
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		3.2	U	3.2	65
Dichlorobiphenyl		1.3	U	1.3	13
Heptachlorobiphenyl		8.1	J	1.9	38
Hexachlorobiphenyl		17	J	1.3	26
Monochlorobiphenyl		0.72	U	0.72	13
Nonachlorobiphenyl		13	U	13	65
Octachlorobiphenyl		2.0	U	2.0	38
Pentachlorobiphenyl		1.3	U	1.3	26
Tetrachlorobiphenyl		200		1.4	26
Trichlorobiphenyl		17		0.65	13

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	66		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-274-01

Lab Sample ID: 680-102558-2

Date Sampled: 06/19/2014 0800

Client Matrix: Solid

% Moisture: 66.6

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2714.D
Dilution: 5.0		Initial Weight/Volume: 10.27 g
Analysis Date: 07/28/2014 0342		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		36	U	36	740
Dichlorobiphenyl		15	U	15	140
Heptachlorobiphenyl		62	J	22	440
Hexachlorobiphenyl		370		14	290
Monochlorobiphenyl		8.3	U	8.3	140
Nonachlorobiphenyl		140	U	140	740
Octachlorobiphenyl		23	U	23	440
Pentachlorobiphenyl		870		15	290
Tetrachlorobiphenyl		4600		16	290
Trichlorobiphenyl		330		7.4	140

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	35		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-27402

Lab Sample ID: 680-102558-3

Date Sampled: 06/19/2014 0805

Client Matrix: Solid

% Moisture: 66.2

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2715.D
Dilution: 5.0		Initial Weight/Volume: 10.15 g
Analysis Date: 07/28/2014 0411		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		36	U	36	740
Dichlorobiphenyl		15	U	15	140
Heptachlorobiphenyl		22	U	22	440
Hexachlorobiphenyl		120	J	14	290
Monochlorobiphenyl		8.3	U	8.3	140
Nonachlorobiphenyl		140	U	140	740
Octachlorobiphenyl		23	U	23	440
Pentachlorobiphenyl		50	J	15	290
Tetrachlorobiphenyl		130	J	16	290
Trichlorobiphenyl		11	J	7.4	140

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	53		30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-274-03

Lab Sample ID: 680-102558-4

Date Sampled: 06/19/2014 0810

Client Matrix: Solid

% Moisture: 49.7

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2716.D	
Dilution: 1.0		Initial Weight/Volume: 10.27 g	
Analysis Date: 07/28/2014 0440		Final Weight/Volume: 1 mL	
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		4.8	U	4.8	99
Dichlorobiphenyl		2.0	U	2.0	19
Heptachlorobiphenyl		2.9	U	2.9	58
Hexachlorobiphenyl		3.1	J	1.9	39
Monochlorobiphenyl		16	J	1.1	19
Nonachlorobiphenyl		19	U	19	99
Octachlorobiphenyl		3.1	U	3.1	58
Pentachlorobiphenyl		3.9	J	2.0	39
Tetrachlorobiphenyl		2.1	U	2.1	39
Trichlorobiphenyl		0.99	U	0.99	19

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	50		30 - 130

## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-274-SS

Lab Sample ID: 680-102558-1

Date Sampled: 06/19/2014 0755

Client Matrix: Solid

% Moisture: 69.9

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2713.D	
Dilution: 5.0		Initial Weight/Volume: 10.25 g	
Analysis Date: 07/28/2014 0314		Final Weight/Volume: 1 mL	
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		40	U	40	830
Dichlorobiphenyl		17	U	17	160
Heptachlorobiphenyl		240	J	24	490
Hexachlorobiphenyl		750		16	330
Monochlorobiphenyl		9.3	U	9.3	160
Nonachlorobiphenyl		160	U	160	830
Octachlorobiphenyl		26	U	26	490
Pentachlorobiphenyl		1700		17	330
Tetrachlorobiphenyl		8100		18	330
Trichlorobiphenyl		530		8.3	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	37		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-275-SS

Lab Sample ID: 680-102558-26

Date Sampled: 06/19/2014 1320

Client Matrix: Solid

% Moisture: 66.6

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341490	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-341037	Lab File ID: XG2923.D
Dilution: 1.0		Initial Weight/Volume: 9.99 g
Analysis Date: 07/30/2014 0804		Final Weight/Volume: 1 mL
Prep Date: 07/28/2014 1355		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		7.5	U	7.5	150
Dichlorobiphenyl		3.1	U	3.1	30
Heptachlorobiphenyl		180		4.5	90
Hexachlorobiphenyl		250		3.0	60
Monochlorobiphenyl		1.7	U	1.7	30
Nonachlorobiphenyl		30	U	30	150
Octachlorobiphenyl		4.8	U	4.8	90
Pentachlorobiphenyl		160		3.1	60
Tetrachlorobiphenyl		450		3.3	60
Trichlorobiphenyl		1.5	U	1.5	30

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	36		30 - 130



## Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-276-SS

Lab Sample ID: 680-102558-25

Date Sampled: 06/19/2014 1220

Client Matrix: Solid

% Moisture: 69.0

Date Received: 06/20/2014 0935

### 680 Polychlorinated Biphenyls (PCBs) (GC/MS)

Analysis Method: 680	Analysis Batch: 680-341490	Instrument ID: CMSX	
Prep Method: 680	Prep Batch: 680-341037	Lab File ID: XG2922.D	
Dilution: 1.0		Initial Weight/Volume: 10.09 g	
Analysis Date: 07/30/2014 0601		Final Weight/Volume: 1 mL	
Prep Date: 07/28/2014 1355		Injection Volume: 1 uL	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		8.0	U	8.0	160
Dichlorobiphenyl		3.4	U	3.4	32
Heptachlorobiphenyl		320		4.8	96
Hexachlorobiphenyl		540		3.2	64
Monochlorobiphenyl		1.8	U	1.8	32
Nonachlorobiphenyl		32	U	32	160
Octachlorobiphenyl		5.1	U	5.1	96
Pentachlorobiphenyl		450		3.3	64
Tetrachlorobiphenyl		550		3.6	64
Trichlorobiphenyl		20	J	1.6	32

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	48		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-Dup07

Lab Sample ID: 680-102558-9FD

Date Sampled: 06/19/2014 0000

Client Matrix: Solid % Moisture: 20.9

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341033	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-339370	Lab File ID: XG2721.D
Dilution: 1.0		Initial Weight/Volume: 10.00 g
Analysis Date: 07/28/2014 0703		Final Weight/Volume: 1 mL
Prep Date: 07/22/2014 1812		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		3.1	U	3.1	64
Dichlorobiphenyl		1.3	U	1.3	13
Heptachlorobiphenyl		1.9	U	1.9	38
Hexachlorobiphenyl		1.3	U	1.3	25
Monochlorobiphenyl		0.72	U	0.72	13
Nonachlorobiphenyl		13	U	13	64
Octachlorobiphenyl		2.0	U	2.0	38
Pentachlorobiphenyl		1.3	U	1.3	25
Tetrachlorobiphenyl		1.8	J	1.4	25
Trichlorobiphenyl		0.64	U	0.64	13

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	74		30 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-Dup08

Lab Sample ID: 680-102558-31FD

Date Sampled: 06/19/2014 0000

Client Matrix: Solid

% Moisture: 63.8

Date Received: 06/20/2014 0935

**680 Polychlorinated Biphenyls (PCBs) (GC/MS)**

Analysis Method: 680	Analysis Batch: 680-341486	Instrument ID: CMSX
Prep Method: 680	Prep Batch: 680-341361	Lab File ID: XG2942.D
Dilution: 1.0		Initial Weight/Volume: 10.01 g
Analysis Date: 07/30/2014 1740		Final Weight/Volume: 1 mL
Prep Date: 07/29/2014 1428		Injection Volume: 1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
DCB Decachlorobiphenyl		6.9	U	6.9	140
Dichlorobiphenyl		2.9	U	2.9	27
Heptachlorobiphenyl		4.1	U	4.1	83
Hexachlorobiphenyl		2.7	U	2.7	55
Monochlorobiphenyl		1.6	U	1.6	27
Nonachlorobiphenyl		27	U	27	140
Octachlorobiphenyl		4.4	U	4.4	83
Pentachlorobiphenyl		2.8	U	2.8	55
Tetrachlorobiphenyl		3.1	U	3.1	55
Trichlorobiphenyl		1.4	U	1.4	27

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl-13C12	64		30 - 130

Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-252-SS

Lab Sample ID: 680-102558-27

Date Sampled: 06/19/2014 1335

Client Matrix: Solid

% Moisture: 68.2

Date Received: 06/20/2014 0935

8081B/8082A Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analysis Method:	8081B/8082A	Analysis Batch:	680-341704	Instrument ID:	CSGZ
Prep Method:	3546	Prep Batch:	680-341037	Initial Weight/Volume:	10.13 g
Dilution:	10			Final Weight/Volume:	1 mL
Analysis Date:	07/30/2014 2317			Injection Volume:	1 uL
Prep Date:	07/28/2014 1355			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		51	U	51	150
PCB-1221		70	U	70	150
PCB-1232		24	U	24	150
PCB-1242		23	U	23	150
PCB-1248		38	U	38	150
PCB-1254		46	U	46	150
PCB-1260		990		45	150

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl			
Tetrachloro-m-xylene	86		46 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-253-SS

Lab Sample ID: 680-102558-28

Date Sampled: 06/19/2014 1340

Client Matrix: Solid

% Moisture: 65.4

Date Received: 06/20/2014 0935

**8081B/8082A Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography**

Analysis Method:	8081B/8082A	Analysis Batch:	680-341704	Instrument ID:	CSGZ
Prep Method:	3546	Prep Batch:	680-341037	Initial Weight/Volume:	10.17 g
Dilution:	10			Final Weight/Volume:	1 mL
Analysis Date:	07/30/2014 2332			Injection Volume:	1 uL
Prep Date:	07/28/2014 1355			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		47	U	47	140
PCB-1221		64	U	64	140
PCB-1232		22	U	22	140
PCB-1242		21	U	21	140
PCB-1248		35	U	35	140
PCB-1254		43	U	43	140
PCB-1260		890		41	140

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl			
Tetrachloro-m-xylene	82		46 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-254-SS

Lab Sample ID: 680-102558-29  
Client Matrix: Solid

% Moisture: 70.5

Date Sampled: 06/19/2014 1450  
Date Received: 06/20/2014 0935

**8081B/8082A Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography**

Analysis Method:	8081B/8082A	Analysis Batch:	680-341704	Instrument ID:	CSGZ
Prep Method:	3546	Prep Batch:	680-341037	Initial Weight/Volume:	10.03 g
Dilution:	10			Final Weight/Volume:	1 mL
Analysis Date:	07/30/2014 2348			Injection Volume:	1 uL
Prep Date:	07/28/2014 1355			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		56	U	56	170
PCB-1221		76	U	76	170
PCB-1232		26	U	26	170
PCB-1242		25	U	25	170
PCB-1248		42	U	42	170
PCB-1254		51	U	51	170
PCB-1260		960		49	170

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl			
Tetrachloro-m-xylene	84		46 - 130

# Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

Client Sample ID: SD-255-SS

Lab Sample ID: 680-102558-30

Date Sampled: 06/19/2014 1505

Client Matrix: Solid

% Moisture: 63.8

Date Received: 06/20/2014 0935

## 8081B/8082A Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analysis Method:	8081B/8082A	Analysis Batch:	680-340443	Instrument ID:	CSGZ
Prep Method:	3546	Prep Batch:	680-339371	Initial Weight/Volume:	10.25 g
Dilution:	10			Final Weight/Volume:	1 mL
Analysis Date:	07/23/2014 1204			Injection Volume:	1 uL
Prep Date:	07/21/2014 1706			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		44	U	44	130
PCB-1221		61	U	61	130
PCB-1232		21	U	21	130
PCB-1242		20	U	20	130
PCB-1248		33	U	33	130
PCB-1254		40	U	40	130
PCB-1260		840		39	130

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl			
Tetrachloro-m-xylene	65		46 - 130

Analytical Data

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-275-SS

Lab Sample ID: 680-102558-26

Date Sampled: 06/19/2014 1320

Client Matrix: Solid

% Moisture: 66.6

Date Received: 06/20/2014 0935

8081B/8082A Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analysis Method:	8081B/8082A	Analysis Batch:	680-341704	Instrument ID:	CSGZ
Prep Method:	3546	Prep Batch:	680-341037	Initial Weight/Volume:	9.99 g
Dilution:	10			Final Weight/Volume:	1 mL
Analysis Date:	07/30/2014 2301			Injection Volume:	1 uL
Prep Date:	07/28/2014 1355			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		49	U	49	150
PCB-1221		67	U	67	150
PCB-1232		23	U	23	150
PCB-1242		22	U	22	150
PCB-1248		37	U	37	150
PCB-1254		45	U	45	150
PCB-1260		920		43	150

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl			
Tetrachloro-m-xylene	71		46 - 130



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

Client Sample ID: SD-276-SS

Lab Sample ID: 680-102558-25

Date Sampled: 06/19/2014 1220

Client Matrix: Solid

% Moisture: 69.0

Date Received: 06/20/2014 0935

**8081B/8082A Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography**

Analysis Method:	8081B/8082A	Analysis Batch:	680-341704	Instrument ID:	CSGZ
Prep Method:	3546	Prep Batch:	680-341037	Initial Weight/Volume:	10.09 g
Dilution:	10			Final Weight/Volume:	1 mL
Analysis Date:	07/30/2014 2245			Injection Volume:	1 uL
Prep Date:	07/28/2014 1355			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
PCB-1016		53	U	53	160
PCB-1221		72	U	72	160
PCB-1232		25	U	25	160
PCB-1242		24	U	24	160
PCB-1248		39	U	39	160
PCB-1254		48	U	48	160
PCB-1260		1200		46	160

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl			
Tetrachloro-m-xylene	79		46 - 130

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-252-SS

Lab Sample ID: 680-102558-27

Date Sampled: 06/19/2014 1335

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	68		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-253-SS

Lab Sample ID: 680-102558-28

Client Matrix: Solid

Date Sampled: 06/19/2014 1340

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	65		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-254-SS

Lab Sample ID: 680-102558-29

Client Matrix: Solid

Date Sampled: 06/19/2014 1450

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	70		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-255-SS

Lab Sample ID: 680-102558-30

Date Sampled: 06/19/2014 1505

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	64		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-260-01

Lab Sample ID: 680-102558-6

Date Sampled: 06/19/2014 0830

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	68		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-260-02

Lab Sample ID: 680-102558-7

Date Sampled: 06/19/2014 0835

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	46		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-260-03

Lab Sample ID: 680-102558-8

Date Sampled: 06/19/2014 0840

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	60		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-260-SS

Lab Sample ID: 680-102558-5

Date Sampled: 06/19/2014 0825

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	71		%	0.010	0.010	1.0	Moisture
Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N	

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-261-01

Lab Sample ID: 680-102558-22

Date Sampled: 06/19/2014 1105

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	69		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-261-02

Lab Sample ID: 680-102558-23

Date Sampled: 06/19/2014 1110

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	63		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-261-03

Lab Sample ID: 680-102558-24

Date Sampled: 06/19/2014 1115

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	57		%	0.010	0.010	1.0	Moisture
Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N	

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-261-SS

Lab Sample ID: 680-102558-21

Client Matrix: Solid

Date Sampled: 06/19/2014 1100

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	78		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-266-01

Lab Sample ID: 680-102558-18

Date Sampled: 06/19/2014 1035

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	77		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-266-02

Lab Sample ID: 680-102558-19

Date Sampled: 06/19/2014 1040

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	72		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-266-03

Lab Sample ID: 680-102558-20

Date Sampled: 06/19/2014 1045

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	57		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-266-SS

Lab Sample ID: 680-102558-17

Date Sampled: 06/19/2014 1030

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	79		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-267-01

Lab Sample ID: 680-102558-14

Date Sampled: 06/19/2014 1005

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	67		%	0.010	0.010	1.0	Moisture
Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N	

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-267-02

Lab Sample ID: 680-102558-15

Date Sampled: 06/19/2014 1010

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	69		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

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**General Chemistry**

**Client Sample ID:** SD-267-03

**Lab Sample ID:** 680-102558-16

**Client Matrix:** Solid

**Date Sampled:** 06/19/2014 1015

**Date Received:** 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	54		%	0.010	0.010	1.0	Moisture
Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140		DryWt Corrected: N			

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-267-SS

Lab Sample ID: 680-102558-13

Date Sampled: 06/19/2014 1000

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	79		%	0.010	0.010	1.0	Moisture
Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N	

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-272-01

Lab Sample ID: 680-102558-11

Date Sampled: 06/19/2014 0930

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	22		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-272-02

Lab Sample ID: 680-102558-12

Date Sampled: 06/19/2014 0935

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	19		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-272-SS

Lab Sample ID: 680-102558-10

Date Sampled: 06/19/2014 0925

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	22		%	0.010	0.010	1.0	Moisture
Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140		DryWt Corrected: N			



**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

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**General Chemistry**

Client Sample ID: SD-274-01

Lab Sample ID: 680-102558-2

Date Sampled: 06/19/2014 0800

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	67		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

---

**General Chemistry**

Client Sample ID: SD-27402

Lab Sample ID: 680-102558-3

Date Sampled: 06/19/2014 0805

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	66		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

---

**General Chemistry**

Client Sample ID: SD-274-03

Lab Sample ID: 680-102558-4

Client Matrix: Solid

Date Sampled: 06/19/2014 0810

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	50		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

---

**General Chemistry**

Client Sample ID: SD-274-SS

Lab Sample ID: 680-102558-1

Date Sampled: 06/19/2014 0755

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	70		%	0.010	0.010	1.0	Moisture

Analysis Batch: 680-335719      Analysis Date: 06/23/2014 1140      DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

---

**General Chemistry**

Client Sample ID: SD-275-SS

Lab Sample ID: 680-102558-26

Client Matrix: Solid

Date Sampled: 06/19/2014 1320

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	67		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

---

**General Chemistry**

Client Sample ID: **SD-276-SS**

Lab Sample ID: 680-102558-25

Date Sampled: 06/19/2014 1220

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	69		%	0.010	0.010	1.0	Moisture
Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N	

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1  
Sdg Number: 680102558-1

---

**General Chemistry**

Client Sample ID: SD-Dup07

Lab Sample ID: 680-102558-9FD

Client Matrix: Solid

Date Sampled: 06/19/2014 0000

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	21		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N

**Analytical Data**

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

Sdg Number: 680102558-1

---

**General Chemistry**

Client Sample ID: SD-Dup08

Lab Sample ID: 680-102558-31FD

Date Sampled: 06/19/2014 0000

Client Matrix: Solid

Date Received: 06/20/2014 0935

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	64		%	0.010	0.010	1.0	Moisture
	Analysis Batch: 680-335719		Analysis Date: 06/23/2014 1140				DryWt Corrected: N



**Appendix C**

Support Documentation

**MRC SEDIMENT INVESTIGATION  
SEDIMENT DATA**

680-102558-1

FRACTION	CHEMICAL	SD-Dup07	UNITS	SD-272-01	RPD	D
PCB	TETRACHLOROBIPHENYLS	1.8 J	UG/KG	1.9 J	5.41	0.10

Current RPD Quality Control Limit: 50 %.  
Shaded cells indicate RPDs that exceed the applicable quality control limit.

**MRC SEDIMENT INVESTIGATION  
SEDIMENT DATA**

680-102558-1

FRACTION	CHEMICAL	SD-Dup08	UNITS	SD-255-SS-RE	RPD	D
PCB	TETRACHLOROBIPHENYLS	ND	UG/KG	4.4 J	200.00	4.40

Current RPD Quality Control Limit: 50 %.  
Shaded cells indicate RPDs that exceed the applicable quality control limit.

**Chain of Custody Record**

<b>Client Information</b> Client Contact: Mike Martin Company: Tetra Tech, Inc. Address: 20251 Century Blvd Suite 200 City: Germantown State, Zip: MD, 20874 Phone: Email: Michael.Martin@tetratech.com Project Name: Sediments Site:		Sampler: <b>Stu Cameron</b> Phone: <b>(703) 342-8389</b> Lab PM: Lanier, Jerry A E-Mail: jerry.lanier@testamericainc.com		Carrier Tracking No(s): COC No: 680-56831-24906.43 Page: <b>1 of 3</b> Job #:			
Due Date Requested: TAT Requested (days): <b>Standard</b> PO #: <b>Standard</b> Purchase Order not required WO #: Project #: 68012942 SSOW#:		Analysis Requested GA_01_R_Ra - (MCD) Radium-226/228 6020_7470A AFR_7H - Standard Target List 680 - Local Method / <b>680a</b> Matrix Filtered Sample (Yes or No) Matrix (W=water, S=solid, O=soil, C=metal, A=air)					
Sample Identification SD-274-55 SD-274-01 SD-274-02 SD-274-03 SD-260-55 SD-260-01 SD-260-02 SD-260-03 SD-DIP07 SD-272-55 SD-272-01		Sample Date 6/19/14 6/19/14 6/19/14 6/19/14 6/19/14 6/19/14 6/19/14 6/19/14 6/19/14 6/19/14 6/19/14		Sample Time 0755 0800 0805 0810 0825 0830 0835 0946 0906 0925 0930		Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - AgNO2 P - Na2O4S Q - Na2SO3 R - Na2B2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)		Special Instructions/Note: Total Number of Containers: 680-102558 Chain of Custody			
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: <b>680-102558</b>			
Empty Kit Relinquished by:		Date:		Method of Shipment:			
Relinquished by:		Date/Time: 6/19/14 1600		Received by: <i>[Signature]</i> Company: <b>TA</b>			
Relinquished by:		Date/Time: 6/19/14 1730		Received by: <i>[Signature]</i> Company: <b>TA</b>			
Relinquished by:		Date/Time:		Received by: <i>[Signature]</i> Company:			
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <b>2.2°C</b>			

**Chain of Custody Record**

<b>Client Information</b> Client Contact: Mike Martin Company: Tetra Tech, Inc. Address: 20251 Century Blvd Suite 200 City: Germantown State, Zip: MD, 20874 Phone: Email: Michael.Martin@tetratech.com Project Name: Sediments Site:		Lab PM: Lanier, Jerry A E-Mail: jerry.lanier@testamericainc.com Carrier Tracking ID(s): Job #: 2 of 3	
Due Date Requested: TAT Requested (days): <b>Standard</b> PO #: Purchase Order not required WD #: Project #: 68012842 SSO/W:		Analysis Requested A01R, Th - Standard Target List 680 - Local Method / 801 GA, 01, R, Ra - (MOD) Radium-226/228 Total Number of Containers:	
Sample Identification 50-272-02 50-267-55 50-267-01 50-267-02 50-267-03 50-266-55 50-266-01 50-266-02 50-266-03 50-261-55 50-261-01		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsH2O2 P - NaCO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - NCA W - pH 4.5 Z - Other (specify)	
Sample Date 6/14/14 Sample Time 0935 1600 1005 1010 1015 1020 1035 1040 1045 1100 1105		Matrix (W=Water, S=Sediment, O=Other) Preservation Code Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by:			
Relinquished by: [Signature] Date: 6/14/14 - 1600 Company: T4		Received by: [Signature] Date/Time: 6/19/14 1600 Company: T4	
Relinquished by: [Signature] Date/Time: 6/19/14 1730 Company: T4		Received by: [Signature] Date/Time: 6/20/14 09:35 Company: T4	
Relinquished by: [Signature] Date/Time:		Received by: [Signature] Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 2.2°C	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: 680-102558			

**Chain of Custody Record**

<b>Client Information</b> Client Contact: <b>STU Cameron</b> Phone: <b>(703) 342-8384</b> E-Mail: <b>jerry.lanier@testamerica.com</b>		Lab PM: <b>Lanier, Jerry A</b> E-Mail: <b>jerry.lanier@testamerica.com</b>		Carrier Tracking No(s): COC No: <b>680-56831-24906.43</b> Page: <b>3 of 3</b> Job #:	
Address: <b>20251 Century Blvd Suite 200</b> City: <b>Germentown</b> State, Zip: <b>MD, 20874</b> Phone:		Due Date Requested: TAT Requested (days): <b>Standard</b> PO #: <b>Purchase Order not required</b> WO #:		Analysis Requested GA_01_R_Ra - (MOD) Radium-226/228 6020, 7470A A01R, Th - Standard Target List 680 - Local Method / 8082 Field Filtered Sample (Yes or No)	
Email: <b>Michael.Martin@tetratech.com</b> Project Name: <b>68012942</b> Sediments Site:		Matrix (liquid, solid, gas) Sample Type (C-comp, G-grab) Sample Time Sample Date Preservation Code Matrix (Hexane, N-None, O-Acetalde, P-Nitric Acid, Q-Na2SO3, R-Na2S2O5, S-H2SO4, T-TSP Dodecahydrate, U-Acetone, V-MCAA, W-ph 4-5, L-EDA, Other)		Special Instructions/Note: Total Number of Containers	
Sample Identification <b>50-261-02</b> <b>50-261-03</b> <b>50-276-SS</b> <b>50-251-SS</b> <b>50-252-SS</b> <b>50-253-SS</b> <b>50-254-SS</b> <b>50-255-SS</b> <b>50-00008</b>		Sample Date Sample Time Sample Type Matrix		Special Instructions/Note: Total Number of Containers	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: <b>680-102558</b>	
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: <b>6/19/14 1600</b>		Received by: <i>[Signature]</i>	
Relinquished by: <i>[Signature]</i>		Date/Time: <b>6/19/14 1730</b>		Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <b>2.2°C</b>	

LMC - MRC  
SDG 680-102558-1

SAMPLE IDENTIFICATION

SD-267-01

COMPOUND

TETRACHLOROBIPHENYL

COMPOUND AREA	562906
INTERNAL STANDARD AMOUNT (ng)	0.75
DILUTION FACTOR	10
INTERNAL STANDARD AREA	139455
AVERAGE RRF	0.2893
% SOLIDS	0.331
WEIGHT OF SAMPLE (g)	10.09
VOLUME EXTRACT (μl)	1000
VOLUME INJECTED (μl)	1
ng to μg	1000
g to Kg	1000

CONCENTRATION = 31333 ng/g OR μg/Kg

$562906 * 0.75 \text{ ng} * 1000 \mu\text{l} * 10 * 1 \mu\text{g} * 1000 \text{ g} / (139455 * 0.2893 * 10.09 \text{ g} * 1 \mu\text{l} * 0.331 * 1000 \text{ ng} * 1 \text{ Kg})$

TestAmerica Savannah  
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSX\20140727-11356.b\XG2733.D  
 Lims ID: 680-102558-A-14-A Lab Sample ID: 680-102558-14  
 Client ID: SD-267-01  
 Sample Type: Client  
 Inject. Date: 28-Jul-2014 12:34:30 ALS Bottle#: 25 Worklist Smp#: 6  
 Injection Vol: 1.0 ul Dil. Factor: 10.0000  
 Sample Info: 680-102558-A-14-A DL=10  
 Misc. Info.: 680-0011356-006  
 Operator ID: nmd Instrument ID: CMSX  
 Method: \\SAVCHROM\ChromData\CMSX\20140727-11356.b\680\CMSX.m  
 Limit Group: 680  
 Last Update: 29-Jul-2014 09:02:45 Calib Date: 20-Jul-2014 00:46:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\SAVCHROM\ChromData\CMSX\20140719-11146.b\XG1913.D

10.09g/1ml

DF = 10X

RRF = 0.2893

% solid = 33.1%

Column 1 : Det: MS SCAN  
 Process Host: XAWRK022

First Level Reviewer: davisn Date: 29-Jul-2014 09:02:55

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/ml	Flags
* 5 Phenanthrene-d10	188	9.840	9.840	0.0	66	139455	0.7500	
A 25 Trichlorobiphenyl	256	10.717	9.409 - 12.026		0	43026	0.5437	
A 26 Tetrachlorobiphenyl	292	12.199	10.505 - 13.894		0	562906	10.5	
A 27 Pentachlorobiphenyl	326	13.593	11.768 - 15.418		0	125787	3.02	
A 28 1,1'-Biphenyl, hexachloro-	360	14.874	12.928 - 16.819		0	107580	2.75	
* 15 Chrysene-d12	240	15.918	15.918	0.0	100	162535	0.7500	
A 29 1,1'-Biphenyl, heptachloro-	394	15.990	14.529 - 17.451		0	53745	1.74	
A 30 1,1'-Biphenyl, octachloro-	430	17.075	16.015 - 18.136		0	10015	0.3551	



Reagents:

SM-680istd\_00028 Amount Added: 30.00 Units: uL Run Reagent



TestAmerica Savannah  
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30032.D  
 Lims ID: 680-102558-A-25-B Lab Sample ID: 680-102558-25  
 Client ID: SD-276-SS  
 Sample Type: Client  
 Inject. Date: 30-Jul-2014 22:45:57 ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: 680-0011463-032  
 Operator ID: LIMS import Instrument ID: CSGZ  
 Method: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\PestPCB\_CSGZ.m  
 Limit Group: 8081B\_8082A  
 Last Update: 31-Jul-2014 10:10:30 Calib Date: 28-Jul-2014 19:11:51  
 Integrator: Falcon  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\SAVCHROM\ChromData\CSGZ\20140728-11389.b\ZG28018.D  
 Column 1: Rtx CLPesticides I ( 0.32 mm) Det: GC ECD1A  
 Column 2: Rtx CLPesticides II ( 0.32 mm) Det: GC ECD2B  
 Process Host: XAWRK022

10.09 g / 1ml  
 % solid = 31%  
 DF = 10x

First Level Reviewer: kellarj Date: 31-Jul-2014 09:50:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	-----------------	-------

\* 1 1-Bromo-2-nitrobenzene  
 → 1 3.272 3.271 0.001 37850181 0.0800  
 2 3.545 3.544 0.001 70772835 0.0800  
 RPD = 0.00

\$ 3 Tetrachloro-m-xylene  
 1 3.898 3.897 0.001 18415277 0.0374  
 2 4.382 4.381 0.001 35968347 0.0397  
 RPD = 5.94

34 PCB-1260 M  
 1 7.028 7.029 -0.001 9364771 0.3804 M  
 1 7.059 7.059 0.000 4976388 0.3710 M  
 1 7.216 7.217 -0.001 5208351 0.4098 M  
 → 1 7.385 7.385 0.000 21608297 0.3718 M *KRF = 0.1228*  
 1 7.572 7.573 -0.001 11880514 0.4128 M  
 Average of Peak Amounts = 0.3891  
 2 7.676 7.676 0.000 18780226 0.3695 M  
 2 7.714 7.714 0.000 10261122 0.3580 M  
 2 7.881 7.882 -0.001 19520123 0.3457 M  
 2 7.931 7.932 -0.001 11750124 0.4163 M  
 2 8.037 8.038 -0.001 43624597 0.3635 M  
 Average of Peak Amounts = 0.3706  
 RPD = 4.89

\$ 45 DCB Decachlorobiphenyl  
 1 8.291 8.292 -0.001 49560851 0.1057  
 2 9.028 9.030 -0.002 101982199 0.1016  
 RPD = 3.97

$$\frac{0.3891 \text{ ug}}{1 \text{ ml}} \times \frac{1 \text{ ml}}{10.09 \text{ g}} \times \frac{1}{.31} \times \frac{1000 \text{ g}}{1 \text{ kg}} \times 10 = 1243.96 \text{ ug / Kg}$$

$$\frac{21608297 \times 0.08}{37850181 \times 0.1228} = 0.3719 \text{ ug / ml } \checkmark$$

### QC Flag Legend

Review Flags

M - Manually Integrated

### Reagents:

SGBNB\_wk\_00004

Amount Added: 0.10

Units: mL

Run Reagent

Report Date: 31-Jul-2014 10:10:39

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30032.D

Injection Date: 30-Jul-2014 22:45:57

Instrument ID: CSGZ

Lims ID: 680-102558-A-25-B

Lab Sample ID: 680-102558-25

Client ID: SD-276-SS

Operator ID: LIMS import

ALS Bottle#: 32 Worklist Smp#: 32

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

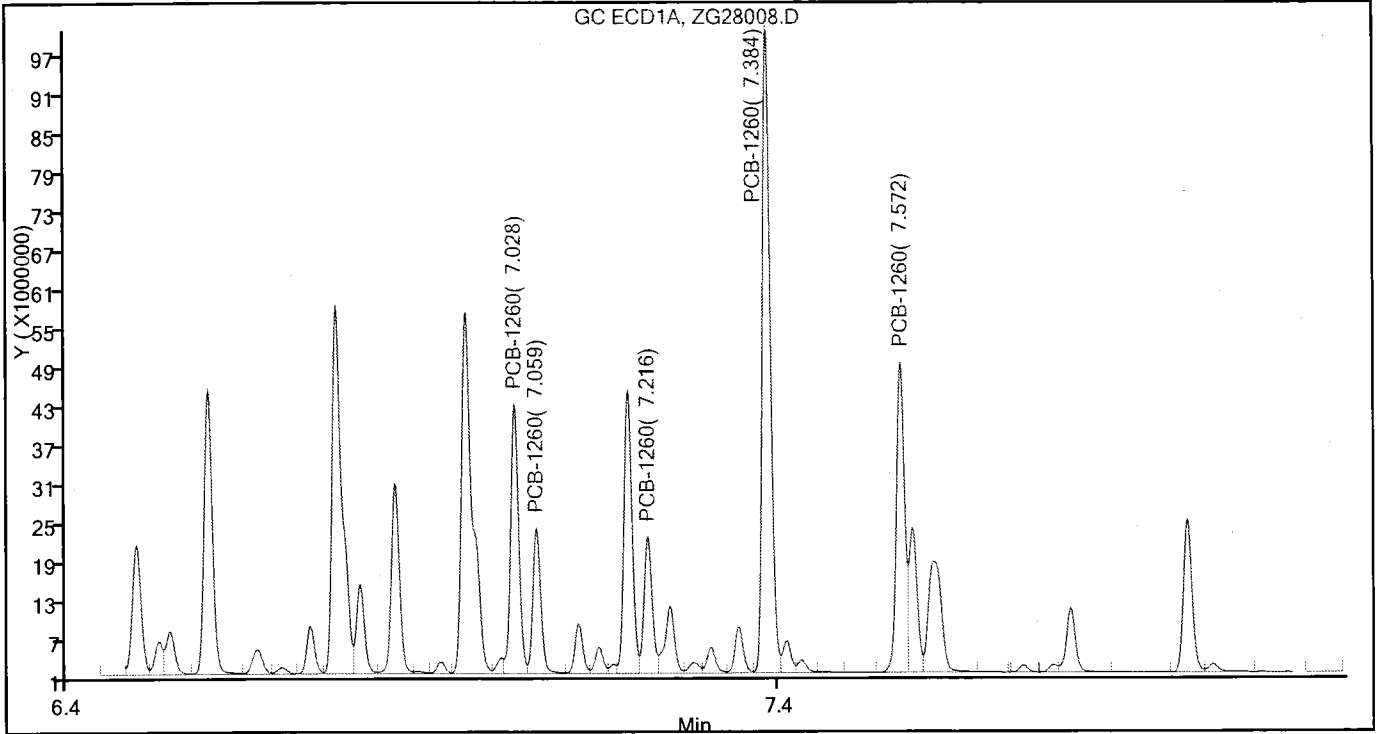
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I (0.32 mm)

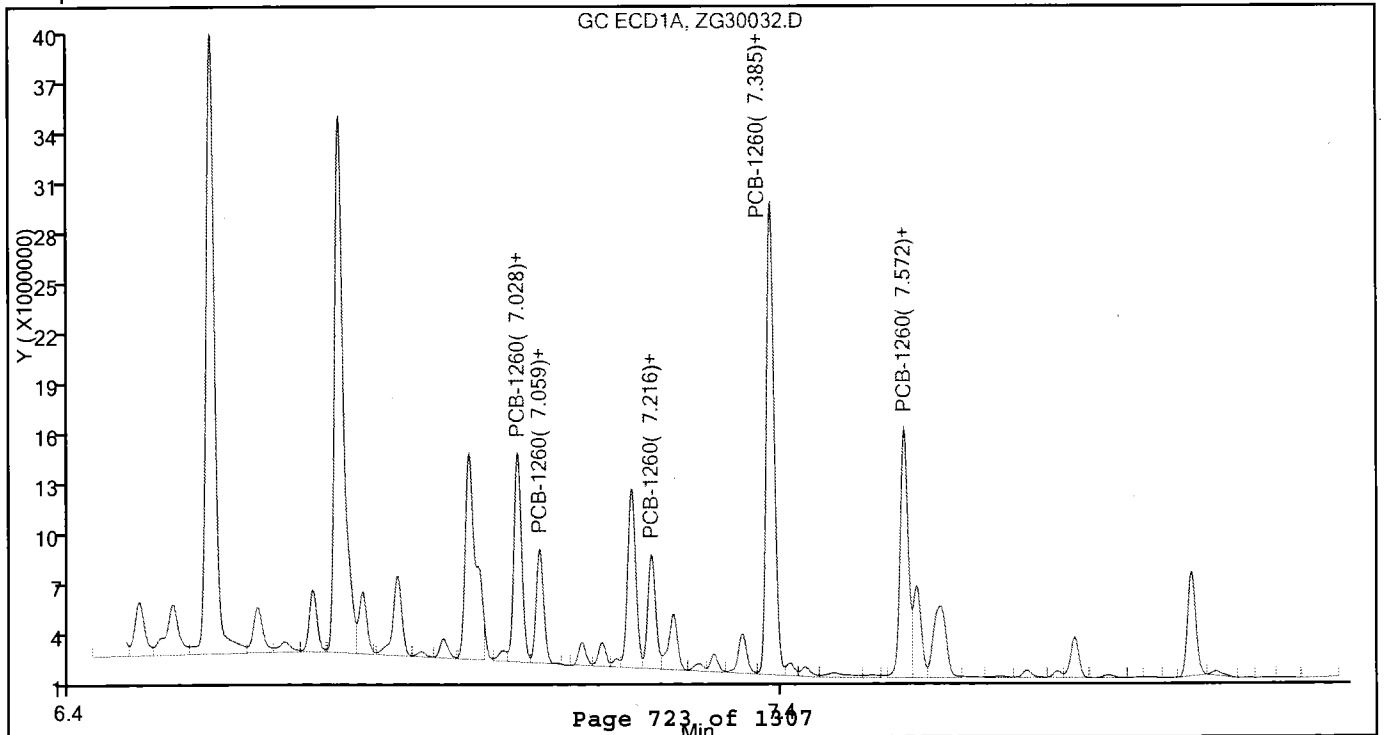
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30032.D

Injection Date: 30-Jul-2014 22:45:57

Instrument ID: CSGZ

Lims ID: 680-102558-A-25-B

Lab Sample ID: 680-102558-25

Client ID: SD-276-SS

Operator ID: LIMS import

ALS Bottle#: 32 Worklist Smp#: 32

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

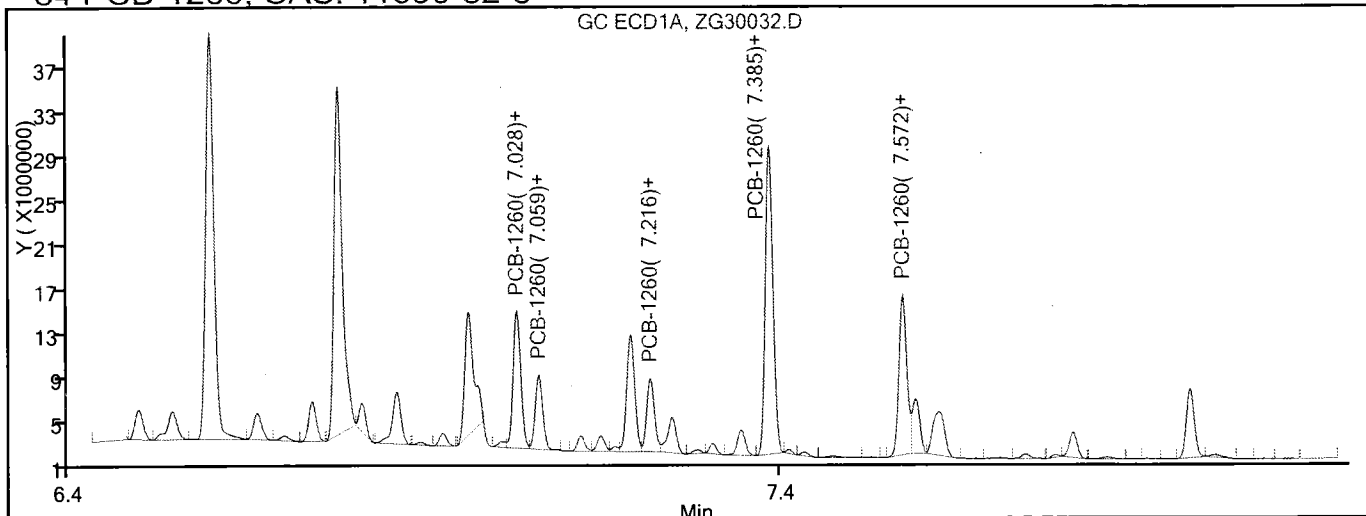
Method: PestPCB\_CSGZ

Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)

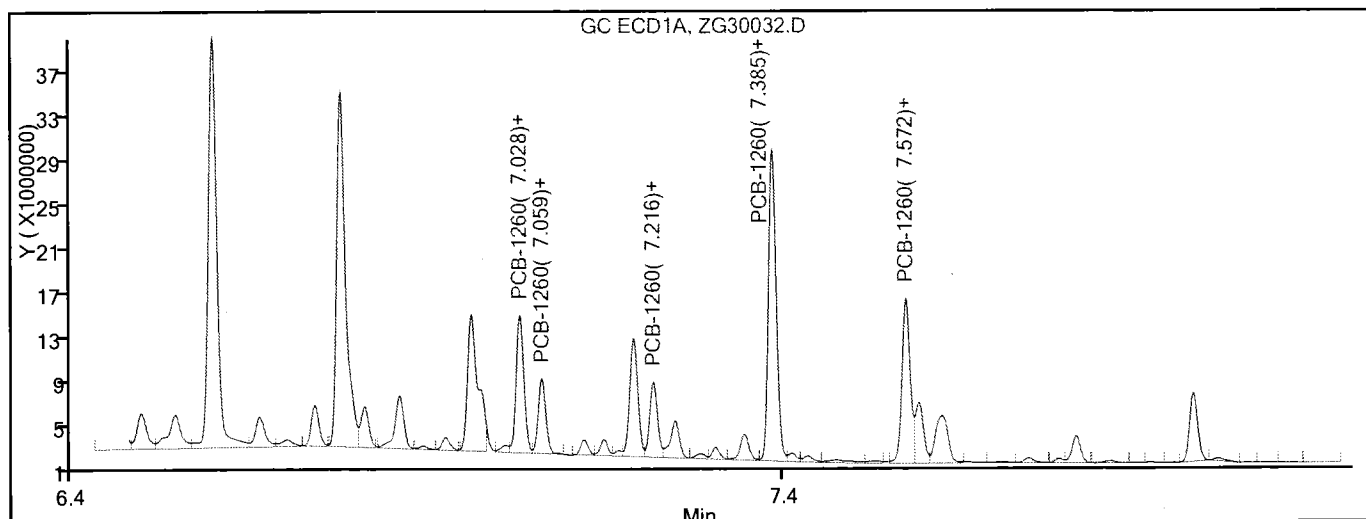
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 7.028	Response = 9241161	M
RT = 7.059	Response = 4921057	M
RT = 7.216	Response = 4989174	M
RT = 7.385	Response = 20982279	M
RT = 7.572	Response = 11177561	M



Manual Integration Results

RT = 7.028	Response = 9364771	M
RT = 7.059	Response = 4976388	M
RT = 7.216	Response = 5208351	M
RT = 7.385	Response = 21608297	M
RT = 7.572	Response = 11880514	M

Reviewer: kellarj, 31-Jul-2014 09:50:08

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Report Date: 31-Jul-2014 10:10:39

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30032.D

Injection Date: 30-Jul-2014 22:45:57

Instrument ID: CSGZ

Operator ID: LIMS import

Lims ID: 680-102558-A-25-B

Lab Sample ID: 680-102558-25

Worklist Smp#: 32

Client ID: SD-276-SS

Dil. Factor: 1.0000

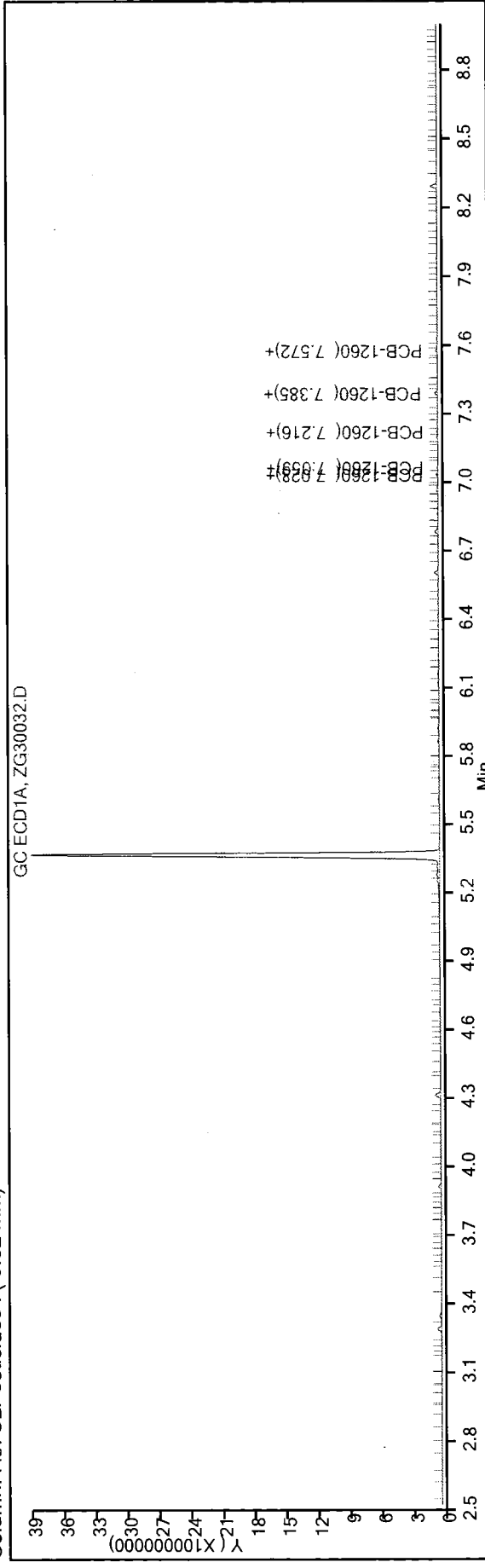
ALS Bottle#: 32

Injection Vol: 1.0 ul

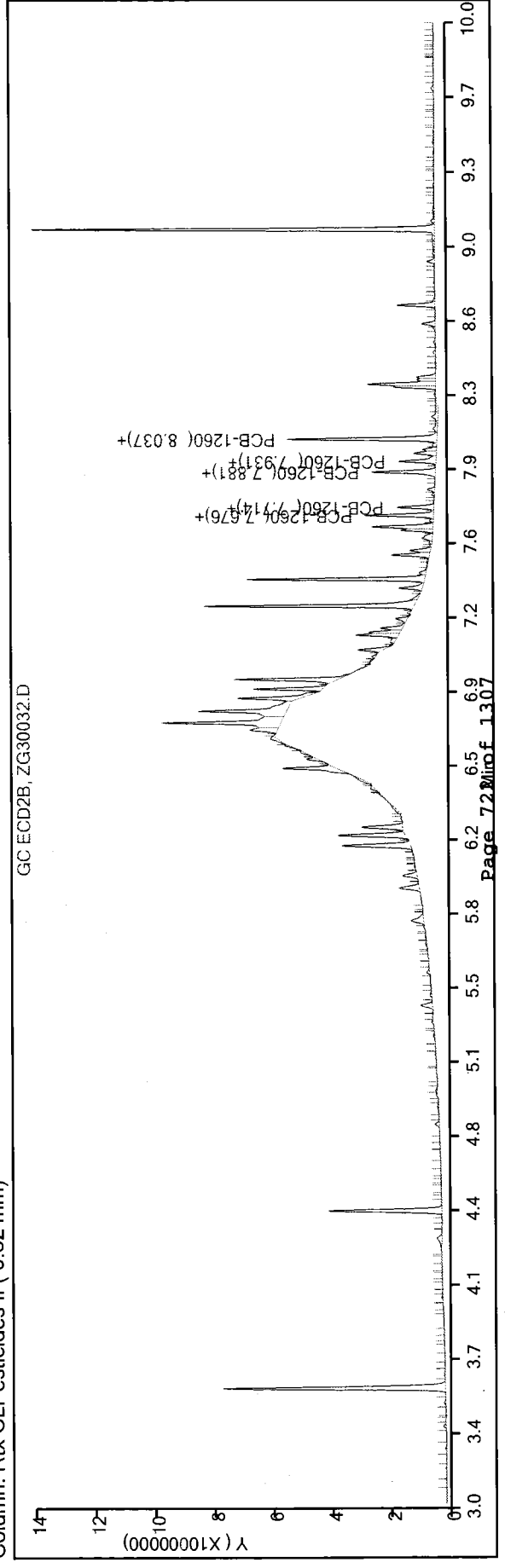
Limit Group: 8081B\_8082A

Method: PestPCB\_CSGZ

Column: Rtx CLPesticides I (0.32 mm)



Column: Rtx CLPesticides II (0.32 mm)



Report Date: 31-Jul-2014 09:30:24

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30028.D

Injection Date: 30-Jul-2014 21:43:50

Instrument ID: CSGZ

Lims ID: ccvis ar4

Operator ID: LIMS import

Worklist Smp#: 28

Client ID:

Injection Vol: 1.0 ul

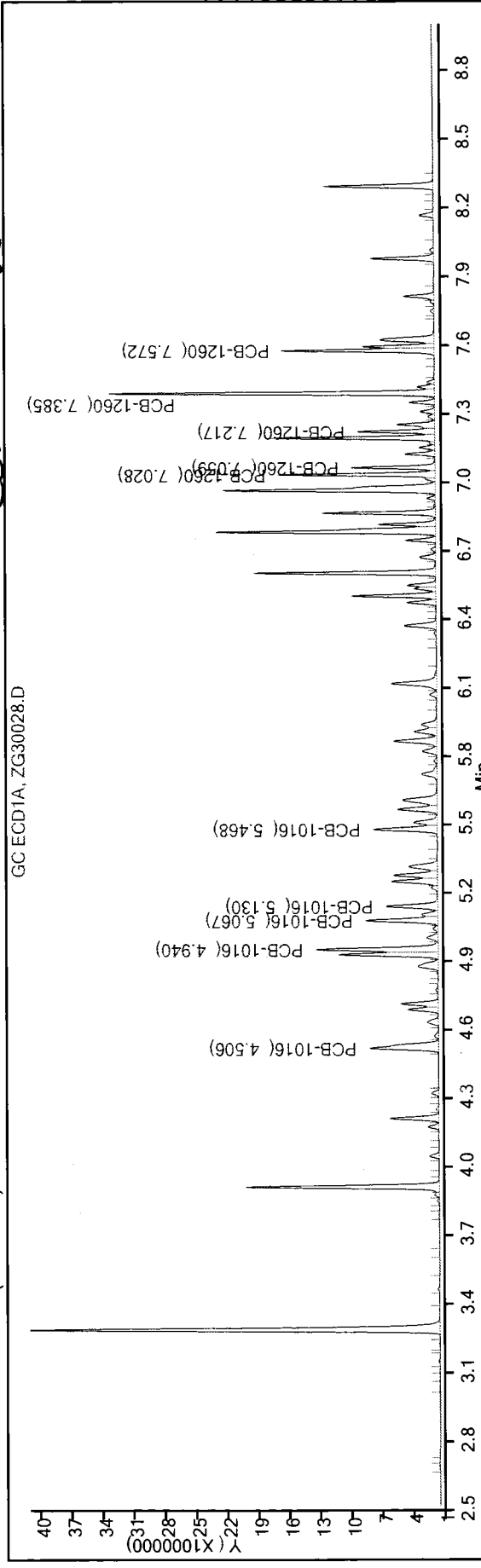
Dil. Factor: 1.0000

ALS Bottle#: 28

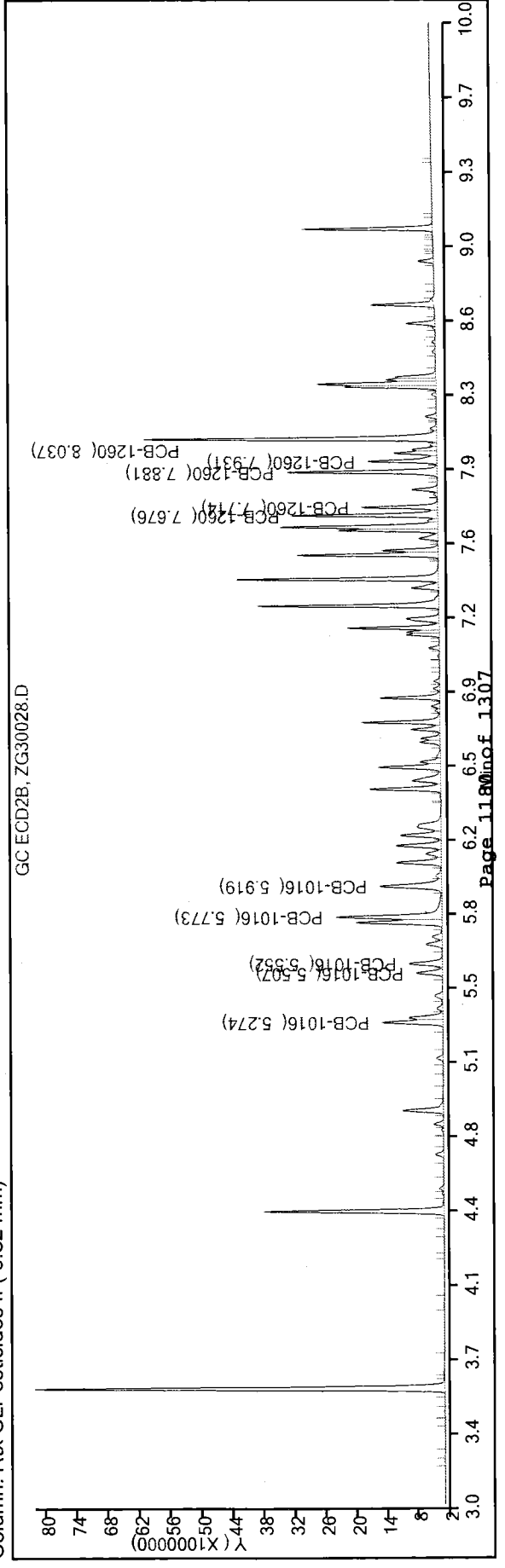
Method: PestPCB\_CSGZ

Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)



Column: Rtx CLPesticides II ( 0.32 mm)



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 680-102558-1

SDG Number: 680102558-1

Login Number: 102558

List Source: TestAmerica Savannah

List Number: 1

Creator: Kicklighter, Marilyn D

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

Job ID: 680-102558-1

Laboratory: TestAmerica Savannah

### Narrative

## CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Sediments

Report Number: 680-102558-1

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 06/20/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.2 C.

### POLYCHLORINATED BIPHENYLS (PCBS)

Samples SD-274-SS (680-102558-1), SD-274-01 (680-102558-2), SD-27402 (680-102558-3), SD-274-03 (680-102558-4), SD-260-SS (680-102558-5), SD-260-01 (680-102558-6), SD-260-02 (680-102558-7), SD-260-03 (680-102558-8), SD-Dup07 (680-102558-9), SD-272-SS (680-102558-10), SD-272-01 (680-102558-11), SD-272-02 (680-102558-12), SD-267-SS (680-102558-13), SD-267-01 (680-102558-14), SD-267-02 (680-102558-15), SD-267-03 (680-102558-16), SD-266-SS (680-102558-17), SD-266-01 (680-102558-18), SD-266-02 (680-102558-19), SD-266-03 (680-102558-20), SD-261-SS (680-102558-21), SD-261-01 (680-102558-22), SD-261-02 (680-102558-23), SD-261-03 (680-102558-24), SD-276-SS (680-102558-25), SD-275-SS (680-102558-26), SD-252-SS (680-102558-27), SD-253-SS (680-102558-28), SD-254-SS (680-102558-29), SD-255-SS (680-102558-30) and SD-Dup08 (680-102558-31) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 07/21/2014, 07/22/2014, 07/28/2014 and 07/29/2014 and analyzed on 07/28/2014, 07/29/2014 and 07/30/2014.

Internal standard (ISTD) response for the following sample(s) was outside of acceptance limits when compared to the area of the CCVIS: (680-102521-19 MSD), (LCS 680-341361/12-A), (MB 680-341361/11-A), SD-255-SS (680-102558-30), SD-261-03 (680-102558-24). The 680 method allows that the sample also be compared to the average internal standard area of the calibration(ICISAV). When compared to the ICISAV the samples are within the area range for the internal standard.

Surrogate recovery for the following sample(s) was outside control limits: SD-266-03 (680-102558-20), SD-267-SS (680-102558-13), SD-266-SS (680-102558-17), SD-267-02 (680-102558-15). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported. The original and reextract were done at 10g. Matrix interference is suspected.

The following sample(s) was diluted due to the nature of the sample matrix : (680-102600-5 MS), (680-102600-5 MSD), SD-253-SS (680-102558-28), SD-261-01 (680-102558-22), SD-266-02 (680-102558-19), SD-267-01 (680-102558-14), SD-Dup09 (680-102600-5), SD-254-SS (680-102558-29), SD-260-01 (680-102558-6), SD-260-SS (680-102558-5), SD-261-02 (680-102558-23), SD-261-SS (680-102558-21). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Several analytes exceeded the recovery criteria low for the MSD of sample 680-102521-19 in batch 680-341486. Several analytes exceeded the RPD limit.

Hexachlorobiphenyl, Pentachlorobiphenyl and Tetrachlorobiphenyl exceeded the recovery criteria low for the MS/MSD of sample SD-276-SS (680-102558-25) in batch 680-341490.

Several analytes failed the recovery criteria low for the MS/MSD of sample 680-102600-5 in batch 680-341034. Tetrachlorobiphenyl and



## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

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### Job ID: 680-102558-1 (Continued)

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#### Laboratory: TestAmerica Savannah (Continued)

Trichlorobiphenyl exceeded the RPD limit.

Samples SD-274-SS (680-102558-1)[5X], SD-274-01 (680-102558-2)[5X], SD-27402 (680-102558-3)[5X], SD-260-SS (680-102558-5) [10X], SD-260-01 (680-102558-6)[10X], SD-267-01 (680-102558-14)[10X], SD-266-02 (680-102558-19)[10X], SD-261-SS (680-102558-21) [10X], SD-261-01 (680-102558-22)[10X], SD-261-02 (680-102558-23)[10X], SD-253-SS (680-102558-28)[10X] and SD-254-SS (680-102558-29)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PESTICIDES AND PCBs

Samples SD-276-SS (680-102558-25), SD-275-SS (680-102558-26), SD-252-SS (680-102558-27), SD-253-SS (680-102558-28), SD-254-SS (680-102558-29) and SD-255-SS (680-102558-30) were analyzed for Pesticides and PCBs in accordance with EPA SW-846 Method 8081B\_8082A. The samples were prepared on 07/21/2014 and 07/28/2014 and analyzed on 07/23/2014 and 07/30/2014.

The following sample(s) required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: (680-102558-25 MS), (680-102558-25 MSD), SD-252-SS (680-102558-27), SD-253-SS (680-102558-28), SD-254-SS (680-102558-29), SD-275-SS (680-102558-26), SD-276-SS (680-102558-25).

The prep batch shows a final volume of 1mL for these extracts, because to the split of the extract for the 680 and 8082 methods. The extracts were split 0.5mL going to the 680 analysis and the other 0.5mL were brought up to a 5mL final volume to maintain routine 8082 RLs. The prep batch can only have one final volume listed. Therefore all 8082 samples start at 10 fold dilution to account for the final volume adjustment done by the extraction department.

This method incorporates 2nd column confirmation. Corrective action is not taken for surrogate/spike compounds unless results from both columns are unacceptable. Results outside criteria are qualified.

PCB-1016 exceeded the RPD limit for the MSD of sample SD-276-SSMSD (680-102558-25) in batch 680-341704.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### PERCENT SOLIDS/MOISTURE

Samples SD-274-SS (680-102558-1), SD-274-01 (680-102558-2), SD-27402 (680-102558-3), SD-274-03 (680-102558-4), SD-260-SS (680-102558-5), SD-260-01 (680-102558-6), SD-260-02 (680-102558-7), SD-260-03 (680-102558-8), SD-Dup07 (680-102558-9), SD-272-SS (680-102558-10), SD-272-01 (680-102558-11), SD-272-02 (680-102558-12), SD-267-SS (680-102558-13), SD-267-01 (680-102558-14), SD-267-02 (680-102558-15), SD-267-03 (680-102558-16), SD-266-SS (680-102558-17), SD-266-01 (680-102558-18), SD-266-02 (680-102558-19), SD-266-03 (680-102558-20), SD-261-SS (680-102558-21), SD-261-01 (680-102558-22), SD-261-02 (680-102558-23), SD-261-03 (680-102558-24), SD-276-SS (680-102558-25), SD-275-SS (680-102558-26), SD-252-SS (680-102558-27), SD-253-SS (680-102558-28), SD-254-SS (680-102558-29), SD-255-SS (680-102558-30) and SD-Dup08 (680-102558-31) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 06/23/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-102558-1	SD-274-SS	Solid	06/19/14 07:55	06/20/14 09:35
680-102558-2	SD-274-01	Solid	06/19/14 08:00	06/20/14 09:35
680-102558-3	SD-27402	Solid	06/19/14 08:05	06/20/14 09:35
680-102558-4	SD-274-03	Solid	06/19/14 08:10	06/20/14 09:35
680-102558-5	SD-260-SS	Solid	06/19/14 08:25	06/20/14 09:35
680-102558-6	SD-260-01	Solid	06/19/14 08:30	06/20/14 09:35
680-102558-7	SD-260-02	Solid	06/19/14 08:35	06/20/14 09:35
680-102558-8	SD-260-03	Solid	06/19/14 08:40	06/20/14 09:35
680-102558-9	SD-Dup07	Solid	06/19/14 00:00	06/20/14 09:35
680-102558-10	SD-272-SS	Solid	06/19/14 09:25	06/20/14 09:35
680-102558-11	SD-272-01	Solid	06/19/14 09:30	06/20/14 09:35
680-102558-12	SD-272-02	Solid	06/19/14 09:35	06/20/14 09:35
680-102558-13	SD-267-SS	Solid	06/19/14 10:00	06/20/14 09:35
680-102558-14	SD-267-01	Solid	06/19/14 10:05	06/20/14 09:35
680-102558-15	SD-267-02	Solid	06/19/14 10:10	06/20/14 09:35
680-102558-16	SD-267-03	Solid	06/19/14 10:15	06/20/14 09:35
680-102558-17	SD-266-SS	Solid	06/19/14 10:30	06/20/14 09:35
680-102558-18	SD-266-01	Solid	06/19/14 10:35	06/20/14 09:35
680-102558-19	SD-266-02	Solid	06/19/14 10:40	06/20/14 09:35
680-102558-20	SD-266-03	Solid	06/19/14 10:45	06/20/14 09:35
680-102558-21	SD-261-SS	Solid	06/19/14 11:00	06/20/14 09:35
680-102558-22	SD-261-01	Solid	06/19/14 11:05	06/20/14 09:35
680-102558-23	SD-261-02	Solid	06/19/14 11:10	06/20/14 09:35
680-102558-24	SD-261-03	Solid	06/19/14 11:15	06/20/14 09:35
680-102558-25	SD-276-SS	Solid	06/19/14 12:20	06/20/14 09:35
680-102558-26	SD-275-SS	Solid	06/19/14 13:20	06/20/14 09:35
680-102558-27	SD-252-SS	Solid	06/19/14 13:35	06/20/14 09:35
680-102558-28	SD-253-SS	Solid	06/19/14 13:40	06/20/14 09:35
680-102558-29	SD-254-SS	Solid	06/19/14 14:50	06/20/14 09:35
680-102558-30	SD-255-SS	Solid	06/19/14 15:05	06/20/14 09:35
680-102558-31	SD-Dup08	Solid	06/19/14 00:00	06/20/14 09:35

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

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<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
680	Polychlorinated Biphenyls (PCBs) (GC/MS)	EPA	TAL SAV
8081B/8082A	Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

### Qualifiers

#### GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
*	ISTD response or retention time outside acceptable limits
F1	MS and/or MSD Recovery exceeds the control limits

#### GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

## GC/MS Semi VOA

### Prep Batch: 339370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-1	SD-274-SS	Total/NA	Solid	680	
680-102558-2	SD-274-01	Total/NA	Solid	680	
680-102558-3	SD-27402	Total/NA	Solid	680	
680-102558-4	SD-274-03	Total/NA	Solid	680	
680-102558-5	SD-260-SS	Total/NA	Solid	680	
680-102558-6	SD-260-01	Total/NA	Solid	680	
680-102558-7	SD-260-02	Total/NA	Solid	680	
680-102558-8	SD-260-03	Total/NA	Solid	680	
680-102558-9	SD-Dup07	Total/NA	Solid	680	
680-102558-10	SD-272-SS	Total/NA	Solid	680	
680-102558-11	SD-272-01	Total/NA	Solid	680	
680-102558-12	SD-272-02	Total/NA	Solid	680	
680-102558-13	SD-267-SS	Total/NA	Solid	680	
680-102558-14	SD-267-01	Total/NA	Solid	680	
680-102558-15	SD-267-02	Total/NA	Solid	680	
680-102558-17	SD-266-SS	Total/NA	Solid	680	
680-102558-19	SD-266-02	Total/NA	Solid	680	
680-102558-20	SD-266-03	Total/NA	Solid	680	
680-102558-20 MS	SD-266-03	Total/NA	Solid	3546	
680-102558-20 MSD	SD-266-03	Total/NA	Solid	3546	
LCS 680-339370/22-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-339370/21-A	Method Blank	Total/NA	Solid	3546	

### Prep Batch: 339371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-21	SD-261-SS	Total/NA	Solid	680	
680-102558-22	SD-261-01	Total/NA	Solid	680	
680-102558-23	SD-261-02	Total/NA	Solid	680	
680-102558-28	SD-253-SS	Total/NA	Solid	3546	
680-102558-29	SD-254-SS	Total/NA	Solid	3546	
LCS 680-339371/18-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-339371/17-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 341033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-1	SD-274-SS	Total/NA	Solid	680	339370
680-102558-2	SD-274-01	Total/NA	Solid	680	339370
680-102558-3	SD-27402	Total/NA	Solid	680	339370
680-102558-4	SD-274-03	Total/NA	Solid	680	339370
680-102558-5	SD-260-SS	Total/NA	Solid	680	339370
680-102558-6	SD-260-01	Total/NA	Solid	680	339370
680-102558-7	SD-260-02	Total/NA	Solid	680	339370
680-102558-8	SD-260-03	Total/NA	Solid	680	339370
680-102558-9	SD-Dup07	Total/NA	Solid	680	339370
680-102558-10	SD-272-SS	Total/NA	Solid	680	339370
680-102558-11	SD-272-01	Total/NA	Solid	680	339370
680-102558-12	SD-272-02	Total/NA	Solid	680	339370
680-102558-13	SD-267-SS	Total/NA	Solid	680	339370
680-102558-20	SD-266-03	Total/NA	Solid	680	339370
680-102558-20 MS	SD-266-03	Total/NA	Solid	680	339370
680-102558-20 MSD	SD-266-03	Total/NA	Solid	680	339370

TestAmerica Savannah

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

### GC/MS Semi VOA (Continued)

#### Analysis Batch: 341033 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-339370/22-A	Lab Control Sample	Total/NA	Solid	680	339370
MB 680-339370/21-A	Method Blank	Total/NA	Solid	680	339370

#### Analysis Batch: 341034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-14	SD-267-01	Total/NA	Solid	680	339370
680-102558-15	SD-267-02	Total/NA	Solid	680	339370
680-102558-17	SD-266-SS	Total/NA	Solid	680	339370
680-102558-19	SD-266-02	Total/NA	Solid	680	339370
680-102558-22	SD-261-01	Total/NA	Solid	680	339371
680-102558-28	SD-253-SS	Total/NA	Solid	680	339371
LCS 680-339371/18-A	Lab Control Sample	Total/NA	Solid	680	339371
MB 680-339371/17-A	Method Blank	Total/NA	Solid	680	339371

#### Analysis Batch: 341035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-29	SD-254-SS	Total/NA	Solid	680	339371

#### Prep Batch: 341037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-25	SD-276-SS	Total/NA	Solid	3546	
680-102558-25 MS	SD-276-SS	Total/NA	Solid	3546	
680-102558-25 MSD	SD-276-SS	Total/NA	Solid	3546	
680-102558-26	SD-275-SS	Total/NA	Solid	3546	
680-102558-27	SD-252-SS	Total/NA	Solid	3546	
LCS 680-341037/19-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-341037/18-A	Method Blank	Total/NA	Solid	3546	

#### Prep Batch: 341361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-16	SD-267-03	Total/NA	Solid	680	
680-102558-18	SD-266-01	Total/NA	Solid	680	
680-102558-24	SD-261-03	Total/NA	Solid	680	
680-102558-30	SD-255-SS	Total/NA	Solid	680	
680-102558-31	SD-Dup08	Total/NA	Solid	680	
LCS 680-341361/12-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-341361/11-A	Method Blank	Total/NA	Solid	3546	

#### Analysis Batch: 341486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-16	SD-267-03	Total/NA	Solid	680	341361
680-102558-18	SD-266-01	Total/NA	Solid	680	341361
680-102558-24	SD-261-03	Total/NA	Solid	680	341361
680-102558-30	SD-255-SS	Total/NA	Solid	680	341361
680-102558-31	SD-Dup08	Total/NA	Solid	680	341361
LCS 680-341361/12-A	Lab Control Sample	Total/NA	Solid	680	341361
MB 680-341361/11-A	Method Blank	Total/NA	Solid	680	341361

#### Analysis Batch: 341490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-21	SD-261-SS	Total/NA	Solid	680	339371

TestAmerica Savannah

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

### GC/MS Semi VOA (Continued)

#### Analysis Batch: 341490 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-23	SD-261-02	Total/NA	Solid	680	339371
680-102558-25	SD-276-SS	Total/NA	Solid	680	341037
680-102558-25 MS	SD-276-SS	Total/NA	Solid	680	341037
680-102558-25 MSD	SD-276-SS	Total/NA	Solid	680	341037
680-102558-26	SD-275-SS	Total/NA	Solid	680	341037
680-102558-27	SD-252-SS	Total/NA	Solid	680	341037
LCS 680-341037/19-A	Lab Control Sample	Total/NA	Solid	680	341037
MB 680-341037/18-A	Method Blank	Total/NA	Solid	680	341037

### GC Semi VOA

#### Prep Batch: 339371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-30	SD-255-SS	Total/NA	Solid	3546	
LCS 680-339371/21-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-339371/17-A	Method Blank	Total/NA	Solid	3546	

#### Analysis Batch: 340443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-30	SD-255-SS	Total/NA	Solid	8081B/8082A	339371
LCS 680-339371/21-A	Lab Control Sample	Total/NA	Solid	8081B/8082A	339371
MB 680-339371/17-A	Method Blank	Total/NA	Solid	8081B/8082A	339371

#### Prep Batch: 341037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-25	SD-276-SS	Total/NA	Solid	3546	
680-102558-25 MS	SD-276-SS	Total/NA	Solid	3546	
680-102558-25 MSD	SD-276-SS	Total/NA	Solid	3546	
680-102558-26	SD-275-SS	Total/NA	Solid	3546	
680-102558-27	SD-252-SS	Total/NA	Solid	3546	
680-102558-28	SD-253-SS	Total/NA	Solid	3546	
680-102558-29	SD-254-SS	Total/NA	Solid	3546	
LCS 680-341037/22-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-341037/18-A	Method Blank	Total/NA	Solid	3546	

#### Analysis Batch: 341704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-25	SD-276-SS	Total/NA	Solid	8081B/8082A	341037
680-102558-25 MS	SD-276-SS	Total/NA	Solid	8081B/8082A	341037
680-102558-25 MSD	SD-276-SS	Total/NA	Solid	8081B/8082A	341037
680-102558-26	SD-275-SS	Total/NA	Solid	8081B/8082A	341037
680-102558-27	SD-252-SS	Total/NA	Solid	8081B/8082A	341037
680-102558-28	SD-253-SS	Total/NA	Solid	8081B/8082A	341037
680-102558-29	SD-254-SS	Total/NA	Solid	8081B/8082A	341037
LCS 680-341037/22-A	Lab Control Sample	Total/NA	Solid	8081B/8082A	341037
MB 680-341037/18-A	Method Blank	Total/NA	Solid	8081B/8082A	341037

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Sediments

TestAmerica Job ID: 680-102558-1  
SDG: 680102558-1

### General Chemistry

Analysis Batch: 335719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-102558-1	SD-274-SS	Total/NA	Solid	Moisture	
680-102558-2	SD-274-01	Total/NA	Solid	Moisture	
680-102558-3	SD-27402	Total/NA	Solid	Moisture	
680-102558-4	SD-274-03	Total/NA	Solid	Moisture	
680-102558-5	SD-260-SS	Total/NA	Solid	Moisture	
680-102558-6	SD-260-01	Total/NA	Solid	Moisture	
680-102558-7	SD-260-02	Total/NA	Solid	Moisture	
680-102558-8	SD-260-03	Total/NA	Solid	Moisture	
680-102558-9	SD-Dup07	Total/NA	Solid	Moisture	
680-102558-10	SD-272-SS	Total/NA	Solid	Moisture	
680-102558-11	SD-272-01	Total/NA	Solid	Moisture	
680-102558-12	SD-272-02	Total/NA	Solid	Moisture	
680-102558-13	SD-267-SS	Total/NA	Solid	Moisture	
680-102558-14	SD-267-01	Total/NA	Solid	Moisture	
680-102558-15	SD-267-02	Total/NA	Solid	Moisture	
680-102558-16	SD-267-03	Total/NA	Solid	Moisture	
680-102558-17	SD-266-SS	Total/NA	Solid	Moisture	
680-102558-18	SD-266-01	Total/NA	Solid	Moisture	
680-102558-19	SD-266-02	Total/NA	Solid	Moisture	
680-102558-20	SD-266-03	Total/NA	Solid	Moisture	
680-102558-21	SD-261-SS	Total/NA	Solid	Moisture	
680-102558-22	SD-261-01	Total/NA	Solid	Moisture	
680-102558-23	SD-261-02	Total/NA	Solid	Moisture	
680-102558-24	SD-261-03	Total/NA	Solid	Moisture	
680-102558-25	SD-276-SS	Total/NA	Solid	Moisture	
680-102558-26	SD-275-SS	Total/NA	Solid	Moisture	
680-102558-27	SD-252-SS	Total/NA	Solid	Moisture	
680-102558-28	SD-253-SS	Total/NA	Solid	Moisture	
680-102558-29	SD-254-SS	Total/NA	Solid	Moisture	
680-102558-30	SD-255-SS	Total/NA	Solid	Moisture	
680-102558-31	SD-Dup08	Total/NA	Solid	Moisture	



FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1

SDG No.: 680102558-1

Matrix: Solid Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #	
SD-274-SS	680-102558-1	37	
SD-274-01	680-102558-2	35	
SD-27402	680-102558-3	53	
SD-274-03	680-102558-4	50	
SD-260-SS	680-102558-5	0	D 10x
SD-260-01	680-102558-6	0	D 10x
SD-260-02	680-102558-7	41	
SD-260-03	680-102558-8	41	
SD-Dup07	680-102558-9	74	
SD-272-SS	680-102558-10	66	
SD-272-01	680-102558-11	50	
SD-272-02	680-102558-12	63	
SD-267-SS	680-102558-13	9	X
SD-267-01	680-102558-14	0	D 10x
SD-267-02	680-102558-15	10	X ←
SD-267-03	680-102558-16	88	
SD-266-SS	680-102558-17	11	X ←
SD-266-01	680-102558-18	44	
SD-266-02	680-102558-19	0	D 10x
SD-266-03	680-102558-20	13	X ←
SD-261-SS	680-102558-21	0	D 10x
SD-261-01	680-102558-22	0	D ↓
SD-261-02	680-102558-23	0	D
SD-261-03	680-102558-24	41	*
SD-276-SS	680-102558-25	48	
SD-275-SS	680-102558-26	36	
SD-252-SS	680-102558-27	35	
SD-253-SS	680-102558-28	0	X 10x
SD-254-SS	680-102558-29	0	D 10x
SD-255-SS	680-102558-30	66	*
SD-Dup08	680-102558-31	64	
	MB	70	
	680-339370/21-A		
	MB	60	
	680-339371/17-A		

QC LIMITS  
30-130

13DCB = Decachlorobiphenyl-13C12

# Column to be used to flag recovery values

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102558-1

SDG No.: 680102558-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #
	MB 680-341037/18-A	72
	MB 680-341361/11-A	34 *
	LCS 680-339370/22-A	47
	LCS 680-339371/18-A	44
	LCS 680-341037/19-A	74
	LCS 680-341361/12-A	47 *
SD-266-03 MS	680-102558-20 MS	59
SD-276-SS MS	680-102558-25 MS	43
SD-266-03 MSD	680-102558-20 MSD	46
SD-276-SS MSD	680-102558-25 MSD	39

13DCB = Decachlorobiphenyl-13C12

QC LIMITS  
30-130

# Column to be used to flag recovery values

FORM II 680

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		160628	10.11	229918	16.23		
UPPER LIMIT		240942	10.61	344877	16.73		
LOWER LIMIT		80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-339932/9		166018	10.11	232985	16.22		
CCVIS 680-341033/4		118899	9.83	136247	15.92		
MB 680-339370/21-A		125510	9.83	127957	15.92		
LCS 680-339370/22-A		137830	9.84	164097	15.92		
680-102558-20 MS	SD-266-03 MS	132662	9.84	150648	15.92		
680-102558-20 MSD	SD-266-03 MSD	136733	9.84	158026	15.92		
680-102558-20	SD-266-03	118363	9.84	119524	15.92		
680-102558-1	SD-274-SS	149927	9.84	179467*	15.92		
680-102558-2	SD-274-01	145191	9.84	165579	15.92		
680-102558-3	SD-27402	128402	9.84	151229	15.92		
680-102558-4	SD-274-03	134568	9.84	147547	15.92		
680-102558-5	SD-260-SS	132172	9.84	128771	15.92		
680-102558-6	SD-260-01	141421	9.84	151707	15.92		
680-102558-7	SD-260-02	112248	9.84	118698	15.92		
680-102558-8	SD-260-03	113070	9.84	127752	15.92		
680-102558-9	SD-Dup07	123311	9.84	135145	15.92		
680-102558-10	SD-272-SS	128838	9.84	152322	15.92		
680-102558-11	SD-272-01	114914	9.84	127664	15.92		
680-102558-12	SD-272-02	119063	9.84	129363	15.92		
680-102558-13	SD-267-SS	130578	9.84	154203	15.92		
CCV 680-341033/27		130432	9.84	152132	15.92		
CCVIS 680-341034/4		134567	9.84	142416	15.92		
680-102558-14	SD-267-01	139455	9.84	162535	15.92		
680-102558-15	SD-267-02	124920	9.84	140994	15.92		
680-102558-17	SD-266-SS	122701	9.84	129137	15.92		
680-102558-19	SD-266-02	133506	9.84	140516	15.92		
MB 680-339371/17-A		133026	9.84	152054	15.92		
LCS 680-339371/18-A		119963	9.84	125500	15.92		
680-102558-22	SD-261-01	135625	9.84	147269	15.92		
680-102558-28	SD-253-SS	145206	9.84	157827	15.92		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	160628	10.11	229918	16.23		
UPPER LIMIT	240942	10.61	344877	16.73		
LOWER LIMIT	80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCV 680-341034/25			147760	9.84	157121	15.92
CCVIS 680-341035/4			134601	9.84	144937	15.92
680-102558-29	SD-254-SS		144140	9.84	157233	15.92
CCV 680-341035/15			133837	9.84	149601	15.92

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: CCVIS 680-341033/4 Date Analyzed: 07/27/2014 22:56  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2704.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	118899	9.83	136247	15.92		
UPPER LIMIT	154569	10.33	177121	16.42		
LOWER LIMIT	83229	9.33	95373	15.42		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-339370/21-A		125510	9.83	127957	15.92	
LCS 680-339370/22-A		137830	9.84	164097	15.92	
680-102558-20 MS	SD-266-03 MS	132662	9.84	150648	15.92	
680-102558-20 MSD	SD-266-03 MSD	136733	9.84	158026	15.92	
680-102558-20	SD-266-03	118363	9.84	119524	15.92	
680-102558-1	SD-274-SS	149927	9.84	179467*	15.92	
680-102558-2	SD-274-01	145191	9.84	165579	15.92	
680-102558-3	SD-27402	128402	9.84	151229	15.92	
680-102558-4	SD-274-03	134568	9.84	147547	15.92	
680-102558-5	SD-260-SS	132172	9.84	128771	15.92	
680-102558-6	SD-260-01	141421	9.84	151707	15.92	
680-102558-7	SD-260-02	112248	9.84	118698	15.92	
680-102558-8	SD-260-03	113070	9.84	127752	15.92	
680-102558-9	SD-Dup07	123311	9.84	135145	15.92	
680-102558-10	SD-272-SS	128838	9.84	152322	15.92	
680-102558-11	SD-272-01	114914	9.84	127664	15.92	
680-102558-12	SD-272-02	119063	9.84	129363	15.92	
680-102558-13	SD-267-SS	130578	9.84	154203	15.92	
CCV 680-341033/27		130432	9.84	152132	15.92	

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: CCVIS 680-341034/4 Date Analyzed: 07/28/2014 11:36  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2731.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	134567	9.84	142416	15.92		
UPPER LIMIT	174937	10.34	185141	16.42		
LOWER LIMIT	94197	9.34	99691	15.42		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102558-14	SD-267-01	139455	9.84	162535	15.92	
680-102558-15	SD-267-02	124920	9.84	140994	15.92	
680-102558-17	SD-266-SS	122701	9.84	129137	15.92	
680-102558-19	SD-266-02	133506	9.84	140516	15.92	
MB 680-339371/17-A		133026	9.84	152054	15.92	
LCS 680-339371/18-A		119963	9.84	125500	15.92	
680-102558-22	SD-261-01	135625	9.84	147269	15.92	
680-102558-28	SD-253-SS	145206	9.84	157827	15.92	
CCV 680-341034/25		147760	9.84	157121	15.92	

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Instrument ID: CMSX Calibration Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/30/2014 01:15  
 Calibration ID: 32707

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	146426	9.77	207821	15.85		
UPPER LIMIT	219639	10.27	311732	16.35		
LOWER LIMIT	73213	9.27	103911	15.35		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-341490/8			132962	9.77	182303	15.85
680-102558-21	SD-261-SS		144958	9.77	170061	15.85
680-102558-23	SD-261-02		145176	9.77	176750	15.85
MB 680-341037/18-A			146590	9.77	185100	15.85
LCS 680-341037/19-A			128668	9.77	144265	15.85
680-102558-25 MS	SD-276-SS MS		170241	9.78	202484	15.86
680-102558-25 MSD	SD-276-SS MSD		166070	9.78	190926	15.86
680-102558-25	SD-276-SS		195004	9.78	251056	15.86
680-102558-26	SD-275-SS		195217	9.78	217195	15.88
680-102558-27	SD-252-SS		163210	9.78	189439	15.86
CCV 680-341490/22			161910	9.78	198715	15.86
CCVIS 680-341486/4			153596	9.78	178136	15.86
MB 680-341361/11-A			97803*	9.78	101835*	15.86
LCS 680-341361/12-A			100926*	9.78	104813*	15.86
680-102558-16	SD-267-03		115700	9.78	139066	15.88
680-102558-24	SD-261-03		94379*	9.78	104441	15.86
680-102558-30	SD-255-SS		100787*	9.78	119833*	15.86
680-102558-31	SD-Dup08		110587	9.78	130326	15.86
680-102558-18	SD-266-01		110868	9.78	123022*	15.86
CCV 680-341486/25			159901	9.78	181465	15.86

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: CCVIS 680-341486/4 Date Analyzed: 07/30/2014 12:25  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2931.D Heated Purge: (Y/N) N  
 Calibration ID: 32707

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	153596	9.78	178136	15.86		
UPPER LIMIT	199675	10.28	231577	16.36		
LOWER LIMIT	107517	9.28	124695	15.36		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-341361/11-A	97803*	9.78	101835*	15.86		
LCS 680-341361/12-A	100926*	9.78	104813*	15.86		
680-102558-16	SD-267-03	115700	139066	15.88		
680-102558-24	SD-261-03	94379*	104441*	15.86		
680-102558-30	SD-255-SS	100787*	119833*	15.86		
680-102558-31	SD-Dup08	110587	130326	15.86		
680-102558-18	SD-266-01	110868	123022*	15.86		
CCV 680-341486/25		159901	181465	15.86		

PHN = Phenanthrene-d10

CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits



FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG2708.D Lab Sample ID: MB 680-339370/21-A  
 Matrix: Solid Date Extracted: 07/22/2014 18:12  
 Instrument ID: CMSX Date Analyzed: 07/28/2014 00:51  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-339370/22-A	XG2709.D	07/28/2014 01:19
SD-266-03 MS	680-102558-20 MS	XG2710.D	07/28/2014 01:48
SD-266-03 MSD	680-102558-20 MSD	XG2711.D	07/28/2014 02:17
SD-266-03	680-102558-20	XG2712.D	07/28/2014 02:45
SD-274-SS	680-102558-1	XG2713.D	07/28/2014 03:14
SD-274-01	680-102558-2	XG2714.D	07/28/2014 03:42
SD-27402	680-102558-3	XG2715.D	07/28/2014 04:11
SD-274-03	680-102558-4	XG2716.D	07/28/2014 04:40
SD-260-SS	680-102558-5	XG2717.D	07/28/2014 05:08
SD-260-01	680-102558-6	XG2718.D	07/28/2014 05:37
SD-260-02	680-102558-7	XG2719.D	07/28/2014 06:05
SD-260-03	680-102558-8	XG2720.D	07/28/2014 06:34
SD-Dup07	680-102558-9	XG2721.D	07/28/2014 07:03
SD-272-SS	680-102558-10	XG2722.D	07/28/2014 07:31
SD-272-01	680-102558-11	XG2723.D	07/28/2014 08:00
SD-272-02	680-102558-12	XG2724.D	07/28/2014 08:29
SD-267-SS	680-102558-13	XG2725.D	07/28/2014 08:57
SD-267-01	680-102558-14	XG2733.D	07/28/2014 12:34
SD-267-02	680-102558-15	XG2734.D	07/28/2014 13:03
SD-266-SS	680-102558-17	XG2736.D	07/28/2014 14:01
SD-266-02	680-102558-19	XG2738.D	07/28/2014 14:58

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-339370/21-A  
 Matrix: Solid Lab File ID: XG2708.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/22/2014 18:12  
 Sample wt/vol: 30.00(g) Date Analyzed: 07/28/2014 00:51  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341033 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	70		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1

SDG No.: 680102558-1

Matrix: Solid Level: Low Lab File ID: XG2709.D

Lab ID: LCS 680-339370/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	159	48	30-130	
Dichlorobiphenyl	66.6	27.5	41	30-130	
Heptachlorobiphenyl	200	91.5	46	40-140	
Hexachlorobiphenyl	133	57.8	43	40-140	
Monochlorobiphenyl	66.6	26.4	40	30-130	
Nonachlorobiphenyl	333	245	74	30-130	
Octachlorobiphenyl	200	94.2	47	40-140	
Pentachlorobiphenyl	133	58.6	44	40-140	
Tetrachlorobiphenyl	133	54.6	41	40-140	
Trichlorobiphenyl	66.6	27.3	41	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: XG2710.D  
 Lab ID: 680-102558-20 MS Client ID: SD-266-03 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	2270	5.7 U	1350	59	30-130	
Dichlorobiphenyl	455	2.4 U	283	62	30-130	
Heptachlorobiphenyl	1360	3.5 U	902	66	40-140	
Hexachlorobiphenyl	910	14 J	655	71	40-140	
Monochlorobiphenyl	455	1.3 U	265	58	30-130	
Nonachlorobiphenyl	2270	23 U	2140	94	30-130	
Octachlorobiphenyl	1360	3.7 U	865	63	40-140	
Pentachlorobiphenyl	910	15 J	654	70	40-140	
Tetrachlorobiphenyl	910	73	864	87	40-140	
Trichlorobiphenyl	455	3.1 J	302	66	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: XG2711.D  
 Lab ID: 680-102558-20 MSD Client ID: SD-266-03 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	2330	1110	48	19	50	30-130	
Dichlorobiphenyl	466	211	45	29	50	30-130	
Heptachlorobiphenyl	1400	671	48	29	50	40-140	
Hexachlorobiphenyl	931	515	54	24	50	40-140	
Monochlorobiphenyl	466	195	42	31	50	30-130	
Nonachlorobiphenyl	2330	1690	73	23	50	30-130	
Octachlorobiphenyl	1400	670	48	25	50	40-140	
Pentachlorobiphenyl	931	520	54	23	50	40-140	
Tetrachlorobiphenyl	931	737	71	16	50	40-140	
Trichlorobiphenyl	466	236	50	25	50	30-130	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
SDG No.: 680102558-1  
Lab File ID: XG2739.D Lab Sample ID: MB 680-339371/17-A  
Matrix: Solid Date Extracted: 07/21/2014 17:06  
Instrument ID: CMSX Date Analyzed: 07/28/2014 15:28  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-339371/18-A	XG2740.D	07/28/2014 15:57
SD-261-01	680-102558-22	XG2745.D	07/28/2014 18:23
SD-253-SS	680-102558-28	XG2751.D	07/28/2014 21:19
SD-254-SS	680-102558-29	XG2760.D	07/29/2014 01:46
SD-261-SS	680-102558-21	XG2916.D	07/30/2014 03:09
SD-261-02	680-102558-23	XG2917.D	07/30/2014 03:38

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-339371/17-A  
 Matrix: Solid Lab File ID: XG2739.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/21/2014 17:06  
 Sample wt/vol: 30.04(g) Date Analyzed: 07/28/2014 15:28  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341034 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	60		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: XG2740.D  
 Lab ID: LCS 680-339371/18-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	332	150	45	30-130	
Dichlorobiphenyl	66.4	30.4	46	30-130	
Heptachlorobiphenyl	199	97.8	49	40-140	
Hexachlorobiphenyl	133	63.4	48	40-140	
Monochlorobiphenyl	66.4	29.3	44	30-130	
Nonachlorobiphenyl	332	235	71	30-130	
Octachlorobiphenyl	199	96.1	48	40-140	
Pentachlorobiphenyl	133	61.6	46	40-140	
Tetrachlorobiphenyl	133	61.8	47	40-140	
Trichlorobiphenyl	66.4	31.0	47	30-130	

# Column to be used to flag recovery and RPD values



FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG2918.D Lab Sample ID: MB 680-341037/18-A  
 Matrix: Solid Date Extracted: 07/28/2014 13:55  
 Instrument ID: CMSX Date Analyzed: 07/30/2014 04:06  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-341037/19-A	XG2919.D	07/30/2014 04:35
SD-276-SS MS	680-102558-25 MS	XG2920.D	07/30/2014 05:04
SD-276-SS MSD	680-102558-25 MSD	XG2921.D	07/30/2014 05:32
SD-276-SS	680-102558-25	XG2922.D	07/30/2014 06:01
SD-275-SS	680-102558-26	XG2923.D	07/30/2014 08:04
SD-252-SS	680-102558-27	XG2924.D	07/30/2014 08:33

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-341037/18-A  
 Matrix: Solid Lab File ID: XG2918.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/28/2014 13:55  
 Sample wt/vol: 30.00(g) Date Analyzed: 07/30/2014 04:06  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341490 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	72		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: XG2919.D  
 Lab ID: LCS 680-341037/19-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	253	76	30-130	
Dichlorobiphenyl	66.6	46.4	70	30-130	
Heptachlorobiphenyl	200	153	77	40-140	
Hexachlorobiphenyl	133	97.4	73	40-140	
Monochlorobiphenyl	66.6	44.4	67	30-130	
Nonachlorobiphenyl	333	400	120	30-130	
Octachlorobiphenyl	200	157	78	40-140	
Pentachlorobiphenyl	133	103	77	40-140	
Tetrachlorobiphenyl	133	97.2	73	40-140	
Trichlorobiphenyl	66.6	48.0	72	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: XG2920.D  
 Lab ID: 680-102558-25 MS Client ID: SD-276-SS MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	3200	8.0 U	1370	43	30-130	
Dichlorobiphenyl	640	3.4 U	292	46	30-130	
Heptachlorobiphenyl	1920	320	1140	43	40-140	
Hexachlorobiphenyl	1280	540	958	33	40-140	F1
Monochlorobiphenyl	640	1.8 U	275	43	30-130	
Nonachlorobiphenyl	3200	32 U	2150	67	30-130	
Octachlorobiphenyl	1920	5.1 U	889	46	40-140	
Pentachlorobiphenyl	1280	450	906	35	40-140	F1
Tetrachlorobiphenyl	1280	550	1050	39	40-140	F1
Trichlorobiphenyl	640	20 U	322	47	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: XG2921.D  
 Lab ID: 680-102558-25 MSD Client ID: SD-276-SS MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD		QC LIMITS		#
			% REC	% RPD	RPD	REC	
DCB Decachlorobiphenyl	3200	1320	41	4	50	30-130	
Dichlorobiphenyl	640	297	46	2	50	30-130	
Heptachlorobiphenyl	1920	1130	42	1	50	40-140	
Hexachlorobiphenyl	1280	959	33	0	50	40-140	F1
Monochlorobiphenyl	640	278	43	1	50	30-130	
Nonachlorobiphenyl	3200	2040	64	5	50	30-130	
Octachlorobiphenyl	1920	836	44	6	50	40-140	
Pentachlorobiphenyl	1280	938	38	4	50	40-140	F1
Tetrachlorobiphenyl	1280	1030	38	2	50	40-140	F1
Trichlorobiphenyl	640	314	46	3	50	30-130	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
SDG No.: 680102558-1  
Lab File ID: XG2934.D Lab Sample ID: MB 680-341361/11-A  
Matrix: Solid Date Extracted: 07/29/2014 14:28  
Instrument ID: CMSX Date Analyzed: 07/30/2014 13:50  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-341361/12-A	XG2935.D	07/30/2014 14:19
SD-267-03	680-102558-16	XG2939.D	07/30/2014 16:14
SD-261-03	680-102558-24	XG2940.D	07/30/2014 16:42
SD-255-SS	680-102558-30	XG2941.D	07/30/2014 17:11
SD-Dup08	680-102558-31	XG2942.D	07/30/2014 17:40
SD-266-01	680-102558-18	XG2943.D	07/30/2014 18:09

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-341361/11-A  
 Matrix: Solid Lab File ID: XG2934.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/29/2014 14:28  
 Sample wt/vol: 30.05(g) Date Analyzed: 07/30/2014 13:50  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341486 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	34	*	30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: XG2935.D  
 Lab ID: LCS 680-341361/12-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	162	49	30-130	*
Dichlorobiphenyl	66.6	30.2	45	30-130	*
Heptachlorobiphenyl	200	101	51	40-140	*
Hexachlorobiphenyl	133	66.3	50	40-140	*
Monochlorobiphenyl	66.6	27.4	41	30-130	*
Nonachlorobiphenyl	333	249	75	30-130	*
Octachlorobiphenyl	200	101	51	40-140	*
Pentachlorobiphenyl	133	66.6	50	40-140	*
Tetrachlorobiphenyl	133	63.9	48	40-140	*
Trichlorobiphenyl	66.6	31.5	47	30-130	*

# Column to be used to flag recovery and RPD values



FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG1907.D DFTPP Injection Date: 07/19/2014  
 Instrument ID: CMSX DFTPP Injection Time: 21:51  
 Analysis Batch No.: 339932

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	54.3
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.9
275	10 - 30% of mass 198	30.0
365	Greater than 1% of mass 198	4.8
441	Present but less than mass 443	13.3 (84.6)2
442	Greater than 40% of mass 198	86.0
443	17 - 23% of mass 442	15.7 (18.3)1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-339932/4	XG1909.D	07/19/2014	22:52
	IC 680-339932/5	XG1910.D	07/19/2014	23:20
	IC 680-339932/6	XG1911.D	07/19/2014	23:49
	IC 680-339932/7	XG1912.D	07/20/2014	00:17
	IC 680-339932/8	XG1913.D	07/20/2014	00:46
	ICV 680-339932/9	XG1914.D	07/20/2014	01:14

GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 339932

SDG No.: 680102558-1

Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2014 22:52 Calibration End Date: 07/20/2014 00:46 Calibration ID: 32129

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-339932/8	XG1913.D
Level 2	IC 680-339932/7	XG1912.D
Level 3	ICISAV 680-339932/4	XG1909.D
Level 4	IC 680-339932/6	XG1911.D
Level 5	IC 680-339932/5	XG1910.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Monochlorobiphenyl	0.8353	0.8456	0.9098	0.8813	0.8734	Ave	0.8691				3.4		20.0				
Dichlorobiphenyl	0.5776	0.5823	0.6122	0.6067	0.5987	Ave	0.5955				2.5		20.0				
Trichlorobiphenyl	0.3996	0.4135	0.4348	0.4389	0.4410	Ave	0.4256				4.3		20.0				
PCB-104			0.3302			Ave	0.3302						30.0				
Tetrachlorobiphenyl	0.2755	0.2817	0.3033	0.2909	0.2951	Ave	0.2893				3.8		20.0				
Pentachlorobiphenyl	0.2123	0.2203	0.2262	0.2270	0.2357	Ave	0.2243				3.9		20.0				
PCB-77			0.4767			Ave	0.4767						30.0				
Hexachlorobiphenyl	0.1966	0.2022	0.2225	0.2132	0.2185	Ave	0.2106				5.2		20.0				
Heptachlorobiphenyl	0.1540	0.1656	0.1696	0.1700	0.1695	Ave	0.1657				4.1		20.0				
Octachlorobiphenyl	0.1373	0.1488	0.1535	0.1521	0.1669	Ave	0.1517				7.0		20.0				
PCB-208			0.0569			Ave	0.0569						30.0				
Nonachlorobiphenyl			0.0443			Ave	0.0363				11.0		20.0				
DCB Decachlorobiphenyl	0.0321	0.0328	0.0379	0.0370	0.0414	Ave	0.0363				11.0		20.0				
Decachlorobiphenyl-13C12	0.0407	0.0484	0.0517	0.0504	0.0567	Ave	0.0496				12.0		20.0				

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-339932/9 Calibration Date: 07/20/2014 01:14  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG1914.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8287		0.953	1.00	-4.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5788		0.972	1.00	-2.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.4300		1.01	1.00	1.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2870		1.98	2.00	-0.8	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2168		1.93	2.00	-3.3	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2122		2.02	2.00	0.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1650		2.99	3.00	-0.4	20.0
Octachlorobiphenyl	Ave	0.1517	0.1560		3.08	3.00	2.8	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0351		4.84	5.00	-3.1	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG2702.D DFTPP Injection Date: 07/27/2014  
 Instrument ID: CMSX DFTPP Injection Time: 21:55  
 Analysis Batch No.: 341033

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.8
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	7.1
275	10 - 30% of mass 198	28.7
365	Greater than 1% of mass 198	4.6
441	Present but less than mass 443	10.2 (60.6)2
442	Greater than 40% of mass 198	89.2
443	17 - 23% of mass 442	16.8 (18.8)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341033/3	XG2703.D	07/27/2014	22:26
	CCVIS 680-341033/4	XG2704.D	07/27/2014	22:56
	MB 680-339370/21-A	XG2708.D	07/28/2014	00:51
	LCS 680-339370/22-A	XG2709.D	07/28/2014	01:19
SD-266-03 MS	680-102558-20 MS	XG2710.D	07/28/2014	01:48
SD-266-03 MSD	680-102558-20 MSD	XG2711.D	07/28/2014	02:17
SD-266-03	680-102558-20	XG2712.D	07/28/2014	02:45
SD-274-SS	680-102558-1	XG2713.D	07/28/2014	03:14
SD-274-01	680-102558-2	XG2714.D	07/28/2014	03:42
SD-27402	680-102558-3	XG2715.D	07/28/2014	04:11
SD-274-03	680-102558-4	XG2716.D	07/28/2014	04:40
SD-260-SS	680-102558-5	XG2717.D	07/28/2014	05:08
SD-260-01	680-102558-6	XG2718.D	07/28/2014	05:37
SD-260-02	680-102558-7	XG2719.D	07/28/2014	06:05
SD-260-03	680-102558-8	XG2720.D	07/28/2014	06:34
SD-Dup07	680-102558-9	XG2721.D	07/28/2014	07:03
SD-272-SS	680-102558-10	XG2722.D	07/28/2014	07:31
SD-272-01	680-102558-11	XG2723.D	07/28/2014	08:00
SD-272-02	680-102558-12	XG2724.D	07/28/2014	08:29
SD-267-SS	680-102558-13	XG2725.D	07/28/2014	08:57
	CCV 680-341033/27	XG2726.D	07/28/2014	09:31

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-341033/4 Calibration Date: 07/27/2014 22:56  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2704.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8309		0.956	1.00	-4.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.5508		0.925	1.00	-7.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.3840		0.902	1.00	-9.8	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2620		1.81	2.00	-9.4	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2019		1.80	2.00	-10.0	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1924		1.83	2.00	-8.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1495		2.71	3.00	-9.8	20.0
Octachlorobiphenyl	Ave	0.1517	0.1372		2.71	3.00	-9.5	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0339		4.68	5.00	-6.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0472		4.76	5.00	-4.8	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-341033/27 Calibration Date: 07/28/2014 09:31  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2726.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8366		0.963	1.00	-3.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5633		0.946	1.00	-5.4	20.0
Trichlorobiphenyl	Ave	0.4256	0.3909		0.919	1.00	-8.1	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2685		1.86	2.00	-7.2	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2024		1.81	2.00	-9.7	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1973		1.87	2.00	-6.3	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1531		2.77	3.00	-7.7	20.0
Octachlorobiphenyl	Ave	0.1517	0.1418		2.80	3.00	-6.5	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0364		5.02	5.00	0.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0490		4.94	5.00	-1.1	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG2729.D DFTPP Injection Date: 07/28/2014  
 Instrument ID: CMSX DFTPP Injection Time: 10:35  
 Analysis Batch No.: 341034

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	29.8
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	15.5 (80.3)2
442	Greater than 40% of mass 198	100.1
443	17 - 23% of mass 442	19.3 (19.3)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341034/3	XG2730.D	07/28/2014	11:05
	CCVIS 680-341034/4	XG2731.D	07/28/2014	11:36
SD-267-01	680-102558-14	XG2733.D	07/28/2014	12:34
SD-267-02	680-102558-15	XG2734.D	07/28/2014	13:03
SD-266-SS	680-102558-17	XG2736.D	07/28/2014	14:01
SD-266-02	680-102558-19	XG2738.D	07/28/2014	14:58
	MB 680-339371/17-A	XG2739.D	07/28/2014	15:28
	LCS 680-339371/18-A	XG2740.D	07/28/2014	15:57
SD-261-01	680-102558-22	XG2745.D	07/28/2014	18:23
SD-253-SS	680-102558-28	XG2751.D	07/28/2014	21:19
	CCV 680-341034/25	XG2752.D	07/28/2014	21:48

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-341034/4 Calibration Date: 07/28/2014 11:36  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2731.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8349		0.961	1.00	-3.9	20.0
Dichlorobiphenyl	Ave	0.5955	0.5646		0.948	1.00	-5.2	20.0
Trichlorobiphenyl	Ave	0.4256	0.3934		0.924	1.00	-7.6	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2649		1.83	2.00	-8.4	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1980		1.77	2.00	-11.7	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1922		1.83	2.00	-8.7	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1513		2.74	3.00	-8.7	20.0
Octachlorobiphenyl	Ave	0.1517	0.1378		2.72	3.00	-9.2	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0328		4.52	5.00	-9.7	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0453		4.57	5.00	-8.6	20.0



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-341034/25 Calibration Date: 07/28/2014 21:48  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2752.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.7860		0.904	1.00	-9.6	20.0
Dichlorobiphenyl	Ave	0.5955	0.5415		0.909	1.00	-9.1	20.0
Trichlorobiphenyl	Ave	0.4256	0.3805		0.894	1.00	-10.6	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2542		1.76	2.00	-12.1	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1977		1.76	2.00	-11.9	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1883		1.79	2.00	-10.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1475		2.67	3.00	-11.0	20.0
Octachlorobiphenyl	Ave	0.1517	0.1329		2.63	3.00	-12.4	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0314		4.33	5.00	-13.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0427		4.30	5.00	-14.0	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG2755.D DFTPP Injection Date: 07/28/2014  
 Instrument ID: CMSX DFTPP Injection Time: 23:17  
 Analysis Batch No.: 341035

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	49.3
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	29.3
365	Greater than 1% of mass 198	4.3
441	Present but less than mass 443	11.1 (57.5) 2
442	Greater than 40% of mass 198	98.4
443	17 - 23% of mass 442	19.2 (19.6) 1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341035/3	XG2756.D	07/28/2014	23:48
	CCVIS 680-341035/4	XG2757.D	07/29/2014	00:19
SD-254-SS	680-102558-29	XG2760.D	07/29/2014	01:46
	CCV 680-341035/15	XG2768.D	07/29/2014	05:37

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-341035/4 Calibration Date: 07/29/2014 00:19  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2757.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8217		0.946	1.00	-5.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.5489		0.922	1.00	-7.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.3870		0.909	1.00	-9.1	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2653		1.83	2.00	-8.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1976		1.76	2.00	-11.9	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1929		1.83	2.00	-8.4	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1563		2.83	3.00	-5.7	20.0
Octachlorobiphenyl	Ave	0.1517	0.1413		2.79	3.00	-6.9	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0323		4.45	5.00	-11.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0454		4.58	5.00	-8.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-341035/15 Calibration Date: 07/29/2014 05:37  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2768.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8152		0.938	1.00	-6.2	20.0
Dichlorobiphenyl	Ave	0.5955	0.5621		0.944	1.00	-5.6	20.0
Trichlorobiphenyl	Ave	0.4256	0.3947		0.927	1.00	-7.3	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2684		1.86	2.00	-7.2	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2062		1.84	2.00	-8.1	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1987		1.89	2.00	-5.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1598		2.89	3.00	-3.6	20.0
Octachlorobiphenyl	Ave	0.1517	0.1476		2.92	3.00	-2.7	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0349		4.81	5.00	-3.8	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0472		4.76	5.00	-4.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG2906.D DFTPP Injection Date: 07/29/2014  
 Instrument ID: CMSX DFTPP Injection Time: 22:19  
 Analysis Batch No.: 341490

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.8
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.6
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	4.6
441	Present but less than mass 443	15.1 (81.7)2
442	Greater than 40% of mass 198	93.1
443	17 - 23% of mass 442	18.4 (19.8)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341490/2	XG2907.D	07/29/2014	22:49
	ICISAV 680-341490/3	XG2908.D	07/29/2014	23:20
	IC 680-341490/4	XG2909.D	07/29/2014	23:49
	IC 680-341490/5	XG2910.D	07/30/2014	00:17
	IC 680-341490/6	XG2911.D	07/30/2014	00:46
	IC 680-341490/7	XG2912.D	07/30/2014	01:15
	ICV 680-341490/8	XG2913.D	07/30/2014	01:43
SD-261-SS	680-102558-21	XG2916.D	07/30/2014	03:09
SD-261-02	680-102558-23	XG2917.D	07/30/2014	03:38
	MB 680-341037/18-A	XG2918.D	07/30/2014	04:06
	LCS 680-341037/19-A	XG2919.D	07/30/2014	04:35
SD-276-SS MS	680-102558-25 MS	XG2920.D	07/30/2014	05:04
SD-276-SS MSD	680-102558-25 MSD	XG2921.D	07/30/2014	05:32
SD-276-SS	680-102558-25	XG2922.D	07/30/2014	06:01
SD-275-SS	680-102558-26	XG2923.D	07/30/2014	08:04
SD-252-SS	680-102558-27	XG2924.D	07/30/2014	08:33
	CCV 680-341490/22	XG2927.D	07/30/2014	09:58

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analyt Batch No.: 341490  
 SDG No.: 680102558-1  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25(mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/29/2014 23:20 Calibration End Date: 07/30/2014 01:15 Calibration ID: 32707

Calibration Files:

LEVEL	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341490/7	XG2912.D
Level 2	IC 680-341490/6	XG2911.D
Level 3	ICISAV 680-341490/3	XG2908.D
Level 4	IC 680-341490/5	XG2910.D
Level 5	IC 680-341490/4	XG2909.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	IVL 1	IVL 2	IVL 3	IVL 4	IVL 5		B	M1								
Monochlorobiphenyl	0.7921	0.7705	0.8099	0.7988	0.7964	Ave	0.7935				1.8		20.0			
Dichlorobiphenyl	0.5284	0.5186	0.5209	0.5416	0.5248	Ave	0.5269				1.7		20.0			
Trichlorobiphenyl	0.3754	0.3671	0.3622	0.3850	0.3830	Ave	0.3745				2.6		20.0			
PCB-104			0.2799			Ave	0.2799						30.0			
Tetrachlorobiphenyl	0.2501	0.2513	0.2524	0.2552	0.2537	Ave	0.2526				0.8		20.0			
Pentachlorobiphenyl	0.1969	0.1993	0.1932	0.2038	0.2132	Ave	0.1993				5.5		20.0			
PCB-77			0.3725			Ave	0.3725						30.0			
Hexachlorobiphenyl	0.1822	0.1911	0.1904	0.1957	0.2013	Ave	0.1922				3.7		20.0			
Heptachlorobiphenyl	0.1478	0.1500	0.1425	0.1568	0.1664	Ave	0.1527				6.0		20.0			
Octachlorobiphenyl	0.1288	0.1424	0.1289	0.1458	0.1571	Ave	0.1406				8.6		20.0			
PCB-208			0.0459			Ave	0.0459						30.0			
Nonachlorobiphenyl			0.0367			Ave	0.0349				9.9		20.0			
ECB Decachlorobiphenyl	0.0323	0.0337	0.0316	0.0368	0.0399	Ave	0.0349				9.9		20.0			
Decachlorobiphenyl-13C12	0.0428	0.0516	0.0426	0.0504	0.0560	Ave	0.0487				12.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-341490/8 Calibration Date: 07/30/2014 01:43  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2913.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7728		0.974	1.00	-2.6	20.0
Dichlorobiphenyl	Ave	0.5269	0.5308		1.01	1.00	0.7	20.0
Trichlorobiphenyl	Ave	0.3745	0.3902		1.04	1.00	4.2	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2598		2.06	2.00	2.9	20.0
Pentachlorobiphenyl	Ave	0.1993	0.2014		2.02	2.00	1.1	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1898		1.98	2.00	-1.2	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1595		3.13	3.00	4.4	20.0
Octachlorobiphenyl	Ave	0.1406	0.1416		3.02	3.00	0.7	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0347		4.98	5.00	-0.5	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-341490/22 Calibration Date: 07/30/2014 09:58  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2927.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7280		0.917	1.00	-8.3	20.0
Dichlorobiphenyl	Ave	0.5269	0.4890		0.928	1.00	-7.2	20.0
Trichlorobiphenyl	Ave	0.3745	0.3465		0.925	1.00	-7.5	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2372		1.88	2.00	-6.1	20.0
Pentachlorobiphenyl	Ave	0.1993	0.1861		1.87	2.00	-6.6	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1841		1.92	2.00	-4.2	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1448		2.85	3.00	-5.2	20.0
Octachlorobiphenyl	Ave	0.1406	0.1332		2.84	3.00	-5.3	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0303		4.34	5.00	-13.1	20.0
Decachlorobiphenyl-13C12	Ave	0.0487	0.0429		4.41	5.00	-11.8	20.0



FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab File ID: XG2929.D DFTPP Injection Date: 07/30/2014  
 Instrument ID: CMSX DFTPP Injection Time: 11:13  
 Analysis Batch No.: 341486

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.6
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	28.3
365	Greater than 1% of mass 198	4.1
441	Present but less than mass 443	14.0 (77.5)2
442	Greater than 40% of mass 198	92.4
443	17 - 23% of mass 442	18.0 (19.5)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341486/3	XG2930.D	07/30/2014	11:54
	CCVIS 680-341486/4	XG2931.D	07/30/2014	12:25
	MB 680-341361/11-A	XG2934.D	07/30/2014	13:50
	LCS 680-341361/12-A	XG2935.D	07/30/2014	14:19
SD-267-03	680-102558-16	XG2939.D	07/30/2014	16:14
SD-261-03	680-102558-24	XG2940.D	07/30/2014	16:42
SD-255-SS	680-102558-30	XG2941.D	07/30/2014	17:11
SD-Dup08	680-102558-31	XG2942.D	07/30/2014	17:40
SD-266-01	680-102558-18	XG2943.D	07/30/2014	18:09
	CCV 680-341486/25	XG2948.D	07/30/2014	20:32

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-341486/4 Calibration Date: 07/30/2014 12:25  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2931.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7474		0.942	1.00	-5.8	20.0
Dichlorobiphenyl	Ave	0.5269	0.4977		0.945	1.00	-5.5	20.0
Trichlorobiphenyl	Ave	0.3745	0.3563		0.951	1.00	-4.9	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2392		1.89	2.00	-5.3	20.0
Pentachlorobiphenyl	Ave	0.1993	0.1878		1.89	2.00	-5.7	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1832		1.91	2.00	-4.7	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1420		2.79	3.00	-7.0	20.0
Octachlorobiphenyl	Ave	0.1406	0.1325		2.83	3.00	-5.8	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0320		4.59	5.00	-8.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0487	0.0438		4.50	5.00	-10.0	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-341486/25 Calibration Date: 07/30/2014 20:32  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2948.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7557		0.952	1.00	-4.8	20.0
Dichlorobiphenyl	Ave	0.5269	0.5175		0.982	1.00	-1.8	20.0
Trichlorobiphenyl	Ave	0.3745	0.3666		0.979	1.00	-2.1	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2497		1.98	2.00	-1.1	20.0
Pentachlorobiphenyl	Ave	0.1993	0.2811		2.82	2.00	41.1*	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1891		1.97	2.00	-1.6	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1432		2.81	3.00	-6.2	20.0
Octachlorobiphenyl	Ave	0.1406	0.1364		2.91	3.00	-3.0	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0317		4.55	5.00	-9.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0487	0.0433		4.45	5.00	-11.0	20.0

FORM II  
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low  
 GC Column (1): CLP I ID: 0.32 (mm) GC Column (2): CLP II ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #
SD-276-SS	680-102558-25		79
SD-275-SS	680-102558-26		71
SD-252-SS	680-102558-27		86
SD-253-SS	680-102558-28		82
SD-254-SS	680-102558-29		84
SD-255-SS	680-102558-30		65
	MB 680-339371/17-A		79
	MB 680-341037/18-A		93
	LCS 680-339371/21-A	54	
	LCS 680-341037/22-A		88
SD-276-SS MS	680-102558-25 MS		90
SD-276-SS MSD	680-102558-25 MSD		61

TCX = Tetrachloro-m-xylene

QC LIMITS  
46-130

# Column to be used to flag recovery values

FORM II 8081B/8082A

FORM VIII  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: ICIS 680-340181/5 Date Analyzed: 07/21/2014 19:11  
 Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm)  
 Lab File ID (Standard): ZG21013.D Heated Purge: (Y/N) N  
 Calibration ID: 32152

	BNB		AREA #	RT #	AREA #	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	35350288	3.31				
UPPER LIMIT	70700576	3.81				
LOWER LIMIT	17675144	2.81				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-340181/9 CCV	36200734	3.31				
ICV 680-340181/16 CCV	35170399	3.31				
ICV 680-340181/23 CCV	34061059	3.31				

BNB = 1-Bromo-2-nitrobenzene

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  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: ICIS 680-340181/5 Date Analyzed: 07/21/2014 19:11  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm)  
 Lab File ID (Standard): ZG21013.D Heated Purge: (Y/N) N  
 Calibration ID: 32153

		BNB			
		AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		64278149	3.59		
UPPER LIMIT		128556298	4.09		
LOWER LIMIT		32139075	3.09		
LAB SAMPLE ID	CLIENT SAMPLE ID				
ICV 680-340181/9 CCV		66228634	3.59		
ICV 680-340181/16 CCV		64423466	3.59		
ICV 680-340181/23 CCV		62006695	3.59		

BNB = 1-Bromo-2-nitrobenzene

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  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: CCVIS 680-340443/3 Date Analyzed: 07/23/2014 09:28  
 Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm)  
 Lab File ID (Standard): ZG23003.D Heated Purge: (Y/N) N  
 Calibration ID: 32222

	BNB					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	38523180	3.31				
UPPER LIMIT	77046360	3.81				
LOWER LIMIT	19261590	2.81				
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-339371/17-A	32301678	3.31				
LCS 680-339371/21-A	37000845	3.31				
680-102558-30	SD-255-SS	38953712	3.31			
CCV 680-340443/22	36667318	3.31				

BNB = 1-Bromo-2-nitrobenzene

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  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: CCVIS 680-340443/3 Date Analyzed: 07/23/2014 09:28  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm)  
 Lab File ID (Standard): ZG23003.D Heated Purge: (Y/N) N  
 Calibration ID: 32223

	BNB		AREA #	RT #	AREA #	RT #
	AREA #	RT #				
12/24 HOUR STD	71815209	3.58				
UPPER LIMIT	143630418	4.08				
LOWER LIMIT	35907605	3.08				
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-339371/17-A			61989948	3.58		
LCS 680-339371/21-A			71324301	3.58		
680-102558-30	SD-255-SS		71009530	3.58		
CCV 680-340443/22			67772445	3.58		

BNB = 1-Bromo-2-nitrobenzene

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  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: ICIS 680-341212/5 Date Analyzed: 07/28/2014 17:07  
 Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm)  
 Lab File ID (Standard): ZG28010.D Heated Purge: (Y/N) N  
 Calibration ID: 32530

	BNB		AREA #	RT #	AREA #	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	32474600	3.27				
UPPER LIMIT	64949200	3.77				
LOWER LIMIT	16237300	2.77				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-341212/9 CCV	34965796	3.27				

BNB = 1-Bromo-2-nitrobenzene

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  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: ICIS 680-341212/5 Date Analyzed: 07/28/2014 17:07  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm)  
 Lab File ID (Standard): ZG28010.D Heated Purge: (Y/N) N  
 Calibration ID: 32531

	BNB		AREA #	RT #	AREA #	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	63636394	3.55				
UPPER LIMIT	127272788	4.05				
LOWER LIMIT	31818197	3.05				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-341212/9 CCV		65616848	3.55			

BNB = 1-Bromo-2-nitrobenzene

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 8081B/8082A

FORM VIII  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: CCVIS 680-341704/28 Date Analyzed: 07/30/2014 21:43  
 Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm)  
 Lab File ID (Standard): ZG30028.D Heated Purge: (Y/N) N  
 Calibration ID: 32570

	BNB		AREA #	RT #	AREA #	RT #
	AREA #	RT #				
12/24 HOUR STD	39460530	3.27				
UPPER LIMIT	78921060	3.77				
LOWER LIMIT	19730265	2.77				
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-341037/18-A		36099840	3.27			
LCS 680-341037/22-A		39781067	3.27			
680-102558-25	SD-276-SS	37850181	3.27			
680-102558-26	SD-275-SS	37794185	3.27			
680-102558-27	SD-252-SS	39680482	3.27			
680-102558-28	SD-253-SS	39772243	3.27			
680-102558-29	SD-254-SS	39728205	3.27			
680-102558-25 MS	SD-276-SS MS	41242290	3.27			
680-102558-25 MSD	SD-276-SS MSD	41619741	3.27			
CCV 680-341704/49		37366720	3.27			

BNB = 1-Bromo-2-nitrobenzene

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  
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Sample No.: CCVIS 680-341704/28 Date Analyzed: 07/30/2014 21:43  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm)  
 Lab File ID (Standard): ZG30028.D Heated Purge: (Y/N) N  
 Calibration ID: 32571

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		75728098	3.54				
UPPER LIMIT		151456196	4.04				
LOWER LIMIT		37864049	3.04				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-341037/18-A		69491669	3.54				
LCS 680-341037/22-A		77323572	3.54				
680-102558-25	SD-276-SS	70772835	3.55				
680-102558-26	SD-275-SS	71497803	3.54				
680-102558-27	SD-252-SS	74540349	3.54				
680-102558-28	SD-253-SS	74945474	3.54				
680-102558-29	SD-254-SS	73609019	3.55				
680-102558-25 MS	SD-276-SS MS	75418230	3.54				
680-102558-25 MSD	SD-276-SS MSD	75755873	3.54				
CCV 680-341704/49		71374548	3.54				

BNB = 1-Bromo-2-nitrobenzene

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 X  
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: SD-276-SS Lab Sample ID: 680-102558-25  
 Instrument ID (1): CSGZ Instrument ID (2): CSGZ  
 Date Analyzed (1): 07/30/2014 22:45 Date Analyzed (2): 07/30/2014 22:45  
 GC Column (1): CLP I ID: 0.32 (mm) GC Column (2): CLP II ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1260	1	1	7.03	6.98	7.08	1220	1200	4.9
		2	7.06	7.01	7.11	1190		
		3	7.22	7.17	7.27	1310		
		4	7.39	7.34	7.44	1190		
		5	7.57	7.52	7.62	1320		
	2	1	7.68	7.63	7.73	1180	1200	
		2	7.71	7.66	7.76	1150		
		3	7.88	7.83	7.93	1110		
		4	7.93	7.88	7.98	1330		
		5	8.04	7.99	8.09	1160		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: SD-275-SS Lab Sample ID: 680-102558-26  
 Instrument ID (1): CSGZ Instrument ID (2): CSGZ  
 Date Analyzed (1): 07/30/2014 23:01 Date Analyzed (2): 07/30/2014 23:01  
 GC Column (1): CLP I ID: 0.32 (mm) GC Column (2): CLP II ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1260	1	1	7.03	6.98	7.08	970	920	10.5
		2	7.06	7.01	7.11	952		
		3	7.22	7.17	7.27	1010		
		4	7.38	7.34	7.44	801		
		5	7.57	7.52	7.62	892		
	2	1	7.68	7.63	7.73	902	830	
		2	7.71	7.66	7.76	808		
		3	7.88	7.83	7.93	750		
		4	7.93	7.88	7.98	937		
		5	8.04	7.99	8.09	764		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: SD-252-SS Lab Sample ID: 680-102558-27  
 Instrument ID (1): CSGZ Instrument ID (2): CSGZ  
 Date Analyzed (1): 07/30/2014 23:17 Date Analyzed (2): 07/30/2014 23:17  
 GC Column (1): CLP I ID: 0.32 (mm) GC Column (2): CLP II ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1260	1	1	7.03	6.98	7.08	1050	990	9.0
		2	7.06	7.01	7.11	1040		
		3	7.22	7.17	7.27	1040		
		4	7.39	7.34	7.44	852		
		5	7.57	7.52	7.62	946		
	2	1	7.68	7.63	7.73	1000	900	
		2	7.71	7.66	7.76	905		
		3	7.88	7.83	7.93	761		
		4	7.93	7.88	7.98	1000		
		5	8.04	7.99	8.09	829		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: SD-253-SS Lab Sample ID: 680-102558-28  
 Instrument ID (1): CSGZ Instrument ID (2): CSGZ  
 Date Analyzed (1): 07/30/2014 23:32 Date Analyzed (2): 07/30/2014 23:32  
 GC Column (1): CLP I ID: 0.32 (mm) GC Column (2): CLP II ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1260	1	1	7.03	6.98	7.08	940	890	7.0
		2	7.06	7.01	7.11	870		
		3	7.22	7.17	7.27	958		
		4	7.39	7.34	7.44	783		
		5	7.57	7.52	7.62	882		
	2	1	7.68	7.63	7.73	906	830	
		2	7.71	7.66	7.76	799		
		3	7.88	7.83	7.93	724		
		4	7.93	7.88	7.98	945		
		5	8.04	7.99	8.09	761		



FORM X  
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: SD-254-SS Lab Sample ID: 680-102558-29  
 Instrument ID (1): CSGZ Instrument ID (2): CSGZ  
 Date Analyzed (1): 07/30/2014 23:48 Date Analyzed (2): 07/30/2014 23:48  
 GC Column (1): CLP I ID: 0.32 (mm) GC Column (2): CLP II ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1260	1	1	7.03	6.98	7.08	1000	960	10.5
		2	7.06	7.01	7.11	1060		
		3	7.22	7.17	7.27	953		
		4	7.39	7.34	7.44	848		
		5	7.57	7.52	7.62	941		
	2	1	7.68	7.63	7.73	925	860	
		2	7.71	7.66	7.76	893		
		3	7.88	7.83	7.93	749		
		4	7.93	7.88	7.98	931		
		5	8.04	7.99	8.09	820		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: SD-255-SS Lab Sample ID: 680-102558-30  
 Instrument ID (1): CSGZ Instrument ID (2): CSGZ  
 Date Analyzed (1): 07/23/2014 12:04 Date Analyzed (2): 07/23/2014 12:04  
 GC Column (1): CLP I ID: 0.32 (mm) GC Column (2): CLP II ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1260	1	1	7.06	7.01	7.11	810	840	7.3
		2	7.09	7.04	7.14	725		
		3	7.25	7.20	7.30	810		
		4	7.42	7.37	7.47	855		
		5	7.60	7.55	7.65	1020		
	2	1	7.71	7.66	7.76	814	790	
		2	7.75	7.70	7.80	755		
		3	7.91	7.87	7.97	665		
		4	7.96	7.92	8.02	885		
		5	8.07	8.02	8.12	809		

FORM IV  
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: MB 680-339371/17-A  
 Matrix: Solid Date Extracted: 07/21/2014 17:06  
 Lab File ID: (1) ZG23005.D Lab File ID: (2) ZG23005.D  
 Date Analyzed: (1) 07/23/2014 10:00 Date Analyzed: (2) 07/23/2014 10:00  
 Instrument ID: (1) CSGZ Instrument ID: (2) CSGZ  
 GC Column: (1) CLP I ID: 0.32 (mm) GC Column: (2) CLP II ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 680-339371/21-A	07/23/2014 10:31	07/23/2014 10:31
SD-255-SS	680-102558-30	07/23/2014 12:04	07/23/2014 12:04

FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-339371/17-A  
 Matrix: Solid Lab File ID: ZG23005.D  
 Analysis Method: 8081B/8082A Date Collected: \_\_\_\_\_  
 Extraction Method: 3546 Date Extracted: 07/21/2014 17:06  
 Sample wt/vol: 30.04(g) Date Analyzed: 07/23/2014 10:00  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 10  
 Injection Volume: 1 (uL) GC Column: CLP I ID: 0.32 (mm)  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340443 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	5.5	U	16	5.5
11104-28-2	PCB-1221	7.5	U	16	7.5
11141-16-5	PCB-1232	2.6	U	16	2.6
53469-21-9	PCB-1242	2.5	U	16	2.5
12672-29-6	PCB-1248	4.1	U	16	4.1
11097-69-1	PCB-1254	5.0	U	16	5.0
11096-82-5	PCB-1260	4.8	U	16	4.8

FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-339371/17-A  
 Matrix: Solid Lab File ID: ZG23005.D  
 Analysis Method: 8081B/8082A Date Collected: \_\_\_\_\_  
 Extraction Method: 3546 Date Extracted: 07/21/2014 17:06  
 Sample wt/vol: 30.04(g) Date Analyzed: 07/23/2014 10:00  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) GC Column: CLP II ID: 0.32(mm)  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340443 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl			
877-09-8	Tetrachloro-m-xylene	79		46-130

FORM III  
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: ZG23007.D  
 Lab ID: LCS 680-339371/21-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
PCB-1016	333	201	60	43-130	
PCB-1260	333	206	62	45-130	

# Column to be used to flag recovery and RPD values

FORM IV  
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: MB 680-341037/18-A  
 Matrix: Solid Date Extracted: 07/28/2014 13:55  
 Lab File ID: (1) ZG30030.D Lab File ID: (2) ZG30030.D  
 Date Analyzed: (1) 07/30/2014 22:14 Date Analyzed: (2) 07/30/2014 22:14  
 Instrument ID: (1) CSGZ Instrument ID: (2) CSGZ  
 GC Column: (1) CLP I ID: 0.32 (mm) GC Column: (2) CLP II ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 680-341037/22-A	07/30/2014 22:30	07/30/2014 22:30
SD-276-SS	680-102558-25	07/30/2014 22:45	07/30/2014 22:45
SD-275-SS	680-102558-26	07/30/2014 23:01	07/30/2014 23:01
SD-252-SS	680-102558-27	07/30/2014 23:17	07/30/2014 23:17
SD-253-SS	680-102558-28	07/30/2014 23:32	07/30/2014 23:32
SD-254-SS	680-102558-29	07/30/2014 23:48	07/30/2014 23:48
SD-276-SS MS	680-102558-25 MS	07/31/2014 02:23	07/31/2014 02:23
SD-276-SS MSD	680-102558-25 MSD	07/31/2014 02:39	07/31/2014 02:39

FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-341037/18-A  
 Matrix: Solid Lab File ID: ZG30030.D  
 Analysis Method: 8081B/8082A Date Collected: \_\_\_\_\_  
 Extraction Method: 3546 Date Extracted: 07/28/2014 13:55  
 Sample wt/vol: 30.00(g) Date Analyzed: 07/30/2014 22:14  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) GC Column: CLP I ID: 0.32(mm)  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341704 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	5.5	U	17	5.5
11104-28-2	PCB-1221	7.5	U	17	7.5
11141-16-5	PCB-1232	2.6	U	17	2.6
53469-21-9	PCB-1242	2.5	U	17	2.5
12672-29-6	PCB-1248	4.1	U	17	4.1
11097-69-1	PCB-1254	5.0	U	17	5.0
11096-82-5	PCB-1260	4.8	U	17	4.8



FORM I  
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-341037/18-A  
 Matrix: Solid Lab File ID: ZG30030.D  
 Analysis Method: 8081B/8082A Date Collected: \_\_\_\_\_  
 Extraction Method: 3546 Date Extracted: 07/28/2014 13:55  
 Sample wt/vol: 30.00(g) Date Analyzed: 07/30/2014 22:14  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) GC Column: CLP II ID: 0.32(mm)  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341704 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl			
877-09-8	Tetrachloro-m-xylene	93		46-130

FORM III  
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: ZG30031.D  
 Lab ID: LCS 680-341037/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS	QC	#
			% REC	LIMITS REC	
PCB-1016	333	299	90	43-130	
PCB-1260	333	274	82	45-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: ZG30046.D  
 Lab ID: 680-102558-25 MS Client ID: SD-276-SS MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
PCB-1016	3190	53 U	4150	130	43-130	
PCB-1260	3190	1200	3840	81	45-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Matrix: Solid Level: Low Lab File ID: ZG30047.D  
 Lab ID: 680-102558-25 MSD Client ID: SD-276-SS MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
PCB-1016	3180	2340	73	56	50	43-130	F2
PCB-1260	3180	2880	51	29	50	45-130	

# Column to be used to flag recovery and RPD values

## GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica SavannahJob No.: 680-102558-1SDG No.: 680102558-1Instrument ID: CSGZStart Date: 07/21/2014 18:39Analysis Batch Number: 340181End Date: 07/22/2014 06:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-340181/3		07/21/2014 18:39	1	ZG21011.D	CLP I 0.32 (mm)
IC 680-340181/3		07/21/2014 18:39	1	ZG21011.D	CLP II 0.32 (mm)
IC 680-340181/4		07/21/2014 18:55	1	ZG21012.D	CLP I 0.32 (mm)
IC 680-340181/4		07/21/2014 18:55	1	ZG21012.D	CLP II 0.32 (mm)
ICIS 680-340181/5		07/21/2014 19:11	1	ZG21013.D	CLP I 0.32 (mm)
ICIS 680-340181/5		07/21/2014 19:11	1	ZG21013.D	CLP II 0.32 (mm)
IC 680-340181/6		07/21/2014 19:26	1	ZG21014.D	CLP I 0.32 (mm)
IC 680-340181/6		07/21/2014 19:26	1	ZG21014.D	CLP II 0.32 (mm)
IC 680-340181/7		07/21/2014 19:42	1	ZG21015.D	CLP I 0.32 (mm)
IC 680-340181/7		07/21/2014 19:42	1	ZG21015.D	CLP II 0.32 (mm)
IC 680-340181/8		07/21/2014 19:57	1	ZG21016.D	CLP I 0.32 (mm)
IC 680-340181/8		07/21/2014 19:57	1	ZG21016.D	CLP II 0.32 (mm)
ICV 680-340181/9 CCV		07/21/2014 20:13	1	ZG21017.D	CLP I 0.32 (mm)
ICV 680-340181/9 CCV		07/21/2014 20:13	1	ZG21017.D	CLP II 0.32 (mm)
IC 680-340181/10		07/21/2014 20:28	1	ZG21018.D	CLP I 0.32 (mm)
IC 680-340181/10		07/21/2014 20:28	1	ZG21018.D	CLP II 0.32 (mm)
IC 680-340181/11		07/21/2014 20:43	1	ZG21019.D	CLP I 0.32 (mm)
IC 680-340181/11		07/21/2014 20:43	1	ZG21019.D	CLP II 0.32 (mm)
IC 680-340181/12		07/21/2014 20:59	1	ZG21020.D	CLP I 0.32 (mm)
IC 680-340181/12		07/21/2014 20:59	1	ZG21020.D	CLP II 0.32 (mm)
IC 680-340181/13		07/21/2014 21:15	1	ZG21021.D	CLP I 0.32 (mm)
IC 680-340181/13		07/21/2014 21:15	1	ZG21021.D	CLP II 0.32 (mm)
IC 680-340181/14		07/21/2014 21:30	1	ZG21022.D	CLP I 0.32 (mm)
IC 680-340181/14		07/21/2014 21:30	1	ZG21022.D	CLP II 0.32 (mm)
IC 680-340181/15		07/21/2014 21:45	1	ZG21023.D	CLP I 0.32 (mm)
IC 680-340181/15		07/21/2014 21:45	1	ZG21023.D	CLP II 0.32 (mm)
ICV 680-340181/16 CCV		07/21/2014 22:01	1	ZG21024.D	CLP I 0.32 (mm)
ICV 680-340181/16 CCV		07/21/2014 22:01	1	ZG21024.D	CLP II 0.32 (mm)
IC 680-340181/17		07/21/2014 22:17	1	ZG21025.D	CLP I 0.32 (mm)
IC 680-340181/17		07/21/2014 22:17	1	ZG21025.D	CLP II 0.32 (mm)
IC 680-340181/18		07/21/2014 22:32	1	ZG21026.D	CLP I 0.32 (mm)
IC 680-340181/18		07/21/2014 22:32	1	ZG21026.D	CLP II 0.32 (mm)
IC 680-340181/19		07/21/2014 22:48	1	ZG21027.D	CLP I 0.32 (mm)
IC 680-340181/19		07/21/2014 22:48	1	ZG21027.D	CLP II 0.32 (mm)
IC 680-340181/20		07/21/2014 23:03	1	ZG21028.D	CLP I 0.32 (mm)
IC 680-340181/20		07/21/2014 23:03	1	ZG21028.D	CLP II 0.32 (mm)
IC 680-340181/21		07/21/2014 23:19	1	ZG21029.D	CLP I 0.32 (mm)
IC 680-340181/21		07/21/2014 23:19	1	ZG21029.D	CLP II 0.32 (mm)
IC 680-340181/22		07/21/2014 23:34	1	ZG21030.D	CLP I 0.32 (mm)
IC 680-340181/22		07/21/2014 23:34	1	ZG21030.D	CLP II 0.32 (mm)
ICV 680-340181/23 CCV		07/21/2014 23:50	1	ZG21031.D	CLP I 0.32 (mm)
ICV 680-340181/23 CCV		07/21/2014 23:50	1	ZG21031.D	CLP II 0.32 (mm)
IC 680-340181/24		07/22/2014 00:05	1	ZG21032.D	CLP I 0.32 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah

Job No.: 680-102558-1

SDG No.: 680102558-1

Instrument ID: CSGZ

Start Date: 07/21/2014 18:39

Analysis Batch Number: 340181

End Date: 07/22/2014 06:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-340181/24		07/22/2014 00:05	1	ZG21032.D	CLP II 0.32 (mm)
IC 680-340181/25		07/22/2014 00:21	1	ZG21033.D	CLP I 0.32 (mm)
IC 680-340181/25		07/22/2014 00:21	1	ZG21033.D	CLP II 0.32 (mm)
PIBLK 680-340181/27		07/22/2014 00:52	1		CLP I 0.32 (mm)
PIBLK 680-340181/27		07/22/2014 00:52	1		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 01:23	1		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 01:23	1		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 01:38	1		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 01:38	1		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 01:54	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 01:54	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 02:09	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 02:09	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 02:25	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 02:25	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 02:40	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 02:40	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 02:56	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 02:56	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 03:11	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 03:11	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 03:27	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 03:27	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 03:42	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 03:42	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 03:58	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 03:58	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 04:13	1		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 04:13	1		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 04:29	1		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 04:29	1		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 04:44	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 04:44	5		CLP II 0.32 (mm)
ZZZZZ		07/22/2014 05:00	5		CLP I 0.32 (mm)
ZZZZZ		07/22/2014 05:00	5		CLP II 0.32 (mm)
CCV 680-340181/45		07/22/2014 05:31	1		CLP I 0.32 (mm)
CCV 680-340181/45		07/22/2014 05:31	1		CLP II 0.32 (mm)
CCV 680-340181/46		07/22/2014 05:46	1		CLP I 0.32 (mm)
CCV 680-340181/46		07/22/2014 05:46	1		CLP II 0.32 (mm)
CCV 680-340181/47		07/22/2014 06:02	1		CLP I 0.32 (mm)
CCV 680-340181/47		07/22/2014 06:02	1		CLP II 0.32 (mm)
PIBLK 680-340181/48		07/22/2014 06:17	1		CLP I 0.32 (mm)
PIBLK 680-340181/48		07/22/2014 06:17	1		CLP II 0.32 (mm)

## GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica SavannahJob No.: 680-102558-1SDG No.: 680102558-1Instrument ID: CSGZStart Date: 07/23/2014 09:28Analysis Batch Number: 340443End Date: 07/23/2014 14:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-340443/3		07/23/2014 09:28	1	ZG23003.D	CLP I 0.32 (mm)
CCVIS 680-340443/3		07/23/2014 09:28	1	ZG23003.D	CLP II 0.32 (mm)
PIBLK 680-340443/4		07/23/2014 09:44	1	ZG23004.D	CLP I 0.32 (mm)
PIBLK 680-340443/4		07/23/2014 09:44	1	ZG23004.D	CLP II 0.32 (mm)
MB 680-339371/17-A		07/23/2014 10:00	10	ZG23005.D	CLP I 0.32 (mm)
MB 680-339371/17-A		07/23/2014 10:00	10	ZG23005.D	CLP II 0.32 (mm)
ZZZZZ		07/23/2014 10:15	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 10:15	10		CLP II 0.32 (mm)
LCS 680-339371/21-A		07/23/2014 10:31	10	ZG23007.D	CLP I 0.32 (mm)
LCS 680-339371/21-A		07/23/2014 10:31	10	ZG23007.D	CLP II 0.32 (mm)
ZZZZZ		07/23/2014 10:46	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 10:46	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 11:02	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 11:02	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 11:17	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 11:17	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 11:33	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 11:33	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 11:48	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 11:48	10		CLP II 0.32 (mm)
680-102558-30	SD-255-SS	07/23/2014 12:04	10	ZG23013.D	CLP I 0.32 (mm)
680-102558-30	SD-255-SS	07/23/2014 12:04	10	ZG23013.D	CLP II 0.32 (mm)
ZZZZZ		07/23/2014 12:19	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 12:19	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 12:35	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 12:35	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 12:51	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 12:51	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 13:06	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 13:06	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 13:22	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 13:22	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 13:37	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 13:37	10		CLP II 0.32 (mm)
ZZZZZ		07/23/2014 13:53	10		CLP I 0.32 (mm)
ZZZZZ		07/23/2014 13:53	10		CLP II 0.32 (mm)
CCV 680-340443/22		07/23/2014 14:24	1	ZG23022.D	CLP I 0.32 (mm)
CCV 680-340443/22		07/23/2014 14:24	1	ZG23022.D	CLP II 0.32 (mm)
PIBLK 680-340443/23		07/23/2014 14:40	1	ZG23023.D	CLP I 0.32 (mm)
PIBLK 680-340443/23		07/23/2014 14:40	1	ZG23023.D	CLP II 0.32 (mm)

FORM VI

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 340181

SDG No.: 680102558-1

Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/21/2014 18:39 Calibration End Date: 07/21/2014 19:57 Calibration ID: 32152

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/8	ZG21016.D
Level 2	IC 680-340181/7	ZG21015.D
Level 3	IC 680-340181/6	ZG21014.D
Level 4	ICIS 680-340181/5	ZG21013.D
Level 5	IC 680-340181/4	ZG21012.D
Level 6	IC 680-340181/3	ZG21011.D

ANALYTE	RRF						CURVE TYPE			COEFFICIENT			# MIN RRF	MAX %RSD	R^2 OR COD	# MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2	%RSD	R^2 OR COD	MIN R^2 OR COD				
	LVL 6															
PCB-1016 Peak 1	0.0468	0.0423	0.0381	0.0367	0.0350	Lin2	0.0006	0.0352			0.9990		0.9900			
PCB-1016 Peak 2	0.0352	0.0479	0.0448	0.0443	0.0437	Ave		0.0462		7.0	20.0					
PCB-1016 Peak 3	0.0445	0.0288	0.0266	0.0262	0.0250	Ave		0.0272		9.1	20.0					
PCB-1016 Peak 4	0.0253	0.0246	0.0218	0.0212	0.0198	Lin2	0.0003	0.0201			0.9970		0.9900			
PCB-1016 Peak 5	0.0196	0.0264	0.0240	0.0233	0.0221	Ave		0.0245		10.0	20.0					
PCB-1260 Peak 1	0.0284	0.0446	0.0409	0.0402	0.0365	Lin2	0.0006	0.0376			0.9980		0.9900			
PCB-1260 Peak 2	0.0483	0.0278	0.0246	0.0233	0.0207	Lin2	0.0005	0.0213			0.9950		0.9900			
PCB-1260 Peak 3	0.0314	0.0243	0.0218	0.0210	0.0184	Lin2	0.0004	0.0192			0.9960		0.9900			
PCB-1260 Peak 4	0.0272	0.0881	0.0857	0.0879	0.0790	Ave		0.0855		5.8	20.0					
PCB-1260 Peak 5	0.0920	0.0413	0.0397	0.0406	0.0358	Ave		0.0398		7.6	20.0					
Tetrachloro-m-xylene	0.0805	1.0311	0.9994	1.0400	1.0326	Ave		1.0179		3.8	20.0					
DCB Decachlorobiphenyl	0.0442	0.6738	0.6681	0.6562	0.4952	Ave		0.6185		16.0	20.0					

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.



FORM VI

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102558-1

Analy Batch No.: 340181

SDG No.: 680102558-1

Instrument ID: CSGZ

GC Column: CLP II ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/21/2014 18:39

Calibration End Date: 07/21/2014 19:57

Calibration ID: 32153

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/8	ZG21016.D
Level 2	IC 680-340181/7	ZG21015.D
Level 3	IC 680-340181/6	ZG21014.D
Level 4	ICIS 680-340181/5	ZG21013.D
Level 5	IC 680-340181/4	ZG21012.D
Level 6	IC 680-340181/3	ZG21011.D

ANALYTE	RRF						COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	B	M1	M2								
PCB-1016 Peak 1	0.0303	0.0282	0.0264	0.0261	0.0251	0.0254		0.0269			7.3		20.0				
PCB-1016 Peak 2	0.0254	0.0112	0.0109	0.0111	0.0108	0.0110		0.0111			3.3		20.0				
PCB-1016 Peak 3	0.0170	0.0160	0.0153	0.0153	0.0146	0.0146		0.0155			6.0		20.0				
PCB-1016 Peak 4	0.0544	0.0534	0.0503	0.0516	0.0497	0.0500		0.0518			4.7		20.0				
PCB-1016 Peak 5	0.0357	0.0339	0.0322	0.0326	0.0314	0.0318		0.0329			4.9		20.0				
PCB-1260 Peak 1	0.0421	0.0487	0.0469	0.0461	0.0418	0.0421	0.0006	0.0430					0.9980				0.9900
PCB-1260 Peak 2	0.0279	0.0255	0.0251	0.0245	0.0222	0.0224		0.0246			8.7		20.0				
PCB-1260 Peak 3	0.0538	0.0504	0.0497	0.0498	0.0453	0.0457		0.0491			6.5		20.0				
PCB-1260 Peak 4	0.0273	0.0257	0.0250	0.0246	0.0220	0.0221		0.0244			8.6		20.0				
PCB-1260 Peak 5	0.1057	0.1032	0.1029	0.1052	0.0939	0.0955		0.1011			5.0		20.0				
Tetrachloro-m-xylene	0.9145	1.0258	1.0084	1.0571	1.0536	1.0818		1.0235			5.8		20.0				
DCB Decachlorobiphenyl	0.7312	0.8227	0.7887	0.7923	0.6042	0.6105		0.7249			13.0		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102558-1

Analy Batch No.: 340181

SDG No.: 680102558-1

Instrument ID: CSGZ

GC Column: CLP I ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/21/2014 20:28

Calibration End Date: 07/21/2014 21:45

Calibration ID: 32162

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/15	ZG21023.D
Level 2	IC 680-340181/14	ZG21022.D
Level 3	IC 680-340181/13	ZG21021.D
Level 4	IC 680-340181/12	ZG21020.D
Level 5	IC 680-340181/11	ZG21019.D
Level 6	IC 680-340181/10	ZG21018.D

ANALYTE	RRF						CURVE TYPE	COEFFICIENT			MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6		B	M1	M2							
PCB-1221 Peak 1	0.0117 0.0103	0.0127	0.0112	0.0113	0.0108	0.0108	Ave		0.0113				20.0				
PCB-1221 Peak 2	0.0076 0.0064	0.0083	0.0074	0.0073	0.0068	0.0068	Ave		0.0073				20.0				
PCB-1221 Peak 3	0.0274 0.0247	0.0292	0.0259	0.0269	0.0258	0.0258	Ave		0.0267				20.0				
PCB-1254 Peak 1	0.0422 0.0316	0.0366	0.0356	0.0334	0.0331	0.0331	Lin2	0.0005	0.0323					0.9990			0.9900
PCB-1254 Peak 2	0.0701 0.0548	0.0609	0.0602	0.0572	0.0570	0.0570	Ave		0.0600				20.0				
PCB-1254 Peak 3	0.0667 0.0575	0.0589	0.0602	0.0587	0.0595	0.0595	Ave		0.0603				20.0				
PCB-1254 Peak 4	0.0542 0.0428	0.0467	0.0465	0.0445	0.0447	0.0447	Ave		0.0466				20.0				
PCB-1254 Peak 5	0.0253 0.0217	0.0223	0.0225	0.0221	0.0228	0.0228	Ave		0.0228				20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 340181

SDG No.: 680102558-1

Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/21/2014 20:28 Calibration End Date: 07/21/2014 21:45 Calibration ID: 32163

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/15	ZG21023.D
Level 2	IC 680-340181/14	ZG21022.D
Level 3	IC 680-340181/13	ZG21021.D
Level 4	IC 680-340181/12	ZG21020.D
Level 5	IC 680-340181/11	ZG21019.D
Level 6	IC 680-340181/10	ZG21018.D

ANALYTE	RRF						CURVE TYPE	COEFFICIENT			MIN RRF	%RSD #	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6		B	M1	M2						
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6										
PCB-1221 Peak 1	0.0115	0.0124	0.0112	0.0117	0.0113	0.0115		0.0115				4.5	20.0			
PCB-1221 Peak 2	0.0109	0.0080	0.0073	0.0075	0.0072	0.0071		0.0073				5.2	20.0			
PCB-1221 Peak 3	0.0069	0.0263	0.0235	0.0243	0.0234	0.0239		0.0240				5.1	20.0			
PCB-1254 Peak 1	0.0228	0.0492	0.0482	0.0459	0.0448	0.0552		0.0477				9.2	20.0			
PCB-1254 Peak 2	0.0426	0.0574	0.0513	0.0489	0.0483	0.0461		0.0505				7.7	20.0			
PCB-1254 Peak 3	0.0862	0.0797	0.0817	0.0774	0.0793	0.0758		0.0804				5.4	20.0			
PCB-1254 Peak 4	0.0758	0.0617	0.0555	0.0534	0.0532	0.0617		0.0549				6.9	20.0			
PCB-1254 Peak 5	0.0504	0.0332	0.0306	0.0296	0.0302	0.0288		0.0306				4.9	20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 340181

SDG No.: 680102558-1

Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/21/2014 22:17 Calibration End Date: 07/21/2014 23:34 Calibration ID: 32172

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/22	ZG21030.D
Level 2	IC 680-340181/21	ZG21029.D
Level 3	IC 680-340181/20	ZG21028.D
Level 4	IC 680-340181/19	ZG21027.D
Level 5	IC 680-340181/18	ZG21026.D
Level 6	IC 680-340181/17	ZG21025.D

ANALYTE	RRF						CURVE TYPE			COEFFICIENT			MIN RRF	%RSD	#	R <sup>2</sup> OR COD	MAX %RSD	#	R <sup>2</sup> OR COD	MIN R <sup>2</sup> OR COD		
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	CURVE TYPE	B	M1	M2												
PCB-1248 Peak 1	0.0205	0.0200	0.0178	0.0157	0.0154	0.0157	Lin2	0.0003	0.0157											0.9940	0.9900	
PCB-1248 Peak 2	0.0153	0.0065	0.0059	0.0052	0.0051	0.0051	Lin2	0.0001	0.0051												0.9950	0.9900
PCB-1248 Peak 3	0.0049	0.0249	0.0240	0.0199	0.0204	0.0209	Ave		0.0220												20.0	
PCB-1248 Peak 4	0.0209	0.0123	0.0112	0.0100	0.0101	0.0101	Ave		0.0110												20.0	
PCB-1248 Peak 5	0.0101	0.0108	0.0105	0.0092	0.0091	0.0089	Ave		0.0098												20.0	

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 340181  
 SDG No.: 680102558-1  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/21/2014 22:17 Calibration End Date: 07/21/2014 23:34 Calibration ID: 32173

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/22	ZG21030.D
Level 2	IC 680-340181/21	ZG21029.D
Level 3	IC 680-340181/20	ZG21028.D
Level 4	IC 680-340181/19	ZG21027.D
Level 5	IC 680-340181/18	ZG21026.D
Level 6	IC 680-340181/17	ZG21025.D

ANALYTE	RRF						CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	R <sup>2</sup> OR COD	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6		B	M1	M2									
PCB-1248 Peak 1	0.0139	0.0142	0.0132	0.0121	0.0120	Ave		0.0129				7.5			20.0				
PCB-1248 Peak 2	0.0267	0.0262	0.0250	0.0233	0.0233	Ave		0.0247				6.2			20.0				
PCB-1248 Peak 3	0.0310	0.0311	0.0298	0.0282	0.0293	Ave		0.0299				3.7			20.0				
PCB-1248 Peak 4	0.0084	0.0087	0.0084	0.0079	0.0081	Ave		0.0082				3.9			20.0				
PCB-1248 Peak 5	0.0229	0.0228	0.0211	0.0194	0.0198	Ave		0.0211				7.1			20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 340181

SDG No.: 680102558-1

Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/22/2014 00:05 Calibration End Date: 07/22/2014 00:05 Calibration ID: 32212

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/24	ZG21032.D

ANALYTE	LVL 1	RRF	CURVE TYPE	COEFFICIENT			#	MIN RRF	SRSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
				B	M1	M2								
PCB-1232 Peak 1	0.0175		Ave		0.0175						20.0			
PCB-1232 Peak 2	0.0206		Ave		0.0206						20.0			
PCB-1232 Peak 3	0.0123		Ave		0.0123						20.0			
PCB-1232 Peak 4	0.0101		Ave		0.0101						20.0			
PCB-1232 Peak 5	0.0100		Ave		0.0100						20.0			
PCB-1262 Peak 1	0.0558		Ave		0.0558						20.0			
PCB-1262 Peak 2	0.0501		Ave		0.0501						20.0			
PCB-1262 Peak 3	0.0986		Ave		0.0986						20.0			
PCB-1262 Peak 4	0.0387		Ave		0.0387						20.0			
PCB-1262 Peak 5	0.0301		Ave		0.0301						20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-1025558-1 Analy Batch No.: 340181

SDG No.: 6801025558-1

Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/22/2014 00:05 Calibration End Date: 07/22/2014 00:05 Calibration ID: 32213

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/24	ZG21032.D

ANALYTE	RRF		CURVE TYPE			COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1		B	M1	M2											
PCB-1232 Peak 1	0.0129		Ave	0.0129									20.0			
PCB-1232 Peak 2	0.0051		Ave	0.0051									20.0			
PCB-1232 Peak 3	0.0073		Ave	0.0073									20.0			
PCB-1232 Peak 4	0.0237		Ave	0.0237									20.0			
PCB-1232 Peak 5	0.0150		Ave	0.0150									20.0			
PCB-1262 Peak 1	0.0654		Ave	0.0654									20.0			
PCB-1262 Peak 2	0.0587		Ave	0.0587									20.0			
PCB-1262 Peak 3	0.1159		Ave	0.1159									20.0			
PCB-1262 Peak 4	0.0530		Ave	0.0530									20.0			
PCB-1262 Peak 5	0.0362		Ave	0.0362									20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 340181  
 SDG No.: 680102558-1  
 Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/22/2014 00:21 Calibration End Date: 07/22/2014 00:21 Calibration ID: 32222

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/25	ZG21033.D

ANALYTE	RRF		CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1			B	M1	M2								
PCB-1242 Peak 1	0.0295		Ave	0.0295							20.0			
PCB-1242 Peak 2	0.0352		Ave	0.0352							20.0			
PCB-1242 Peak 3	0.0205		Ave	0.0205							20.0			
PCB-1242 Peak 4	0.0165		Ave	0.0165							20.0			
PCB-1242 Peak 5	0.0181		Ave	0.0181							20.0			
PCB-1268 Peak 1	0.1087		Ave	0.1087							20.0			
PCB-1268 Peak 2	0.1084		Ave	0.1084							20.0			
PCB-1268 Peak 3	0.0839		Ave	0.0839							20.0			
PCB-1268 Peak 4	0.0353		Ave	0.0353							20.0			
PCB-1268 Peak 5	0.2404		Ave	0.2404							20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.



FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-1025558-1 Analy Batch No.: 340181  
 SDG No.: 680102558-1 GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Instrument ID: CSGZ Calibration Start Date: 07/22/2014 00:21 Calibration End Date: 07/22/2014 00:21 Calibration ID: 32223

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-340181/25	ZG21033.D

ANALYTE	RRF		COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1		B	M1	M2								
PCB-1242 Peak 1	0.0206			0.0206						20.0			
PCB-1242 Peak 2	0.0087			0.0087						20.0			
PCB-1242 Peak 3	0.0122			0.0122						20.0			
PCB-1242 Peak 4	0.0408			0.0408						20.0			
PCB-1242 Peak 5	0.0257			0.0257						20.0			
PCB-1268 Peak 1	0.1322			0.1322						20.0			
PCB-1268 Peak 2	0.1234			0.1234						20.0			
PCB-1268 Peak 3	0.1025			0.1025						20.0			
PCB-1268 Peak 4	0.0406			0.0406						20.0			
PCB-1268 Peak 5	0.3049			0.3049						20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-340181/9 Calibration Date: 07/21/2014 20:13  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 18:39  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/21/2014 19:57  
 Lab File ID: ZG21017.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin2		0.0375		0.516	0.500	3.2	20.0
PCB-1016 Peak 2	Ave	0.0462	0.0462		0.500	0.500	-0.0	20.0
PCB-1016 Peak 3	Ave	0.0272	0.0263		0.483	0.500	-3.4	20.0
PCB-1016 Peak 4	Lin2		0.0213		0.513	0.500	2.5	20.0
PCB-1016 Peak 5	Ave	0.0245	0.0233		0.477	0.500	-4.6	20.0
PCB-1260 Peak 1	Lin2		0.0344		0.443	0.500	-11.4	20.0
PCB-1260 Peak 2	Lin2		0.0210		0.467	0.500	-6.6	20.0
PCB-1260 Peak 3	Lin2		0.0191		0.475	0.500	-4.9	20.0
PCB-1260 Peak 4	Ave	0.0855	0.0771		0.451	0.500	-9.9	20.0
PCB-1260 Peak 5	Ave	0.0398	0.0389		0.489	0.500	-2.2	20.0
Tetrachloro-m-xylene	Ave	1.018	0.8185		0.0257	0.0320	-19.6	20.0
DCB Decachlorobiphenyl	Ave	0.6185	0.5281		0.0273	0.0320	-14.6	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-340181/9 Calibration Date: 07/21/2014 20:13  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 18:39  
 GC Column: CLP II ID: 0.32 (mm) Calib End Date: 07/21/2014 19:57  
 Lab File ID: ZG21017.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0269	0.0263		0.488	0.500	-2.4	20.0
PCB-1016 Peak 2	Ave	0.0111	0.0113		0.508	0.500	1.6	20.0
PCB-1016 Peak 3	Ave	0.0155	0.0155		0.500	0.500	0.0	20.0
PCB-1016 Peak 4	Ave	0.0518	0.0525		0.506	0.500	1.2	20.0
PCB-1016 Peak 5	Ave	0.0329	0.0330		0.500	0.500	0.0	20.0
PCB-1260 Peak 1	Lin2		0.0389		0.439	0.500	-12.2	20.0
PCB-1260 Peak 2	Ave	0.0246	0.0220		0.446	0.500	-10.7	20.0
PCB-1260 Peak 3	Ave	0.0491	0.0450		0.458	0.500	-8.4	20.0
PCB-1260 Peak 4	Ave	0.0244	0.0218		0.447	0.500	-10.6	20.0
PCB-1260 Peak 5	Ave	0.1011	0.0929		0.460	0.500	-8.1	20.0
Tetrachloro-m-xylene	Ave	1.024	0.8286		0.0259	0.0320	-19.0	20.0
DCB Decachlorobiphenyl	Ave	0.7249	0.6398		0.0282	0.0320	-11.7	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-340181/16 Calibration Date: 07/21/2014 22:01  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 20:28  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/21/2014 21:45  
 Lab File ID: ZG21024.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	0.0113	0.0105		0.463	0.500	-7.3	20.0
PCB-1221 Peak 2	Ave	0.0073	0.0070		0.479	0.500	-4.1	20.0
PCB-1221 Peak 3	Ave	0.0267	0.0257		0.483	0.500	-3.5	20.0
PCB-1254 Peak 1	Lin2		0.0326		0.489	0.500	-2.3	20.0
PCB-1254 Peak 2	Ave	0.0600	0.0563		0.469	0.500	-6.3	20.0
PCB-1254 Peak 3	Ave	0.0603	0.0576		0.478	0.500	-4.4	20.0
PCB-1254 Peak 4	Ave	0.0466	0.0437		0.470	0.500	-6.1	20.0
PCB-1254 Peak 5	Ave	0.0228	0.0217		0.475	0.500	-4.9	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-340181/16 Calibration Date: 07/21/2014 22:01  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 20:28  
 GC Column: CLP II ID: 0.32 (mm) Calib End Date: 07/21/2014 21:45  
 Lab File ID: ZG21024.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	0.0115	0.0111		0.482	0.500	-3.7	20.0
PCB-1221 Peak 2	Ave	0.0073	0.0071		0.486	0.500	-2.8	20.0
PCB-1221 Peak 3	Ave	0.0240	0.0231		0.481	0.500	-3.8	20.0
PCB-1254 Peak 1	Ave	0.0477	0.0451		0.473	0.500	-5.3	20.0
PCB-1254 Peak 2	Ave	0.0505	0.0479		0.474	0.500	-5.2	20.0
PCB-1254 Peak 3	Ave	0.0804	0.0777		0.483	0.500	-3.4	20.0
PCB-1254 Peak 4	Ave	0.0549	0.0520		0.473	0.500	-5.3	20.0
PCB-1254 Peak 5	Ave	0.0306	0.0296		0.484	0.500	-3.2	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-340181/23 Calibration Date: 07/21/2014 23:50  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 22:17  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/21/2014 23:34  
 Lab File ID: ZG21031.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin2		0.0151		0.462	0.500	-7.6	20.0
PCB-1248 Peak 2	Lin2		0.0047		0.443	0.500	-11.4	20.0
PCB-1248 Peak 3	Ave	0.0220	0.0202		0.459	0.500	-8.1	20.0
PCB-1248 Peak 4	Ave	0.0110	0.0096		0.436	0.500	-12.8	20.0
PCB-1248 Peak 5	Ave	0.0098	0.0091		0.461	0.500	-7.8	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-340181/23 Calibration Date: 07/21/2014 23:50  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 22:17  
 GC Column: CLP II ID: 0.32(mm) Calib End Date: 07/21/2014 23:34  
 Lab File ID: ZG21031.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0129	0.0118		0.456	0.500	-8.9	20.0
PCB-1248 Peak 2	Ave	0.0247	0.0232		0.470	0.500	-6.0	20.0
PCB-1248 Peak 3	Ave	0.0299	0.0310		0.518	0.500	3.5	20.0
PCB-1248 Peak 4	Ave	0.0082	0.0083		0.503	0.500	0.7	20.0
PCB-1248 Peak 5	Ave	0.0211	0.0221		0.524	0.500	4.8	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-340443/3 Calibration Date: 07/23/2014 09:28  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 18:39  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/21/2014 19:57  
 Lab File ID: ZG23003.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin2		0.0381		0.524	0.500	4.8	20.0
PCB-1016 Peak 2	Ave	0.0462	0.0470		0.509	0.500	1.7	20.0
PCB-1016 Peak 3	Ave	0.0272	0.0269		0.494	0.500	-1.2	20.0
PCB-1016 Peak 4	Lin2		0.0220		0.529	0.500	5.9	20.0
PCB-1016 Peak 5	Ave	0.0245	0.0240		0.491	0.500	-1.7	20.0
PCB-1260 Peak 1	Lin2		0.0396		0.511	0.500	2.3	20.0
PCB-1260 Peak 2	Lin2		0.0228		0.510	0.500	2.0	20.0
PCB-1260 Peak 3	Lin2		0.0205		0.511	0.500	2.3	20.0
PCB-1260 Peak 4	Ave	0.0855	0.0833		0.487	0.500	-2.6	20.0
PCB-1260 Peak 5	Ave	0.0398	0.0373		0.469	0.500	-6.2	20.0
Tetrachloro-m-xylene	Ave	1.018	1.066		0.0335	0.0320	4.7	20.0
DCB Decachlorobiphenyl	Ave	0.6185	0.5379		0.0278	0.0320	-13.0	20.0



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-340443/3 Calibration Date: 07/23/2014 09:28  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 18:39  
 GC Column: CLP II ID: 0.32 (mm) Calib End Date: 07/21/2014 19:57  
 Lab File ID: ZG23003.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0269	0.0265		0.491	0.500	-1.7	20.0
PCB-1016 Peak 2	Ave	0.0111	0.0114		0.512	0.500	2.4	20.0
PCB-1016 Peak 3	Ave	0.0155	0.0157		0.507	0.500	1.4	20.0
PCB-1016 Peak 4	Ave	0.0518	0.0531		0.512	0.500	2.4	20.0
PCB-1016 Peak 5	Ave	0.0329	0.0334		0.508	0.500	1.5	20.0
PCB-1260 Peak 1	Lin2		0.0452		0.511	0.500	2.3	20.0
PCB-1260 Peak 2	Ave	0.0246	0.0239		0.485	0.500	-3.0	20.0
PCB-1260 Peak 3	Ave	0.0491	0.0481		0.490	0.500	-2.0	20.0
PCB-1260 Peak 4	Ave	0.0244	0.0234		0.479	0.500	-4.3	20.0
PCB-1260 Peak 5	Ave	0.1011	0.0992		0.491	0.500	-1.8	20.0
Tetrachloro-m-xylene	Ave	1.024	1.082		0.0338	0.0320	5.7	20.0
DCB Decachlorobiphenyl	Ave	0.7249	0.6468		0.0285	0.0320	-10.8	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-340443/22 Calibration Date: 07/23/2014 14:24  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 18:39  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/21/2014 19:57  
 Lab File ID: ZG23022.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin2		0.0380		0.523	0.500	4.7	20.0
PCB-1016 Peak 2	Ave	0.0462	0.0469		0.508	0.500	1.5	20.0
PCB-1016 Peak 3	Ave	0.0272	0.0271		0.497	0.500	-0.7	20.0
PCB-1016 Peak 4	Lin2		0.0220		0.530	0.500	6.0	20.0
PCB-1016 Peak 5	Ave	0.0245	0.0241		0.492	0.500	-1.6	20.0
PCB-1260 Peak 1	Lin2		0.0389		0.503	0.500	0.6	20.0
PCB-1260 Peak 2	Lin2		0.0223		0.498	0.500	-0.3	20.0
PCB-1260 Peak 3	Lin2		0.0200		0.497	0.500	-0.5	20.0
PCB-1260 Peak 4	Ave	0.0855	0.0818		0.478	0.500	-4.3	20.0
PCB-1260 Peak 5	Ave	0.0398	0.0368		0.462	0.500	-7.6	20.0
Tetrachloro-m-xylene	Ave	1.018	1.073		0.0337	0.0320	5.4	20.0
DCB Decachlorobiphenyl	Ave	0.6185	0.5224		0.0270	0.0320	-15.5	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-340443/22 Calibration Date: 07/23/2014 14:24  
 Instrument ID: CSGZ Calib Start Date: 07/21/2014 18:39  
 GC Column: CLP II ID: 0.32 (mm) Calib End Date: 07/21/2014 19:57  
 Lab File ID: ZG23022.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0269	0.0267		0.496	0.500	-0.8	20.0
PCB-1016 Peak 2	Ave	0.0111	0.0114		0.512	0.500	2.4	20.0
PCB-1016 Peak 3	Ave	0.0155	0.0156		0.504	0.500	0.7	20.0
PCB-1016 Peak 4	Ave	0.0518	0.0529		0.510	0.500	2.1	20.0
PCB-1016 Peak 5	Ave	0.0329	0.0332		0.505	0.500	0.9	20.0
PCB-1260 Peak 1	Lin2		0.0439		0.497	0.500	-0.6	20.0
PCB-1260 Peak 2	Ave	0.0246	0.0230		0.468	0.500	-6.3	20.0
PCB-1260 Peak 3	Ave	0.0491	0.0465		0.474	0.500	-5.3	20.0
PCB-1260 Peak 4	Ave	0.0244	0.0227		0.465	0.500	-7.1	20.0
PCB-1260 Peak 5	Ave	0.1011	0.0954		0.472	0.500	-5.6	20.0
Tetrachloro-m-xylene	Ave	1.024	1.087		0.0340	0.0320	6.2	20.0
DCB Decachlorobiphenyl	Ave	0.7249	0.6005		0.0265	0.0320	-17.2	20.0

## GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica SavannahJob No.: 680-102558-1SDG No.: 680102558-1Instrument ID: CSGZStart Date: 07/28/2014 16:21Analysis Batch Number: 341212End Date: 07/28/2014 21:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PIBLK 680-341212/3		07/28/2014 16:21	1		CLP I 0.32 (mm)
PIBLK 680-341212/3		07/28/2014 16:21	1		CLP II 0.32 (mm)
IC 680-341212/29		07/28/2014 16:36	1	ZG28008.D	CLP I 0.32 (mm)
IC 680-341212/29		07/28/2014 16:36	1	ZG28008.D	CLP II 0.32 (mm)
IC 680-341212/4		07/28/2014 16:52	1	ZG28009.D	CLP I 0.32 (mm)
IC 680-341212/4		07/28/2014 16:52	1	ZG28009.D	CLP II 0.32 (mm)
ICIS 680-341212/5		07/28/2014 17:07	1	ZG28010.D	CLP I 0.32 (mm)
ICIS 680-341212/5		07/28/2014 17:07	1	ZG28010.D	CLP II 0.32 (mm)
IC 680-341212/6		07/28/2014 17:23	1	ZG28011.D	CLP I 0.32 (mm)
IC 680-341212/6		07/28/2014 17:23	1	ZG28011.D	CLP II 0.32 (mm)
IC 680-341212/7		07/28/2014 17:38	1	ZG28012.D	CLP I 0.32 (mm)
IC 680-341212/7		07/28/2014 17:38	1	ZG28012.D	CLP II 0.32 (mm)
IC 680-341212/8		07/28/2014 17:54	1	ZG28013.D	CLP I 0.32 (mm)
IC 680-341212/8		07/28/2014 17:54	1	ZG28013.D	CLP II 0.32 (mm)
ICV 680-341212/9 CCV		07/28/2014 18:09	1	ZG28014.D	CLP I 0.32 (mm)
ICV 680-341212/9 CCV		07/28/2014 18:09	1	ZG28014.D	CLP II 0.32 (mm)
IC 680-341212/10		07/28/2014 18:25	1	ZG28015.D	CLP I 0.32 (mm)
IC 680-341212/10		07/28/2014 18:25	1	ZG28015.D	CLP II 0.32 (mm)
IC 680-341212/11		07/28/2014 18:40	1	ZG28016.D	CLP I 0.32 (mm)
IC 680-341212/11		07/28/2014 18:40	1	ZG28016.D	CLP II 0.32 (mm)
IC 680-341212/12		07/28/2014 18:56	1	ZG28017.D	CLP I 0.32 (mm)
IC 680-341212/12		07/28/2014 18:56	1	ZG28017.D	CLP II 0.32 (mm)
IC 680-341212/13		07/28/2014 19:11	1	ZG28018.D	CLP I 0.32 (mm)
IC 680-341212/13		07/28/2014 19:11	1	ZG28018.D	CLP II 0.32 (mm)
PIBLK 680-341212/15		07/28/2014 19:27	1		CLP I 0.32 (mm)
PIBLK 680-341212/15		07/28/2014 19:27	1		CLP II 0.32 (mm)
ZZZZZ		07/28/2014 19:42	1		CLP I 0.32 (mm)
ZZZZZ		07/28/2014 19:42	1		CLP II 0.32 (mm)
ZZZZZ		07/28/2014 19:58	1		CLP I 0.32 (mm)
ZZZZZ		07/28/2014 19:58	1		CLP II 0.32 (mm)
ZZZZZ		07/28/2014 20:13	1		CLP I 0.32 (mm)
ZZZZZ		07/28/2014 20:13	1		CLP II 0.32 (mm)
ZZZZZ		07/28/2014 20:29	1		CLP I 0.32 (mm)
ZZZZZ		07/28/2014 20:29	1		CLP II 0.32 (mm)
ZZZZZ		07/28/2014 20:44	5		CLP I 0.32 (mm)
ZZZZZ		07/28/2014 20:44	5		CLP II 0.32 (mm)
ZZZZZ		07/28/2014 20:59	25		CLP I 0.32 (mm)
ZZZZZ		07/28/2014 20:59	25		CLP II 0.32 (mm)
CCV 680-341212/23		07/28/2014 21:30	1		CLP I 0.32 (mm)
CCV 680-341212/23		07/28/2014 21:30	1		CLP II 0.32 (mm)
PIBLK 680-341212/24		07/28/2014 21:46	1		CLP I 0.32 (mm)
PIBLK 680-341212/24		07/28/2014 21:46	1		CLP II 0.32 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah

Job No.: 680-102558-1

SDG No.: 680102558-1

Instrument ID: CSGZ

Start Date: 07/30/2014 21:43

Analysis Batch Number: 341704

End Date: 07/31/2014 03:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-341704/28		07/30/2014 21:43	1	ZG30028.D	CLP I 0.32 (mm)
CCVIS 680-341704/28		07/30/2014 21:43	1	ZG30028.D	CLP II 0.32 (mm)
PIBLK 680-341704/29		07/30/2014 21:59	1	ZG30029.D	CLP I 0.32 (mm)
PIBLK 680-341704/29		07/30/2014 21:59	1	ZG30029.D	CLP II 0.32 (mm)
MB 680-341037/18-A		07/30/2014 22:14	10	ZG30030.D	CLP I 0.32 (mm)
MB 680-341037/18-A		07/30/2014 22:14	10	ZG30030.D	CLP II 0.32 (mm)
LCS 680-341037/22-A		07/30/2014 22:30	10	ZG30031.D	CLP I 0.32 (mm)
LCS 680-341037/22-A		07/30/2014 22:30	10	ZG30031.D	CLP II 0.32 (mm)
680-102558-25	SD-276-SS	07/30/2014 22:45	10	ZG30032.D	CLP I 0.32 (mm)
680-102558-25	SD-276-SS	07/30/2014 22:45	10	ZG30032.D	CLP II 0.32 (mm)
680-102558-26	SD-275-SS	07/30/2014 23:01	10	ZG30033.D	CLP I 0.32 (mm)
680-102558-26	SD-275-SS	07/30/2014 23:01	10	ZG30033.D	CLP II 0.32 (mm)
680-102558-27	SD-252-SS	07/30/2014 23:17	10	ZG30034.D	CLP I 0.32 (mm)
680-102558-27	SD-252-SS	07/30/2014 23:17	10	ZG30034.D	CLP II 0.32 (mm)
680-102558-28	SD-253-SS	07/30/2014 23:32	10	ZG30035.D	CLP I 0.32 (mm)
680-102558-28	SD-253-SS	07/30/2014 23:32	10	ZG30035.D	CLP II 0.32 (mm)
680-102558-29	SD-254-SS	07/30/2014 23:48	10	ZG30036.D	CLP I 0.32 (mm)
680-102558-29	SD-254-SS	07/30/2014 23:48	10	ZG30036.D	CLP II 0.32 (mm)
ZZZZZ		07/31/2014 00:03	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 00:03	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 00:19	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 00:19	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 00:35	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 00:35	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 00:50	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 00:50	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 01:06	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 01:06	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 01:21	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 01:21	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 01:37	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 01:37	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 01:52	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 01:52	10		CLP II 0.32 (mm)
ZZZZZ		07/31/2014 02:08	10		CLP I 0.32 (mm)
ZZZZZ		07/31/2014 02:08	10		CLP II 0.32 (mm)
680-102558-25 MS	SD-276-SS MS	07/31/2014 02:23	10	ZG30046.D	CLP I 0.32 (mm)
680-102558-25 MS	SD-276-SS MS	07/31/2014 02:23	10	ZG30046.D	CLP II 0.32 (mm)
680-102558-25 MSD	SD-276-SS MSD	07/31/2014 02:39	10	ZG30047.D	CLP I 0.32 (mm)
680-102558-25 MSD	SD-276-SS MSD	07/31/2014 02:39	10	ZG30047.D	CLP II 0.32 (mm)
CCV 680-341704/49		07/31/2014 03:10	1	ZG30049.D	CLP I 0.32 (mm)
CCV 680-341704/49		07/31/2014 03:10	1	ZG30049.D	CLP II 0.32 (mm)
PIBLK 680-341704/50		07/31/2014 03:25	1	ZG30050.D	CLP I 0.32 (mm)
PIBLK 680-341704/50		07/31/2014 03:25	1	ZG30050.D	CLP II 0.32 (mm)

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102558-1

Analy Batch No.: 341212

SDG No.: 680102558-1

Instrument ID: CSGZ

GC Column: CLP I ID: 0.32 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/28/2014 16:36

Calibration End Date: 07/28/2014 17:54

Calibration ID: 32530

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341212/8	ZG28013.D
Level 2	IC 680-341212/7	ZG28012.D
Level 3	IC 680-341212/6	ZG28011.D
Level 4	ICIS 680-341212/5	ZG28010.D
Level 5	IC 680-341212/4	ZG28009.D
Level 6	IC 680-341212/29	ZG28008.D

ANALYTE	RRF						CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	R <sup>2</sup> OR COD	MAX %RSD	#	MIN R <sup>2</sup> OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6		B	M1	M2								
PCB-1016 Peak 1	0.0497 0.0367	0.0447	0.0400	0.0385	0.0369	0.0369	0.0007	0.0369						0.9990				0.9900
PCB-1016 Peak 2	0.0562 0.0481	0.0512	0.0476	0.0479	0.0472	Ave		0.0497			7.0				20.0			
PCB-1016 Peak 3	0.0353 0.0283	0.0321	0.0291	0.0285	0.0281	Lin2	0.0004	0.0278						1.0000				0.9900
PCB-1016 Peak 4	0.0273 0.0210	0.0257	0.0225	0.0217	0.0209	Lin2	0.0003	0.0210						0.9990				0.9900
PCB-1016 Peak 5	0.0330 0.0259	0.0304	0.0272	0.0264	0.0257	Lin2	0.0004	0.0257						0.9990				0.9900
PCB-1260 Peak 1	0.0638 0.0521	0.0566	0.0517	0.0509	0.0514	Lin2	0.0007	0.0503						0.9990				0.9900
PCB-1260 Peak 2	0.0372 0.0278	0.0323	0.0286	0.0276	0.0275	Lin2	0.0005	0.0270						1.0000				0.9900
PCB-1260 Peak 3	0.0349 0.0266	0.0303	0.0273	0.0261	0.0263	Lin2	0.0005	0.0258						1.0000				0.9900
PCB-1260 Peak 4	0.1315 0.1253	0.1211	0.1173	0.1193	0.1225	Ave		0.1228			4.1				20.0			
PCB-1260 Peak 5	0.0667 0.0617	0.0606	0.0578	0.0586	0.0596	Ave		0.0608			5.3				20.0			
Tetrachloro-m-xylene	0.9720 1.0768	1.0513	1.0207	1.0586	1.0576	Ave		1.0395			3.6				20.0			
DCB Decachlorobiphenyl	1.0083 0.9883	1.0511	0.9841	0.9581	0.9561	Ave		0.9910			3.6				20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 341212  
 SDG No.: 680102558-1  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/28/2014 16:36 Calibration End Date: 07/28/2014 17:54 Calibration ID: 32531

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341212/8	ZG28013.D
Level 2	IC 680-341212/7	ZG28012.D
Level 3	IC 680-341212/6	ZG28011.D
Level 4	ICIS 680-341212/5	ZG28010.D
Level 5	IC 680-341212/4	ZG28009.D
Level 6	IC 680-341212/29	ZG28008.D

ANALYTE	RRF						CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	R <sup>2</sup> OR COD	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6		B	M1	M2									
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6													
PCB-1016 Peak 1	0.0296	0.0274	0.0260	0.0257	0.0253	Ave		0.0266				6.4			20.0				
PCB-1016 Peak 2	0.0253	0.0109	0.0109	0.0109	0.0110	Ave		0.0112				3.8			20.0				
PCB-1016 Peak 3	0.0113	0.0159	0.0159	0.0155	0.0151	Ave		0.0159				5.8			20.0				
PCB-1016 Peak 4	0.0151	0.0539	0.0532	0.0535	0.0527	Ave		0.0535				1.7			20.0				
PCB-1016 Peak 5	0.0527	0.0339	0.0328	0.0327	0.0325	Ave		0.0336				4.4			20.0				
PCB-1260 Peak 1	0.0365	0.0612	0.0572	0.0564	0.0570	Lin2	0.0005	0.0560								1.0000			0.9900
PCB-1260 Peak 2	0.0669	0.0371	0.0346	0.0305	0.0304	Ave		0.0324				8.6			20.0				
PCB-1260 Peak 3	0.0574	0.0649	0.0613	0.0615	0.0630	Ave		0.0638				4.1			20.0				
PCB-1260 Peak 4	0.0640	0.0335	0.0305	0.0303	0.0307	Ave		0.0319				6.2			20.0				
PCB-1260 Peak 5	0.0312	0.1404	0.1343	0.1328	0.1367	Ave		0.1357				3.0			20.0				
Tetrachloro-m-xylene	0.1397	1.0235	1.0093	1.0557	1.0630	Ave		1.0232				6.1			20.0				
DCB Decachlorobiphenyl	0.9069	1.0915	1.1309	1.1169	1.1183	Ave		1.1347				3.4			20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 341212

SDG No.: 680102558-1

Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/28/2014 18:25 Calibration End Date: 07/28/2014 18:25 Calibration ID: 32540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341212/10	ZG28015.D

ANALYTE	RRF		CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2		B	M1	M2								
PCB-1221 Peak 1	0.0114		Ave					7.3			20.0			
PCB-1221 Peak 2	0.0076		Ave					8.9			20.0			
PCB-1221 Peak 3	0.0270		Ave					5.8			20.0			
PCB-1254 Peak 1	0.0376		Lin2	0.0004								0.9950		0.9900
PCB-1254 Peak 2	0.0656		Ave					9.1			20.0			
PCB-1254 Peak 3	0.0706		Ave					8.4			20.0			
PCB-1254 Peak 4	0.0544		Ave					10.0			20.0			
PCB-1254 Peak 5	0.0288		Ave					11.0			20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.



GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 341212

SDG No.: 680102558-1 GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: CSGZ Calibration Start Date: 07/28/2014 18:25 Calibration End Date: 07/28/2014 18:25 Calibration ID: 32541

Level 1 IC 680-341212/10 LAB FILE ID: ZG28015.D

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341212/10	ZG28015.D

ANALYTE	RRF		COEFFICIENT			MIN RRF	%RSD #	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1		B	M1	M2						
PCB-1221 Peak 1	0.0113			0.0114			4.5	20.0			
PCB-1221 Peak 2	0.0072			0.0073			5.1	20.0			
PCB-1221 Peak 3	0.0234			0.0239			5.2	20.0			
PCB-1254 Peak 1	0.0496			0.0483			9.0	20.0			
PCB-1254 Peak 2	0.0525			0.0511			7.5	20.0			
PCB-1254 Peak 3	0.0892			0.0823			6.4	20.0			
PCB-1254 Peak 4	0.0612			0.0562			7.9	20.0			
PCB-1254 Peak 5	0.0355			0.0316			7.6	20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analyt Batch No.: 341212  
 SDG No.: 680102558-1  
 Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/28/2014 18:40 Calibration End Date: 07/28/2014 18:40 Calibration ID: 32550

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341212/11	ZG28016.D

ANALYTE	RRF		CURVE TYPE	COEFFICIENT			MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1			B	M1	M2							
PCB-1232 Peak 1	0.0180		Ave	0.0180						20.0			
PCB-1232 Peak 2	0.0213		Ave	0.0213						20.0			
PCB-1232 Peak 3	0.0133		Ave	0.0133						20.0			
PCB-1232 Peak 4	0.0102		Ave	0.0102						20.0			
PCB-1232 Peak 5	0.0113		Ave	0.0113						20.0			
PCB-1262 Peak 1	0.0706		Ave	0.0706						20.0			
PCB-1262 Peak 2	0.0658		Ave	0.0658						20.0			
PCB-1262 Peak 3	0.1344		Ave	0.1344						20.0			
PCB-1262 Peak 4	0.0533		Ave	0.0533						20.0			
PCB-1262 Peak 5	0.0448		Ave	0.0448						20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 341212  
 SDG No.: 680102558-1  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/28/2014 18:40 Calibration End Date: 07/28/2014 18:40 Calibration ID: 32551

Calibration Files:  
 LEVEL: LAB SAMPLE ID: LAB FILE ID:  
 Level 1 IC 680-341212/11 ZG28016.D

ANALYTE	RRF		COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1		B	M1	M2								
PCB-1232 Peak 1	0.0127			0.0127					20.0				
PCB-1232 Peak 2	0.0051			0.0051					20.0				
PCB-1232 Peak 3	0.0075			0.0075					20.0				
PCB-1232 Peak 4	0.0242			0.0242					20.0				
PCB-1232 Peak 5	0.0151			0.0151					20.0				
PCB-1262 Peak 1	0.0796			0.0796					20.0				
PCB-1262 Peak 2	0.0733			0.0733					20.0				
PCB-1262 Peak 3	0.1481			0.1481					20.0				
PCB-1262 Peak 4	0.0668			0.0668					20.0				
PCB-1262 Peak 5	0.0547			0.0547					20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-1025558-1 Analy Batch No.: 341212

SDG No.: 6801025558-1

Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/28/2014 18:56 Calibration End Date: 07/28/2014 18:56 Calibration ID: 32560

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341212/12	ZG28017.D

ANALYTE	RRF		COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1		B	M1	M2								
PCB-1242 Peak 1	0.0306			0.0306						20.0			
PCB-1242 Peak 2	0.0374			0.0374						20.0			
PCB-1242 Peak 3	0.0224			0.0224						20.0			
PCB-1242 Peak 4	0.0169			0.0169						20.0			
PCB-1242 Peak 5	0.0213			0.0213						20.0			
PCB-1268 Peak 1	0.1610			0.1610						20.0			
PCB-1268 Peak 2	0.1518			0.1518						20.0			
PCB-1268 Peak 3	0.1263			0.1263						20.0			
PCB-1268 Peak 4	0.0534			0.0534						20.0			
PCB-1268 Peak 5	0.3887			0.3887						20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-1025558-1 Analy Batch No.: 341212

SDG No.: 6801025558-1

Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/28/2014 18:56 Calibration End Date: 07/28/2014 18:56 Calibration ID: 32561

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-341212/12	ZG28017.D

ANALYTE	RRF		COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1		B	M1	M2								
PCB-1242 Peak 1	0.0204			0.0204						20.0			
PCB-1242 Peak 2	0.0086			0.0086						20.0			
PCB-1242 Peak 3	0.0128			0.0128						20.0			
PCB-1242 Peak 4	0.0428			0.0428						20.0			
PCB-1242 Peak 5	0.0262			0.0262						20.0			
PCB-1268 Peak 1	0.1859			0.1859						20.0			
PCB-1268 Peak 2	0.1759			0.1759						20.0			
PCB-1268 Peak 3	0.1493			0.1493						20.0			
PCB-1268 Peak 4	0.0609			0.0609						20.0			
PCB-1268 Peak 5	0.4761			0.4761						20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI

GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-1025558-1 Analy Batch No.: 341212  
 SDG No.: 680102558-1  
 Instrument ID: CSGZ GC Column: CLP I ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/28/2014 19:11 Calibration End Date: 07/28/2014 19:11 Calibration ID: 32570

Calibration Files:

LEVEL: LAB SAMPLE ID: LAB FILE ID:  
 Level 1 IC 680-341212/13 ZG28018.D

ANALYTE	LVL 1	RRF	CURVE TYPE	COEFFICIENT			MIN RRF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
				B	M1	M2						
PCB-1248 Peak 1	0.0164		Lin2	0.0003	0.0158				0.9950			0.9900
PCB-1248 Peak 2	0.0053		Lin2	0.0001	0.0052				0.9950			0.9900
PCB-1248 Peak 3	0.0213		Ave		0.0222		8.1	20.0				
PCB-1248 Peak 4	0.0109		Ave		0.0111		8.8	20.0				
PCB-1248 Peak 5	0.0090		Ave		0.0098		8.9	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102558-1 Analy Batch No.: 341212  
 SDG No.: 680102558-1  
 Instrument ID: CSGZ GC Column: CLP II ID: 0.32 (mm) Heated Purge: (Y/N) N  
 Calibration Start Date: 07/28/2014 19:11 Calibration End Date: 07/28/2014 19:11 Calibration ID: 32571

Calibration Files:  
 LEVEL: LAB SAMPLE ID: ZG28018.D  
 Level 1 IC 680-341212/13

ANALYTE	RRF		CURVE TYPE			COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1		Ave	Ave	Ave	B	M1	M2								
PCB-1248 Peak 1	0.0119		Ave										20.0			
PCB-1248 Peak 2	0.0242		Ave										20.0			
PCB-1248 Peak 3	0.0292		Ave										20.0			
PCB-1248 Peak 4	0.0080		Ave										20.0			
PCB-1248 Peak 5	0.0206		Ave										20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-341212/9 Calibration Date: 07/28/2014 18:09  
 Instrument ID: CSGZ Calib Start Date: 07/28/2014 16:36  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/28/2014 17:54  
 Lab File ID: ZG28014.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin2		0.0390		0.511	0.500	2.3	20.0
PCB-1016 Peak 2	Ave	0.0497	0.0493		0.496	0.500	-0.9	20.0
PCB-1016 Peak 3	Lin2		0.0290		0.507	0.500	1.5	20.0
PCB-1016 Peak 4	Lin2		0.0219		0.505	0.500	1.1	20.0
PCB-1016 Peak 5	Lin2		0.0266		0.502	0.500	0.4	20.0
PCB-1260 Peak 1	Lin2		0.0447		0.431	0.500	-13.8	20.0
PCB-1260 Peak 2	Lin2		0.0256		0.456	0.500	-8.9	20.0
PCB-1260 Peak 3	Lin2		0.0246		0.461	0.500	-7.9	20.0
PCB-1260 Peak 4	Ave	0.1228	0.1081		0.440	0.500	-12.0	20.0
PCB-1260 Peak 5	Ave	0.0608	0.0579		0.476	0.500	-4.8	20.0
Tetrachloro-m-xylene	Ave	1.040	0.8218		0.0253	0.0320	-20.9*	20.0
DCB Decachlorobiphenyl	Ave	0.9910	0.8206		0.0265	0.0320	-17.2	20.0



FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: ICV 680-341212/9 Calibration Date: 07/28/2014 18:09  
 Instrument ID: CSGZ Calib Start Date: 07/28/2014 16:36  
 GC Column: CLP II ID: 0.32 (mm) Calib End Date: 07/28/2014 17:54  
 Lab File ID: ZG28014.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0266	0.0262		0.492	0.500	-1.5	20.0
PCB-1016 Peak 2	Ave	0.0112	0.0114		0.510	0.500	1.9	20.0
PCB-1016 Peak 3	Ave	0.0159	0.0160		0.506	0.500	1.2	20.0
PCB-1016 Peak 4	Ave	0.0535	0.0552		0.515	0.500	3.1	20.0
PCB-1016 Peak 5	Ave	0.0336	0.0338		0.503	0.500	0.7	20.0
PCB-1260 Peak 1	Lin2		0.0499		0.436	0.500	-12.8	20.0
PCB-1260 Peak 2	Ave	0.0324	0.0285		0.440	0.500	-12.0	20.0
PCB-1260 Peak 3	Ave	0.0638	0.0581		0.455	0.500	-8.9	20.0
PCB-1260 Peak 4	Ave	0.0319	0.0282		0.442	0.500	-11.6	20.0
PCB-1260 Peak 5	Ave	0.1357	0.1230		0.453	0.500	-9.3	20.0
Tetrachloro-m-xylene	Ave	1.023	0.8294		0.0259	0.0320	-18.9	20.0
DCB Decachlorobiphenyl	Ave	1.135	0.9557		0.0270	0.0320	-15.8	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-341704/28 Calibration Date: 07/30/2014 21:43  
 Instrument ID: CSGZ Calib Start Date: 07/28/2014 16:36  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/28/2014 17:54  
 Lab File ID: ZG30028.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin2		0.0394		0.516	0.500	3.2	20.0
PCB-1016 Peak 2	Ave	0.0497	0.0506		0.509	0.500	1.7	20.0
PCB-1016 Peak 3	Lin2		0.0303		0.530	0.500	6.0	20.0
PCB-1016 Peak 4	Lin2		0.0223		0.513	0.500	2.6	20.0
PCB-1016 Peak 5	Lin2		0.0280		0.530	0.500	6.0	20.0
PCB-1260 Peak 1	Lin2		0.0481		0.464	0.500	-7.1	20.0
PCB-1260 Peak 2	Lin2		0.0254		0.453	0.500	-9.5	20.0
PCB-1260 Peak 3	Lin2		0.0242		0.451	0.500	-9.8	20.0
PCB-1260 Peak 4	Ave	0.1228	0.1018		0.414	0.500	-17.1	20.0
PCB-1260 Peak 5	Ave	0.0608	0.0483		0.397	0.500	-20.6*	20.0
Tetrachloro-m-xylene	Ave	1.040	1.074		0.0331	0.0320	3.3	20.0
DCB Decachlorobiphenyl	Ave	0.9910	0.5866		0.0189	0.0320	-40.8*	20.0

*FL*

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCVIS 680-341704/28 Calibration Date: 07/30/2014 21:43  
 Instrument ID: CSGZ Calib Start Date: 07/28/2014 16:36  
 GC Column: CLP II ID: 0.32 (mm) Calib End Date: 07/28/2014 17:54  
 Lab File ID: ZG30028.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0266	0.0270		0.508	0.500	1.6	20.0
PCB-1016 Peak 2	Ave	0.0112	0.0118		0.527	0.500	5.3	20.0
PCB-1016 Peak 3	Ave	0.0159	0.0163		0.513	0.500	2.6	20.0
PCB-1016 Peak 4	Ave	0.0535	0.0566		0.529	0.500	5.8	20.0
PCB-1016 Peak 5	Ave	0.0336	0.0352		0.523	0.500	4.7	20.0
PCB-1260 Peak 1	Lin2		0.0528		0.462	0.500	-7.7	20.0
PCB-1260 Peak 2	Ave	0.0324	0.0274		0.423	0.500	-15.3	20.0
PCB-1260 Peak 3	Ave	0.0638	0.0567		0.444	0.500	-11.2	20.0
PCB-1260 Peak 4	Ave	0.0319	0.0276		0.433	0.500	-13.4	20.0
PCB-1260 Peak 5	Ave	0.1357	0.1113		0.410	0.500	-18.0	20.0
Tetrachloro-m-xylene	Ave	1.023	1.096		0.0343	0.0320	7.1	20.0
DCB Decachlorobiphenyl	Ave	1.135	0.6554		0.0185	0.0320	-42.2*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-341704/49 Calibration Date: 07/31/2014 03:10  
 Instrument ID: CSGZ Calib Start Date: 07/28/2014 16:36  
 GC Column: CLP I ID: 0.32 (mm) Calib End Date: 07/28/2014 17:54  
 Lab File ID: ZG30049.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin2		0.0376		0.491	0.500	-1.8	20.0
PCB-1016 Peak 2	Ave	0.0497	0.0476		0.478	0.500	-4.3	20.0
PCB-1016 Peak 3	Lin2		0.0283		0.495	0.500	-1.0	20.0
PCB-1016 Peak 4	Lin2		0.0208		0.477	0.500	-4.5	20.0
PCB-1016 Peak 5	Lin2		0.0259		0.488	0.500	-2.3	20.0
PCB-1260 Peak 1	Lin2		0.0451		0.436	0.500	-12.9	20.0
PCB-1260 Peak 2	Lin2		0.0239		0.424	0.500	-15.3	20.0
PCB-1260 Peak 3	Lin2		0.0227		0.424	0.500	-15.3	20.0
PCB-1260 Peak 4	Ave	0.1228	0.1007		0.410	0.500	-18.1	20.0
PCB-1260 Peak 5	Ave	0.0608	0.0495		0.407	0.500	-18.7	20.0
Tetrachloro-m-xylene	Ave	1.040	1.029		0.0317	0.0320	-1.0	20.0
DCB Decachlorobiphenyl	Ave	0.9910	0.7784		0.0251	0.0320	-21.5*	20.0

FORM VII  
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102558-1  
 SDG No.: 680102558-1  
 Lab Sample ID: CCV 680-341704/49 Calibration Date: 07/31/2014 03:10  
 Instrument ID: CSGZ Calib Start Date: 07/28/2014 16:36  
 GC Column: CLP II ID: 0.32(mm) Calib End Date: 07/28/2014 17:54  
 Lab File ID: ZG30049.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0266	0.0259		0.487	0.500	-2.6	20.0
PCB-1016 Peak 2	Ave	0.0112	0.0113		0.506	0.500	1.1	20.0
PCB-1016 Peak 3	Ave	0.0159	0.0156		0.493	0.500	-1.4	20.0
PCB-1016 Peak 4	Ave	0.0535	0.0530		0.496	0.500	-0.9	20.0
PCB-1016 Peak 5	Ave	0.0336	0.0331		0.493	0.500	-1.3	20.0
PCB-1260 Peak 1	Lin2		0.0505		0.441	0.500	-11.7	20.0
PCB-1260 Peak 2	Ave	0.0324	0.0266		0.410	0.500	-18.0	20.0
PCB-1260 Peak 3	Ave	0.0638	0.0549		0.430	0.500	-14.0	20.0
PCB-1260 Peak 4	Ave	0.0319	0.0269		0.421	0.500	-15.9	20.0
PCB-1260 Peak 5	Ave	0.1357	0.1125		0.414	0.500	-17.1	20.0
Tetrachloro-m-xylene	Ave	1.023	1.054		0.0330	0.0320	3.0	20.0
DCB Decachlorobiphenyl	Ave	1.135	0.9030		0.0255	0.0320	-20.4*	20.0

Report Date: 22-Jul-2014 11:41:04

Chrom Revision: 2.2 24-Jun-2014 07:21:42

*Standard*

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140721-11196.b\ZG21017.D

Injection Date: 21-Jul-2014 20:13:07

Instrument ID: CSGZ

Operator ID: LIMS import

Lims ID: icv pcb

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

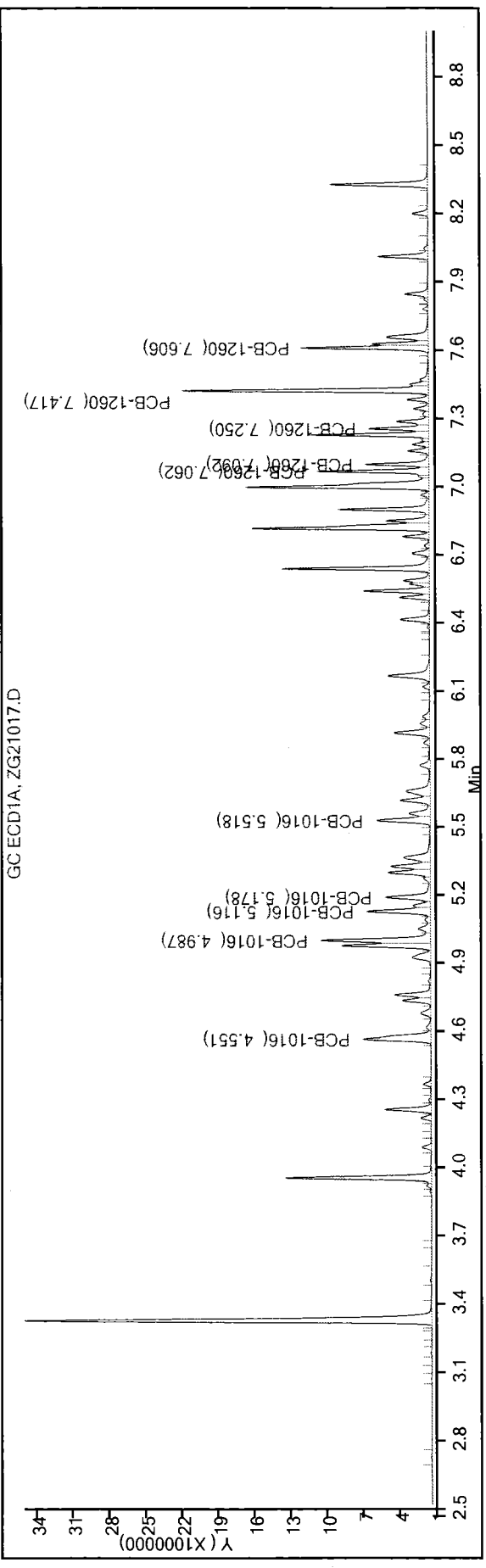
Dil. Factor: 1.0000

ALS Bottle#: 17

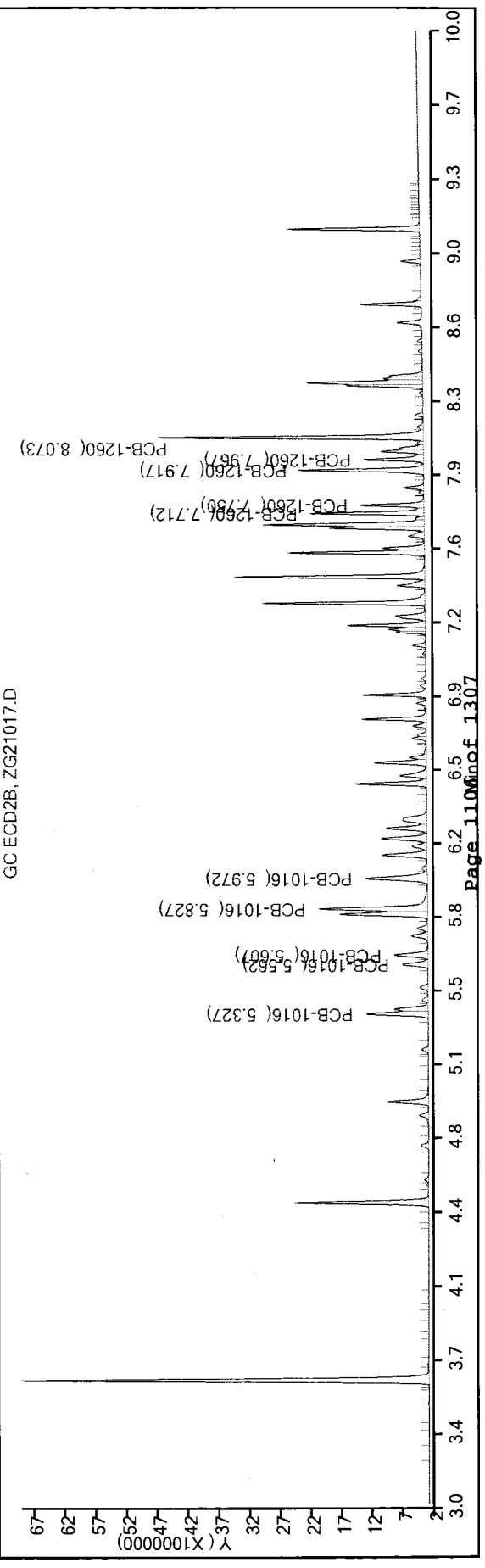
Method: PestPCB\_CSGZ

Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I (0.32 mm)



Column: Rtx CLPesticides II (0.32 mm)



Report Date: 31-Jul-2014 10:10:39

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30032.D

Injection Date: 30-Jul-2014 22:45:57

Instrument ID: CSGZ

Lims ID: 680-102558-A-25-B

Lab Sample ID: 680-102558-25

Client ID: SD-276-SS

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

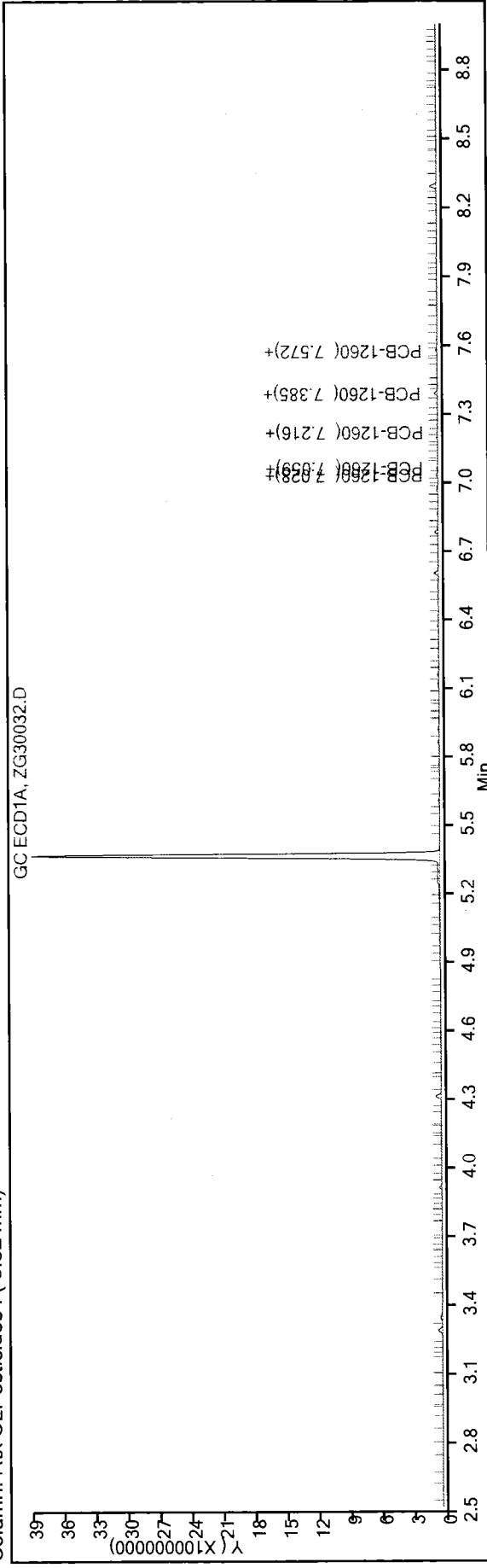
Limit Group: 8081B\_8082A

Operator ID: LIMS import

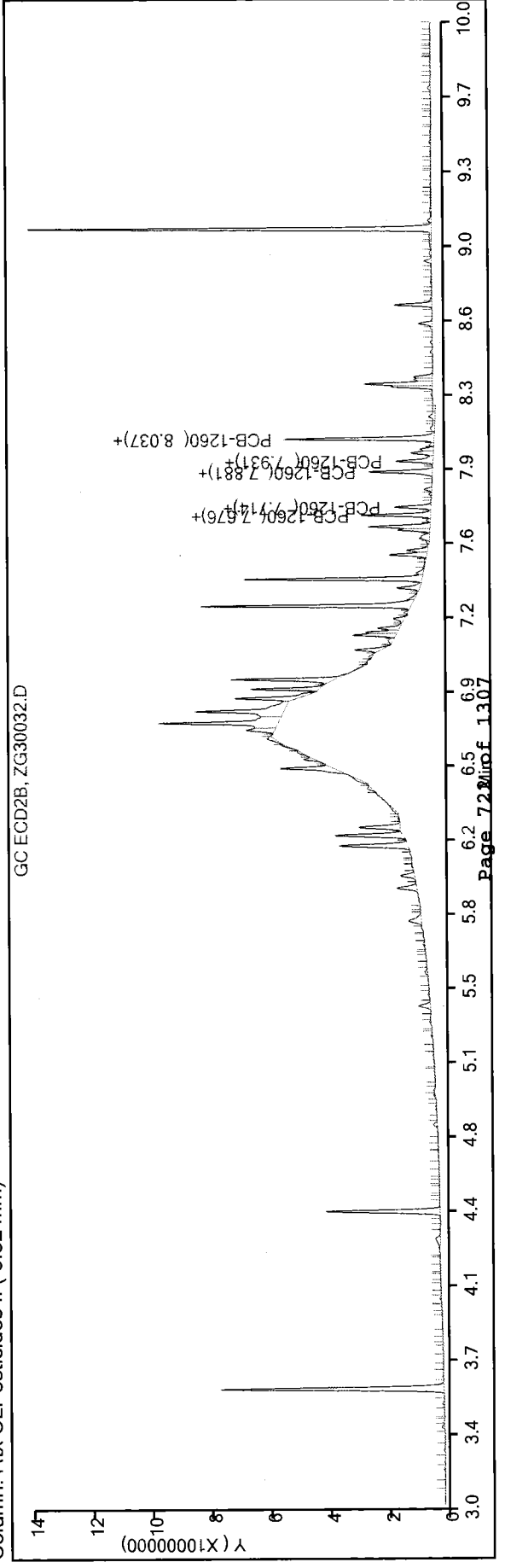
Worklist Smp#: 32

ALS Bottle#: 32

Column: Rtx CLPesticides I (0.32 mm)



Column: Rtx CLPesticides II (0.32 mm)



Report Date: 31-Jul-2014 10:10:39

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30032.D

Injection Date: 30-Jul-2014 22:45:57

Instrument ID: CSGZ

Lims ID: 680-102558-A-25-B

Lab Sample ID: 680-102558-25

Client ID: SD-276-SS

Operator ID: LIMS import

ALS Bottle#: 32 Worklist Smp#: 32

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

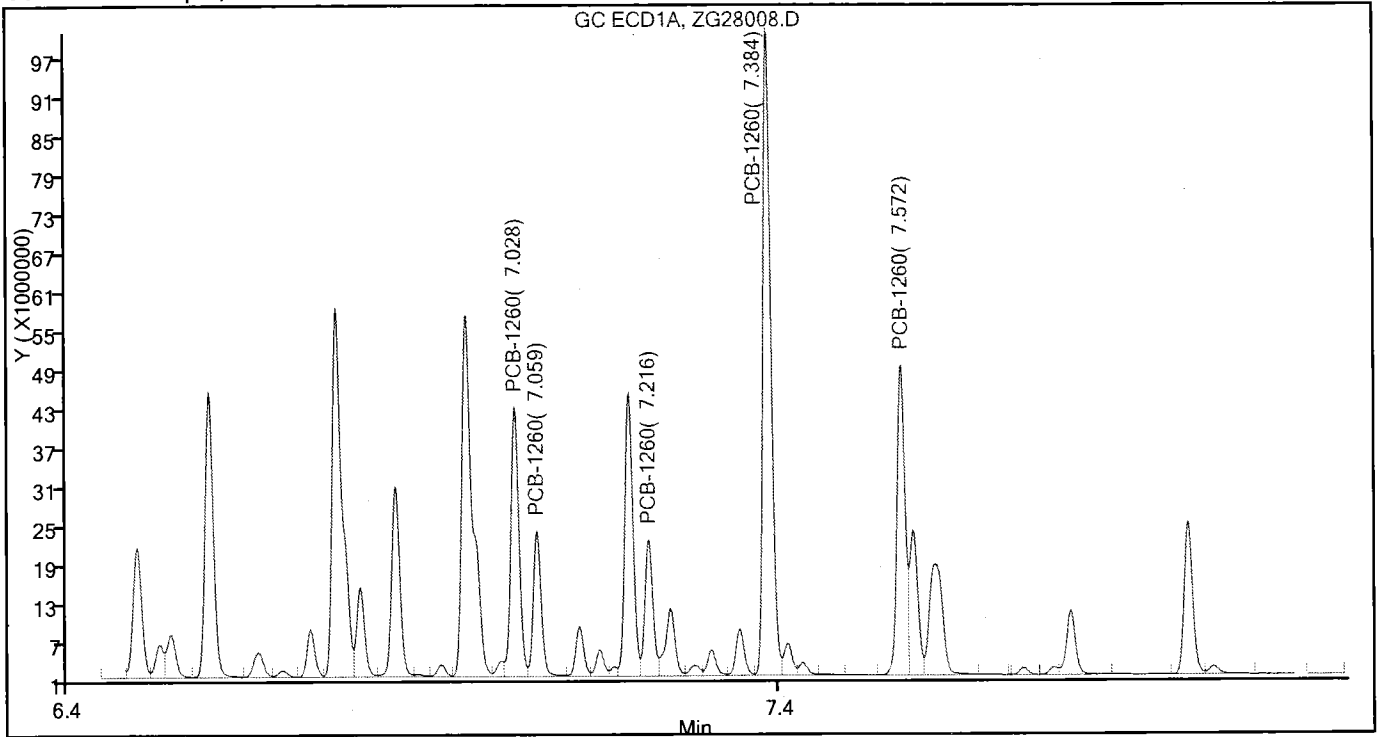
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)

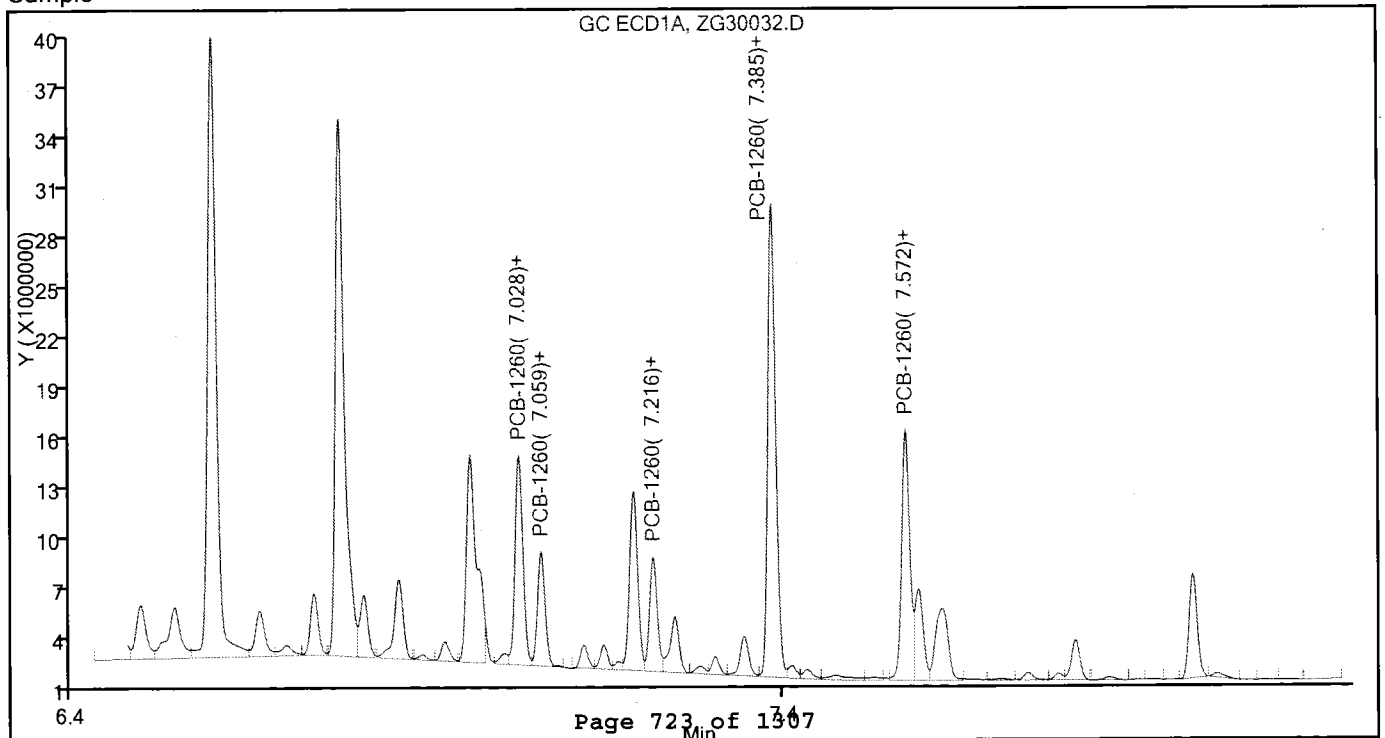
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample





Report Date: 31-Jul-2014 10:10:40

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30033.D

Injection Date: 30-Jul-2014 23:01:34

Instrument ID: CSGZ

Operator ID: LIMS import

Lims ID: 680-102558-A-26-B

Lab Sample ID: 680-102558-26

Worklist Smp#: 33

Client ID: SD-275-SS

Injection Vol: 1.0 ul

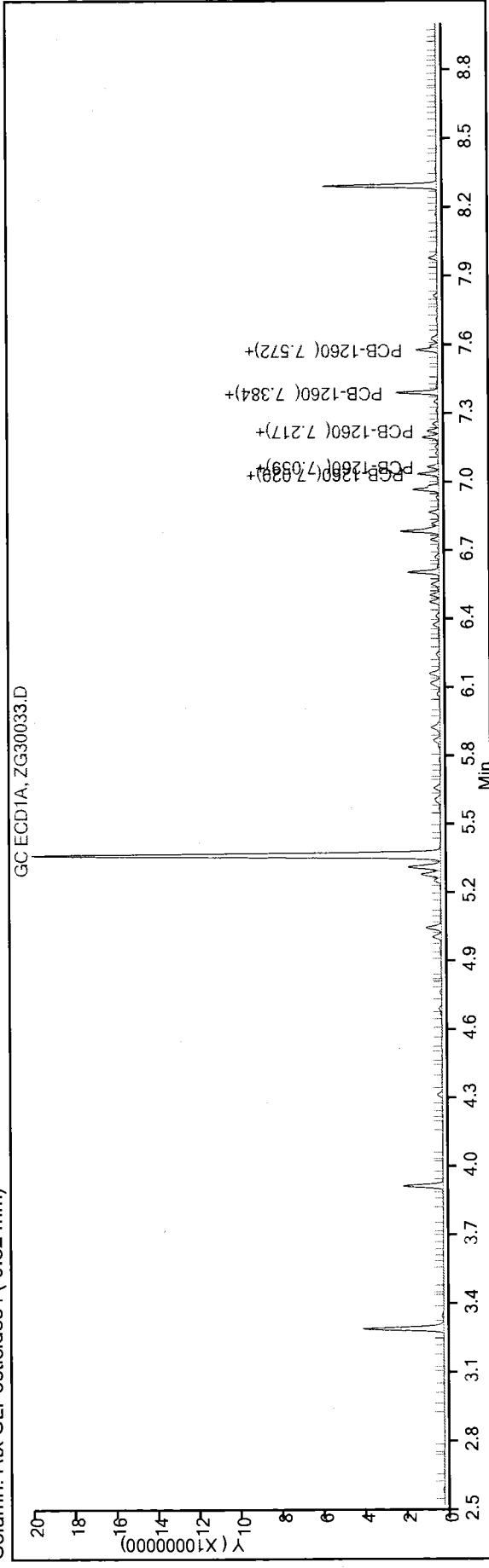
Dil. Factor: 1.0000

ALS Bottle#: 33

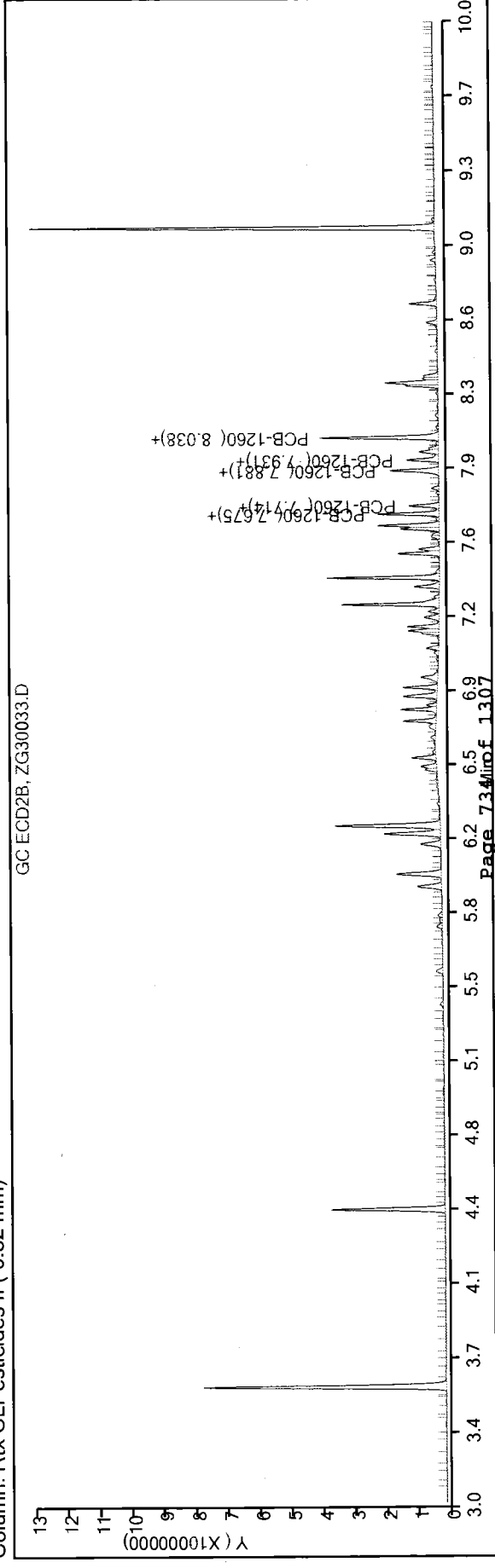
Method: PestPCB\_CSGZ

Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)



Column: Rtx CLPesticides II ( 0.32 mm)



Report Date: 31-Jul-2014 10:10:41

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30033.D

Injection Date: 30-Jul-2014 23:01:34

Instrument ID: CSGZ

Lims ID: 680-102558-A-26-B

Lab Sample ID: 680-102558-26

Client ID: SD-275-SS

Operator ID: LIMS import

ALS Bottle#: 33 Worklist Smp#: 33

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

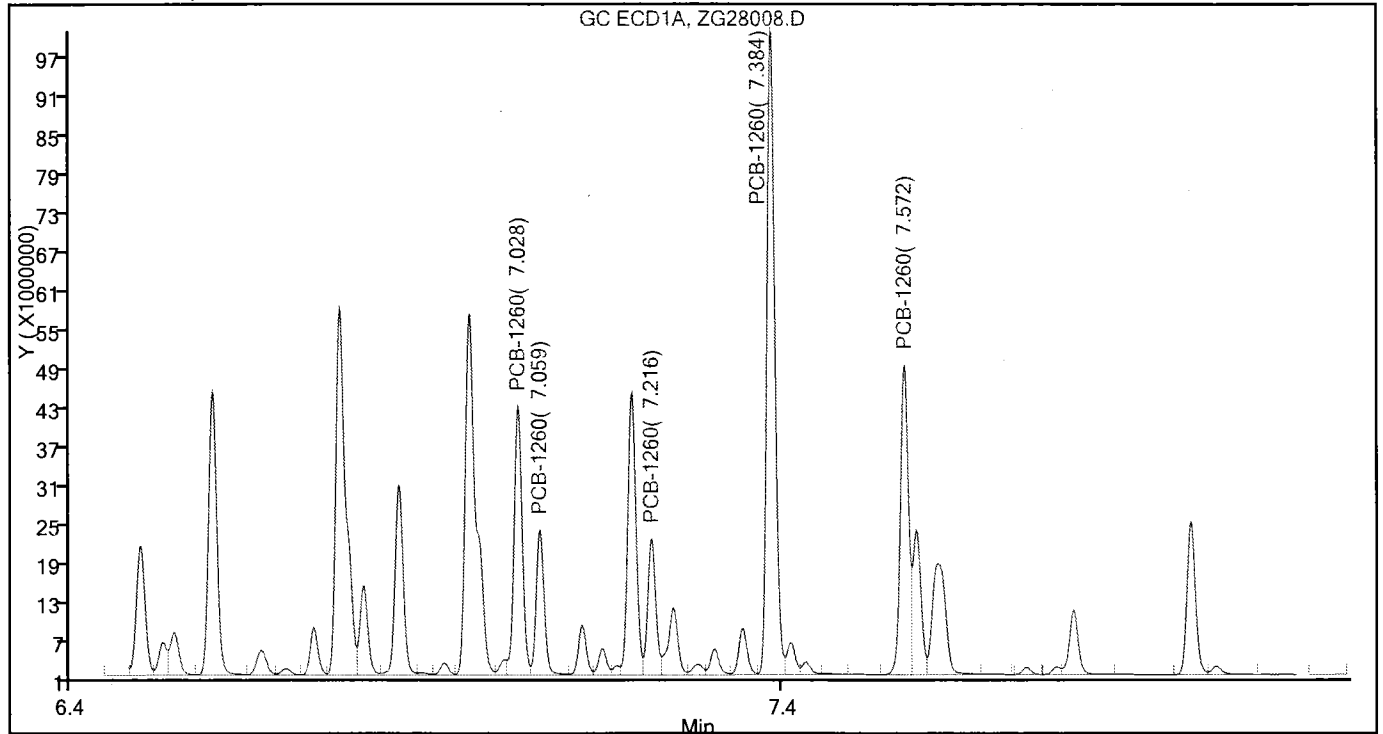
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)

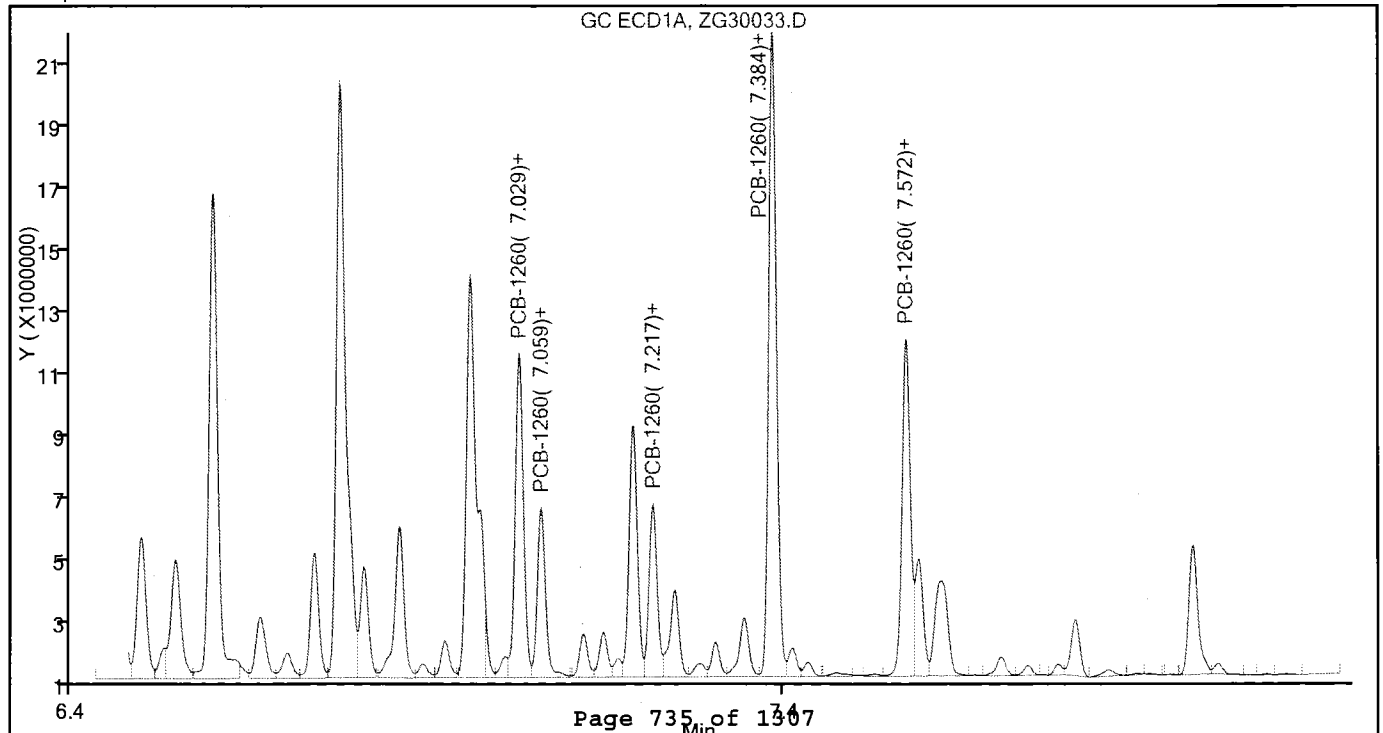
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



Report Date: 31-Jul-2014 10:10:42

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30034.D

Injection Date: 30-Jul-2014 23:17:05

Instrument ID: CSGZ

Operator ID: LIMS import

Lims ID: 680-102558-A-27-B

Lab Sample ID: 680-102558-27

Worklist Smp#: 34

Client ID: SD-252-SS

Injection Vol: 1.0 ul

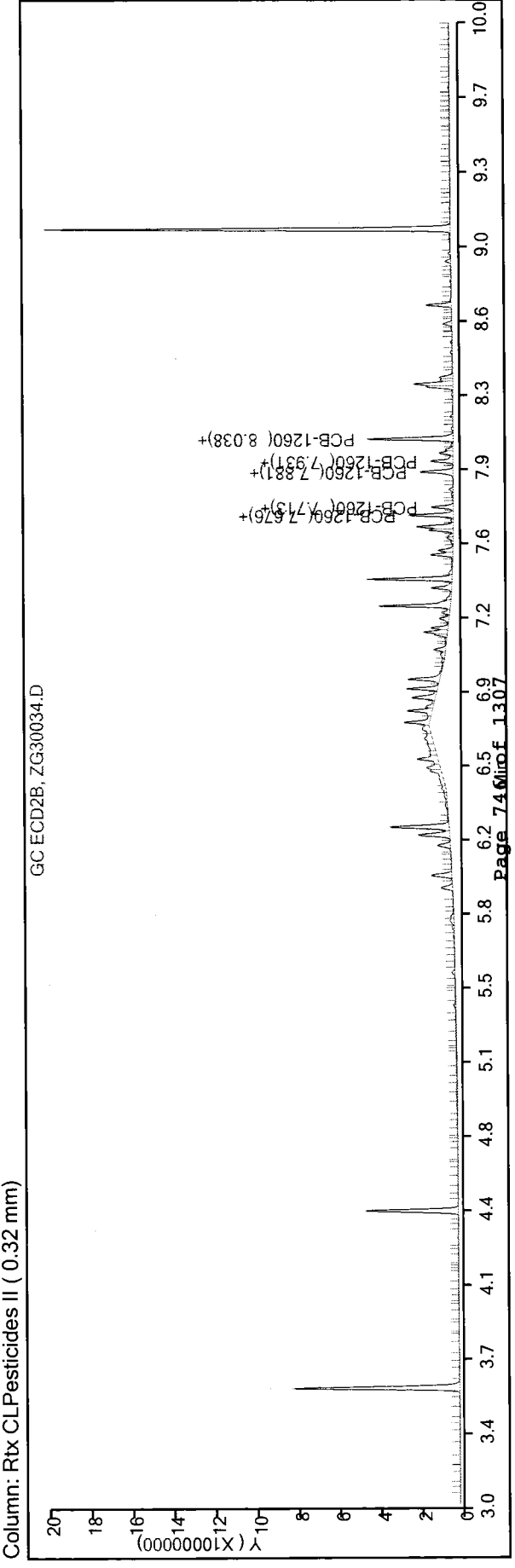
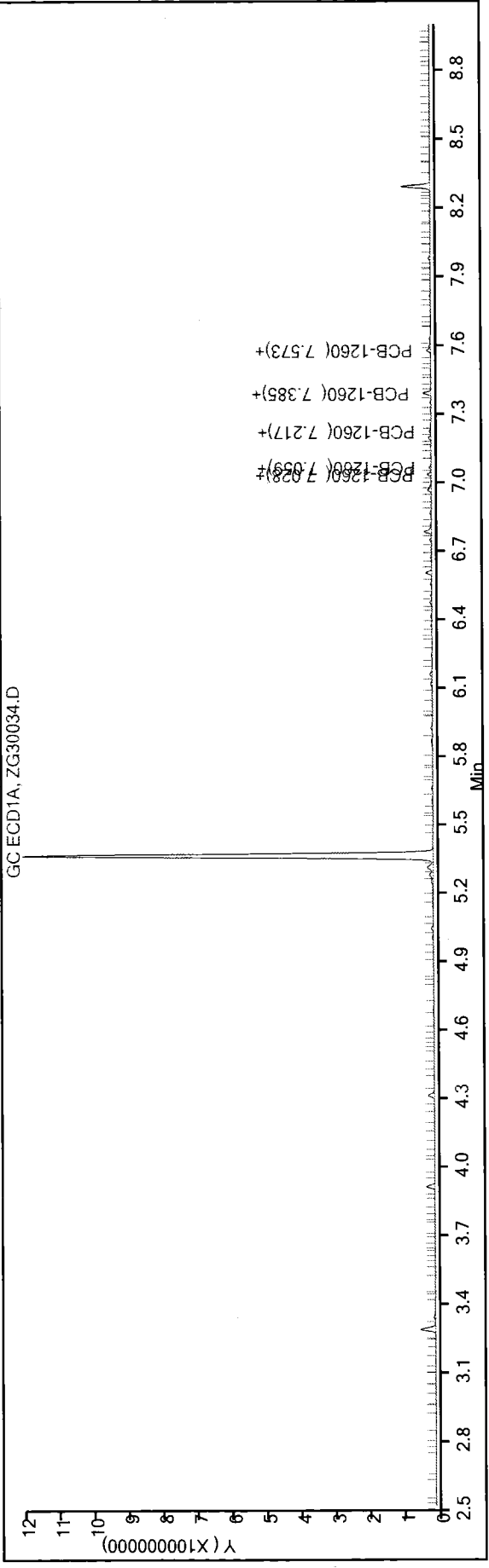
Dil. Factor: 1.0000

ALS Bottle#: 34

Method: PestPCB\_CSGZ

Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)



Report Date: 31-Jul-2014 10:10:42

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30034.D

Injection Date: 30-Jul-2014 23:17:05

Instrument ID: CSGZ

Lims ID: 680-102558-A-27-B

Lab Sample ID: 680-102558-27

Client ID: SD-252-SS

Operator ID: LIMS import

ALS Bottle#: 34

Worklist Smp#: 34

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

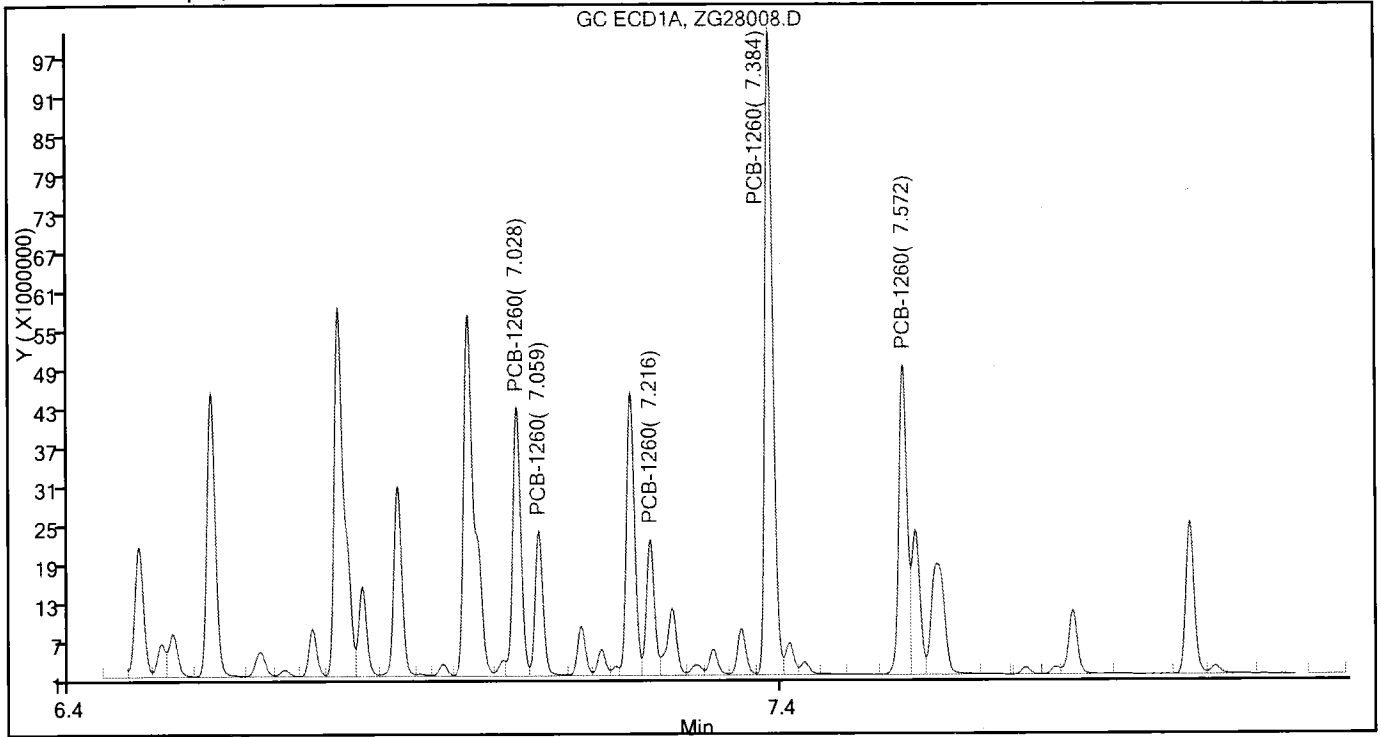
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)

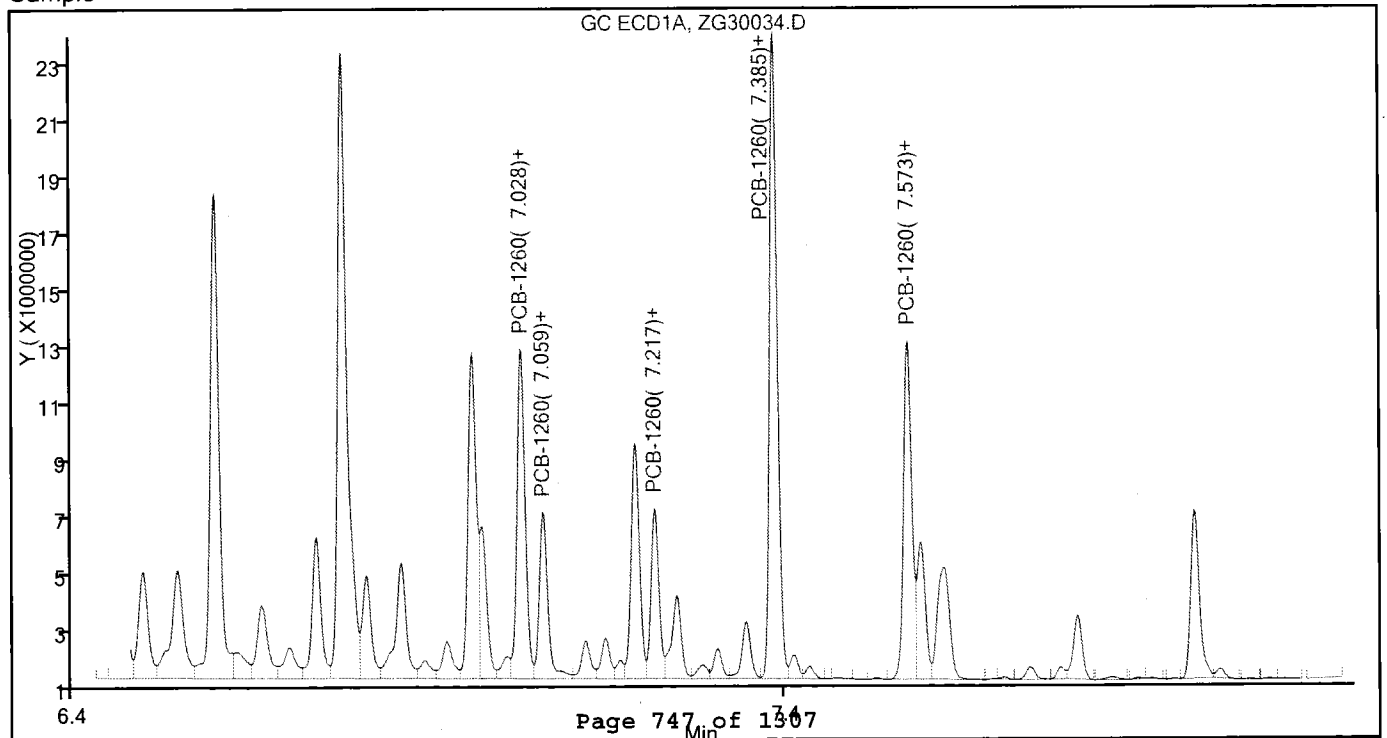
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



Report Date: 31-Jul-2014 10:53:55

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30035.D

Injection Date: 30-Jul-2014 23:32:37

Instrument ID: CSGZ

Lims ID: 680-102558-A-28-B

Lab Sample ID: 680-102558-28

Client ID: SD-253-SS

Injection Vol: 1.0 ul

Method: PestPCB\_CSGZ

Dil. Factor: 1.0000

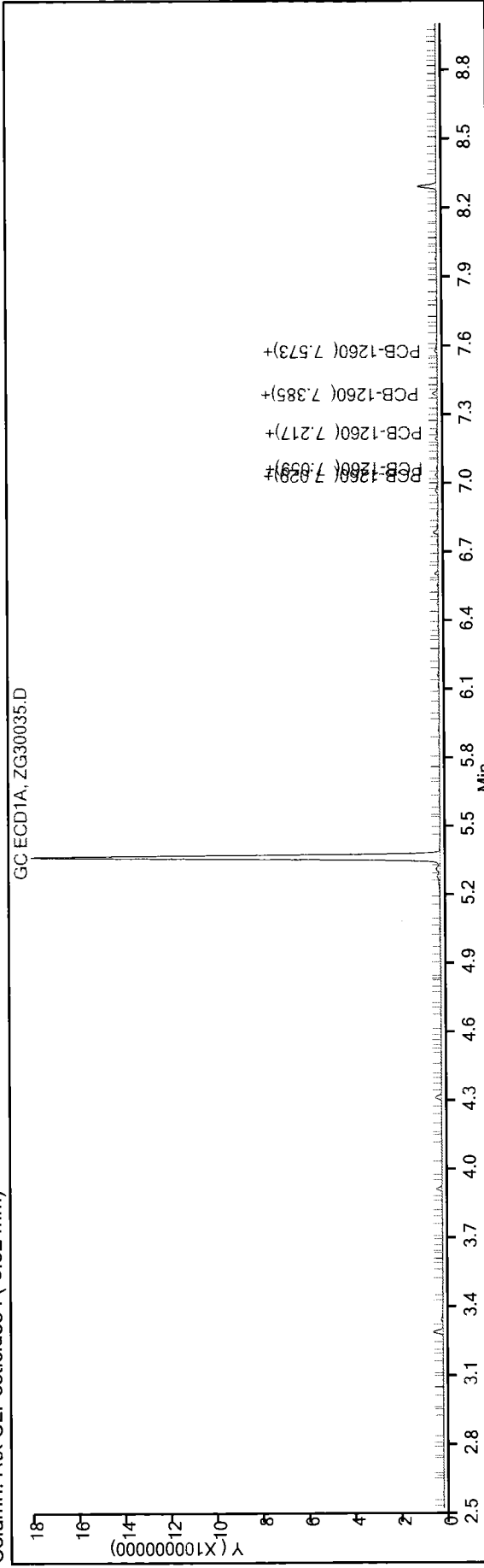
Limit Group: 8081B\_8082A

Operator ID: LIMS import

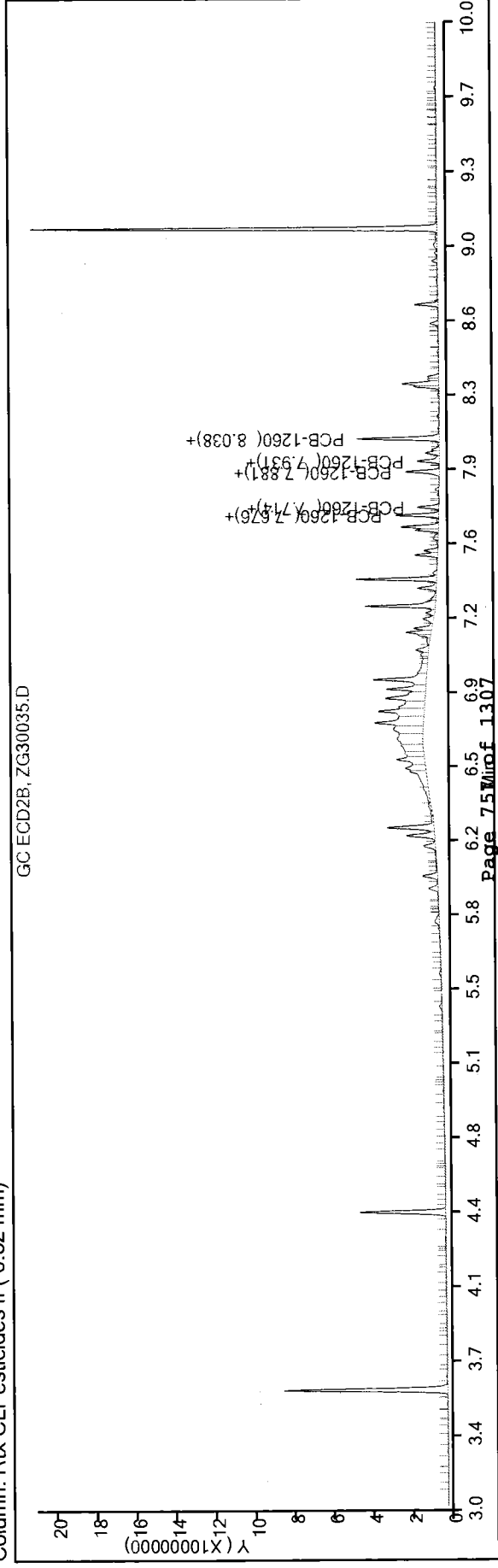
Worklist Smp#: 35

ALS Bottle#: 35

Column: Rtx CLPesticides I ( 0.32 mm)



Column: Rtx CLPesticides II ( 0.32 mm)



Report Date: 31-Jul-2014 10:53:56

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30035.D

Injection Date: 30-Jul-2014 23:32:37

Instrument ID: CSGZ

Lims ID: 680-102558-A-28-B

Lab Sample ID: 680-102558-28

Client ID: SD-253-SS

Operator ID: LIMS import

ALS Bottle#: 35

Worklist Smp#: 35

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

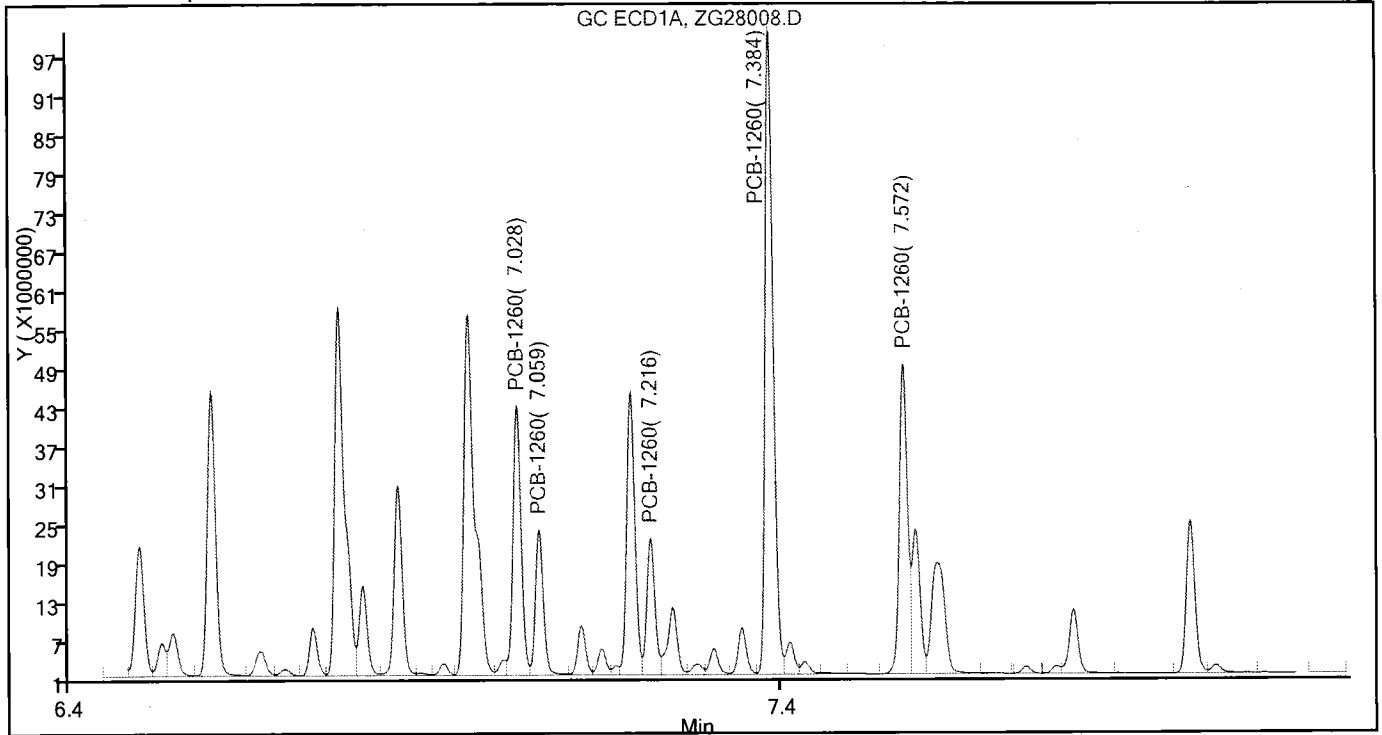
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)

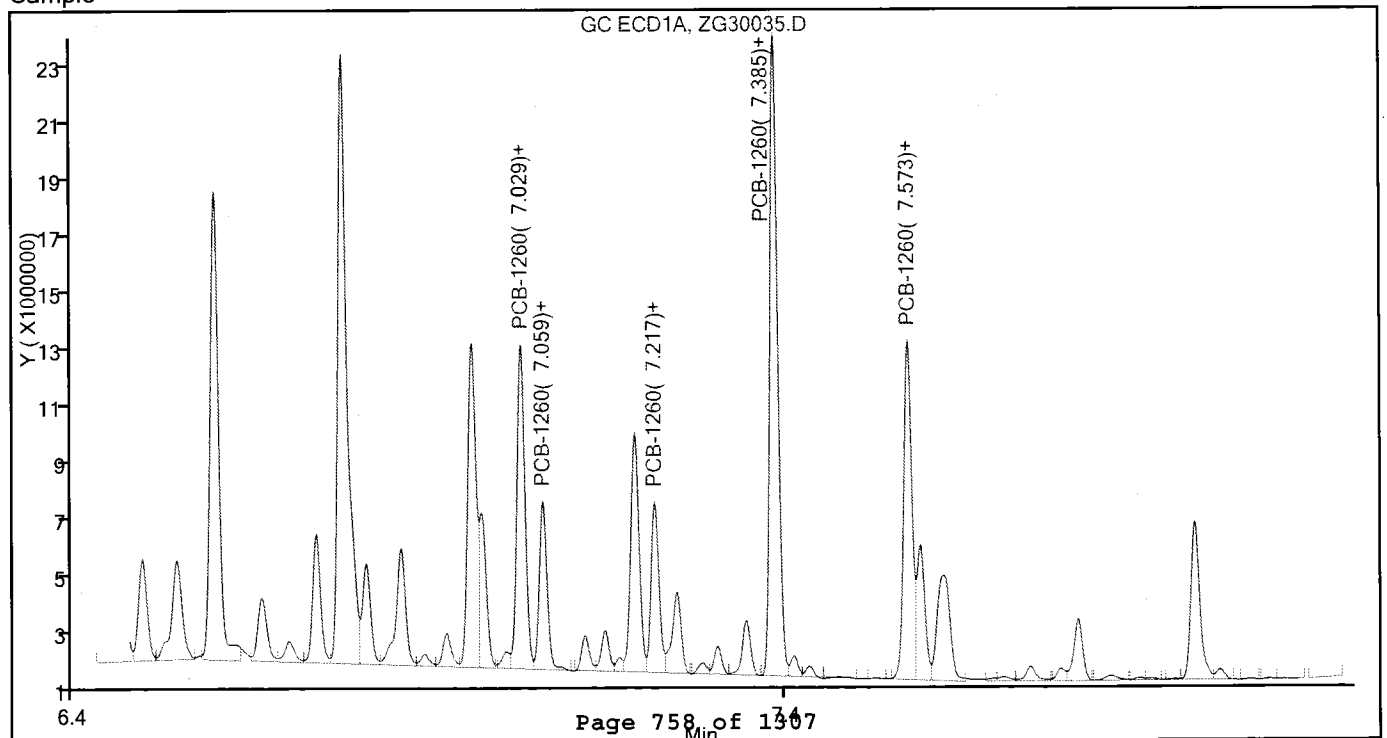
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample



Report Date: 31-Jul-2014 10:10:46

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30036.D

Injection Date: 30-Jul-2014 23:48:23

Instrument ID: CSGZ

Lims ID: 680-102558-A-29-B

Lab Sample ID: 680-102558-29

Client ID: SD-254-SS

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

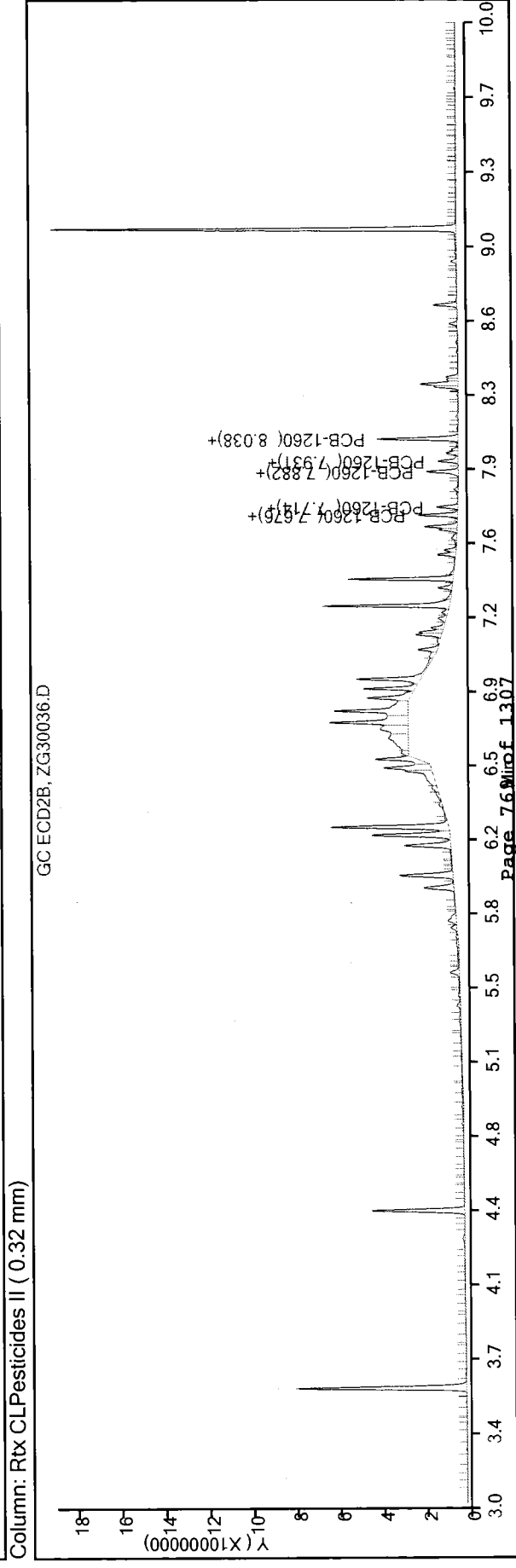
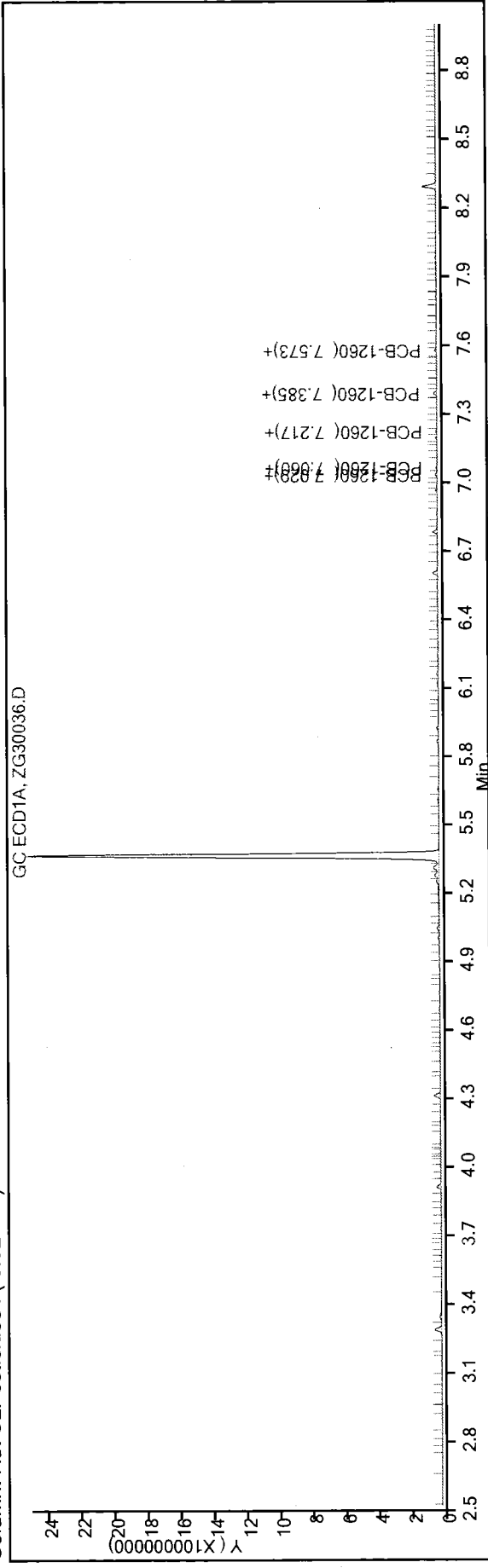
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)

Operator ID: LIMS import

Worklist Smp#: 36

ALS Bottle#: 36



Report Date: 31-Jul-2014 10:10:47

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140730-11463.b\ZG30036.D

Injection Date: 30-Jul-2014 23:48:23

Instrument ID: CSGZ

Lims ID: 680-102558-A-29-B

Lab Sample ID: 680-102558-29

Client ID: SD-254-SS

Operator ID: LIMS import

ALS Bottle#: 36

Worklist Smp#: 36

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

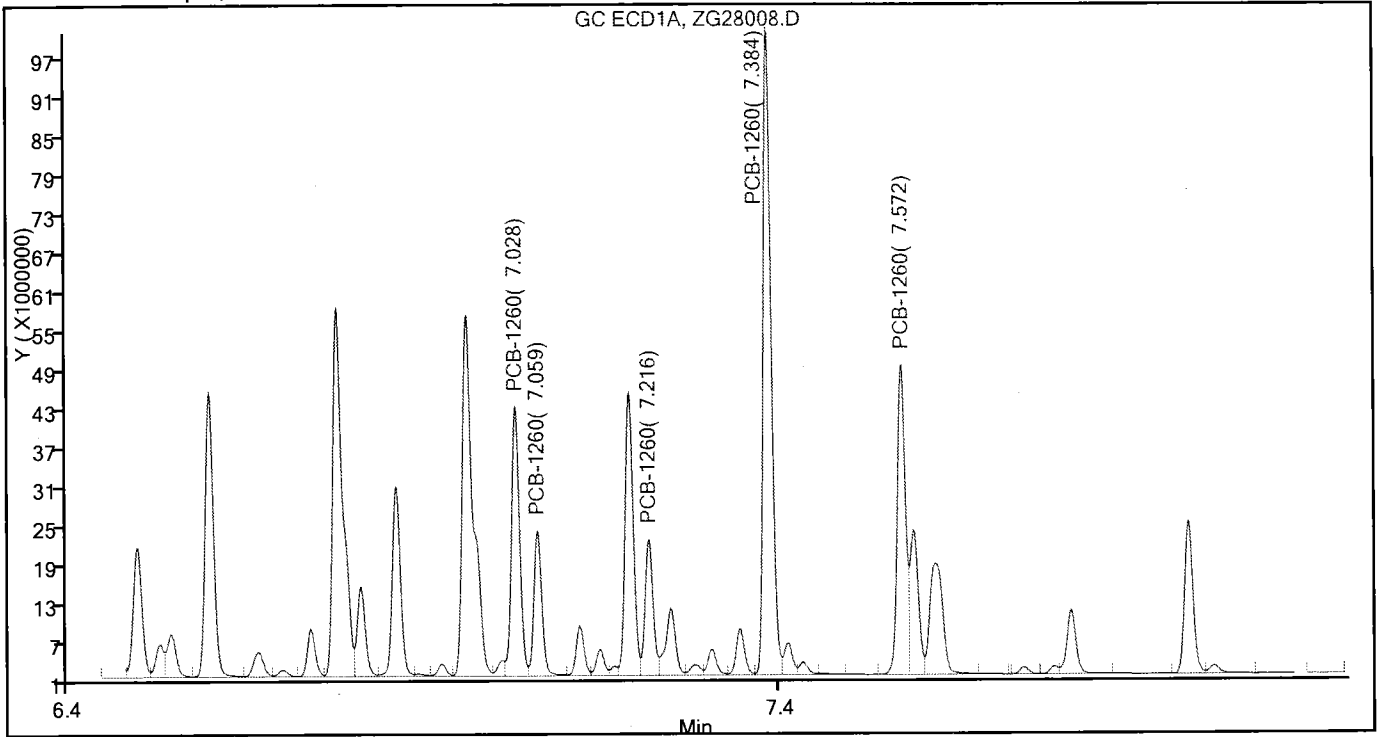
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I ( 0.32 mm)

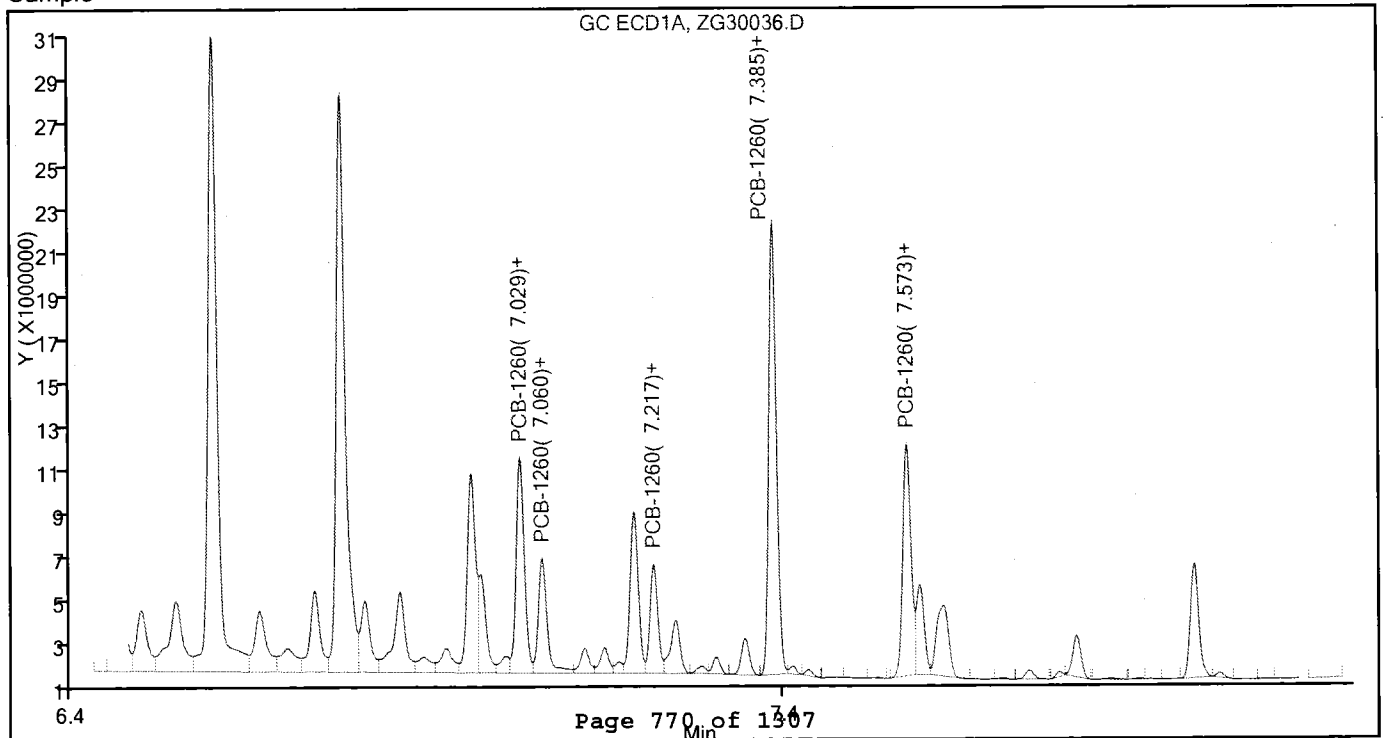
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample





Report Date: 25-Jul-2014 09:12:33

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140723-11243.b\ZG23013.D

Injection Date: 23-Jul-2014 12:04:25

Lims ID: 680-102558-A-30-A

Client ID: SD-255-SS

Injection Vol: 1.0 ul

Method: PestPCB\_CSGZ

Column: Rtx CLPesticides I (0.32 mm)

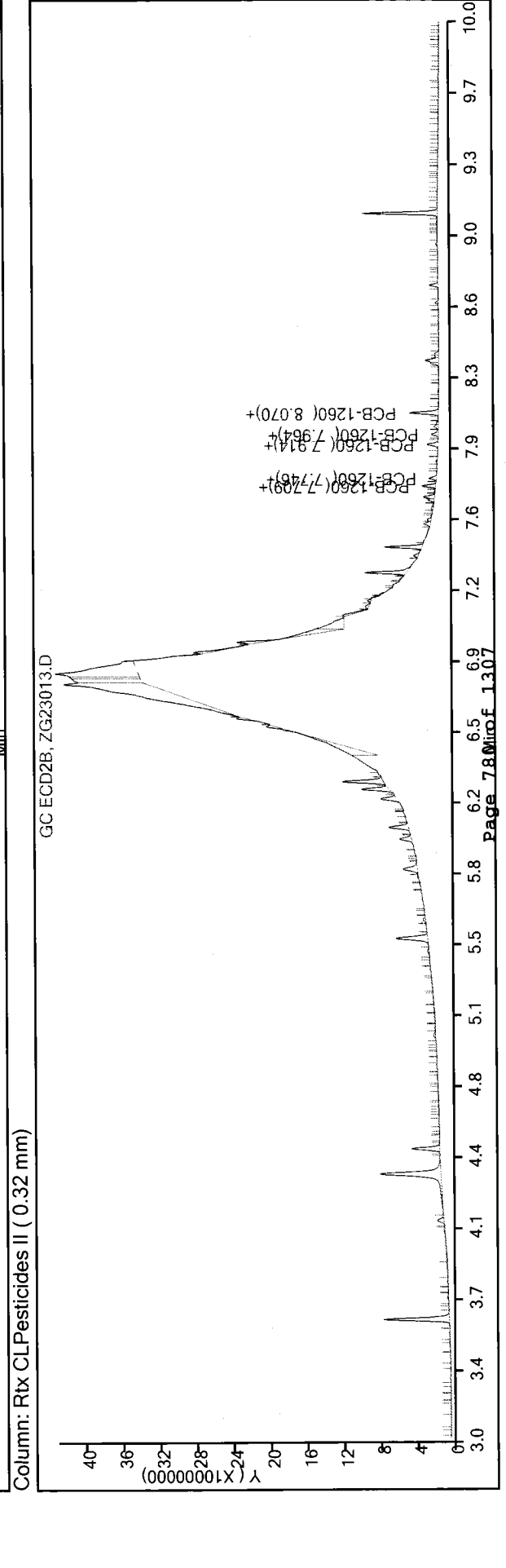
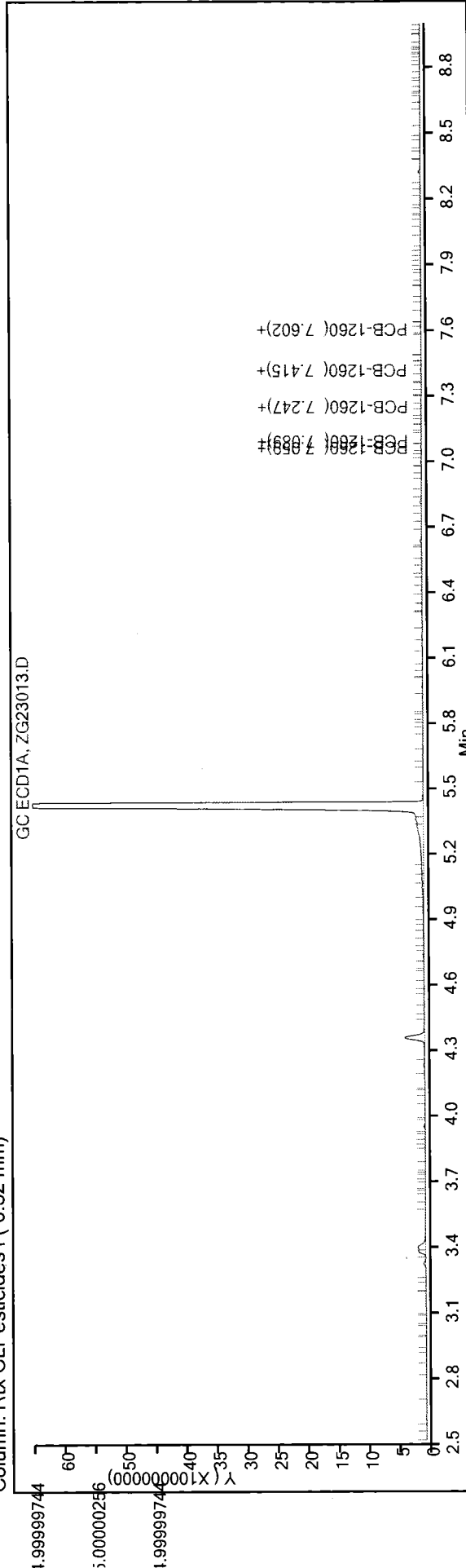
Operator ID: LIMS import

Worklist Smp#: 13

ALS Bottle#: 13

Dil. Factor: 1.0000

Limit Group: 8081B\_8082A



Report Date: 25-Jul-2014 09:12:34

Chrom Revision: 2.2 24-Jul-2014 14:43:32

TestAmerica Savannah

Data File: \\SAVCHROM\ChromData\CSGZ\20140723-11243.b\ZG23013.D

Injection Date: 23-Jul-2014 12:04:25

Instrument ID: CSGZ

Lims ID: 680-102558-A-30-A

Lab Sample ID: 680-102558-30

Client ID: SD-255-SS

Operator ID: LIMS import

ALS Bottle#: 13

Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: PestPCB\_CSGZ

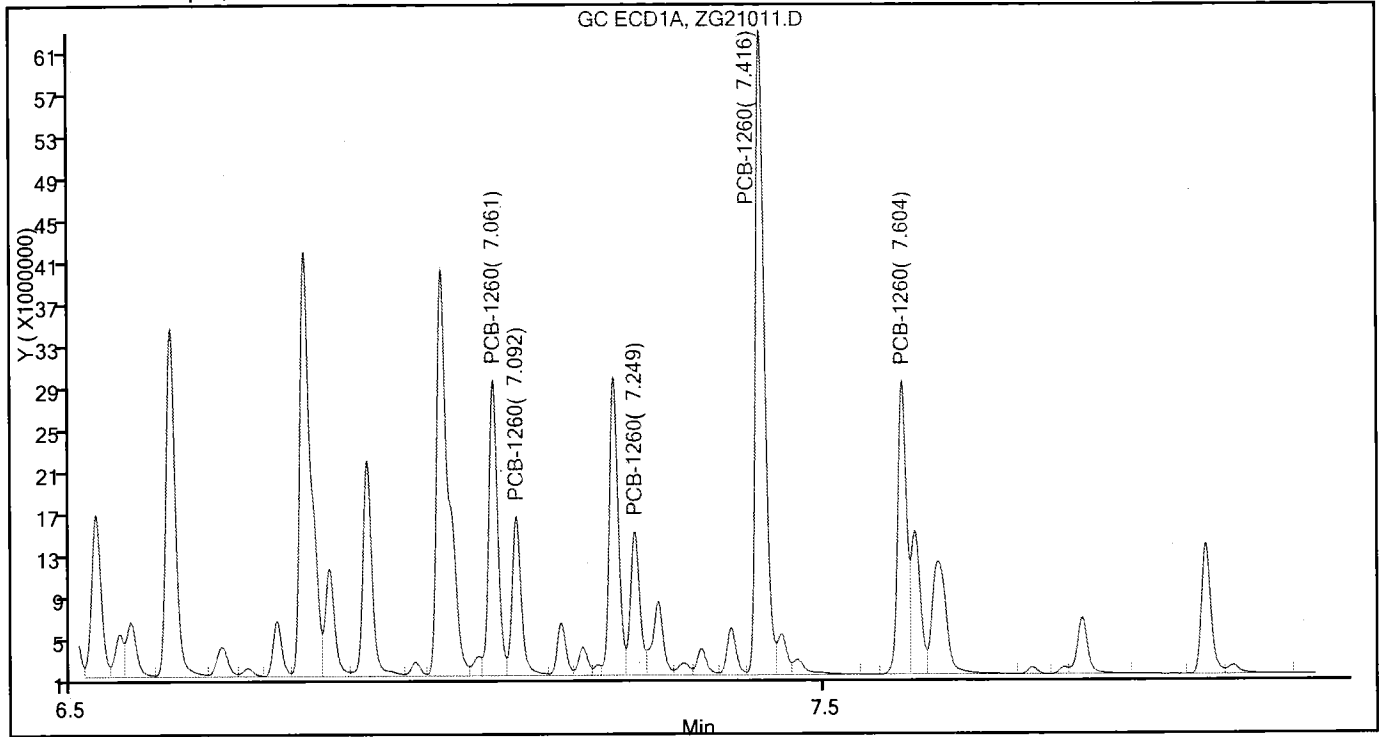
Limit Group: 8081B\_8082A

Column: Rtx CLPesticides I (0.32 mm)

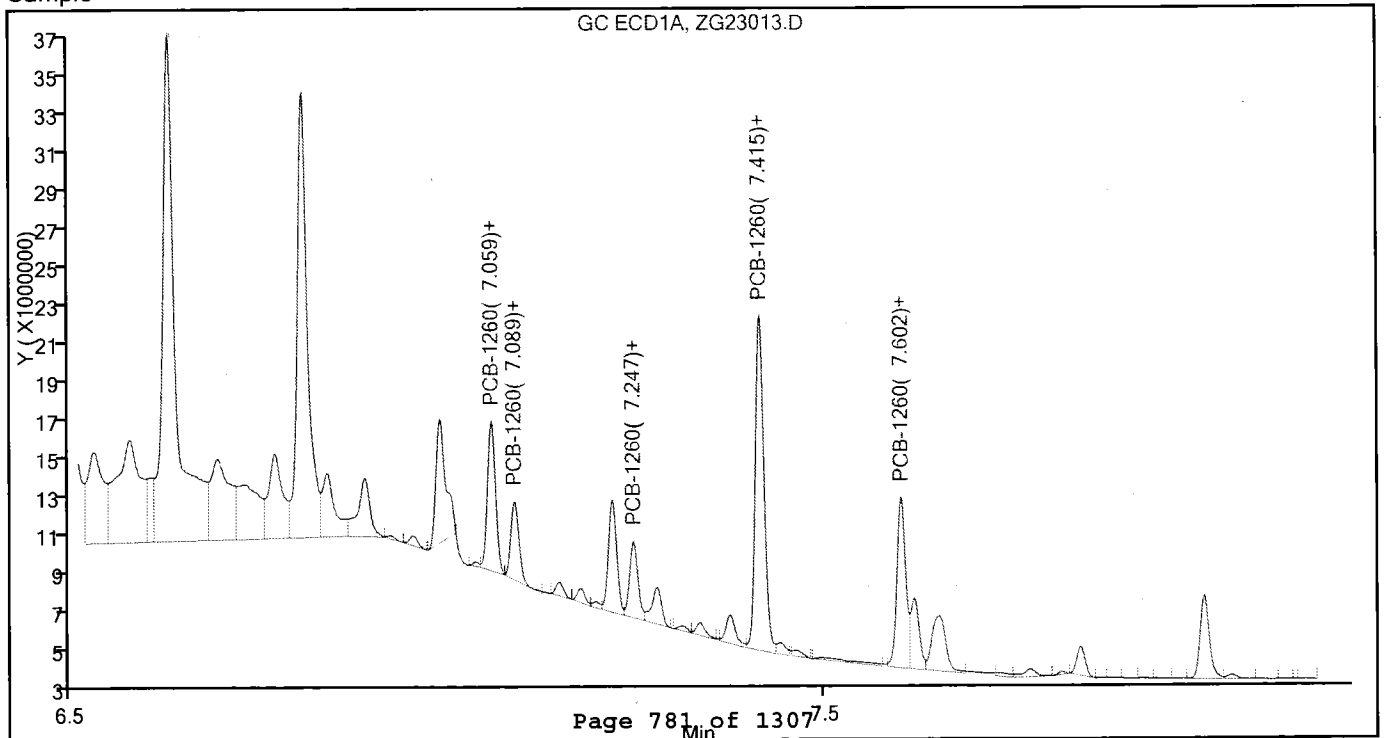
Detector: GC ECD1A

34 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 6



Sample





TO: M. MARTIN DATE: AUGUST 27, 2014  
 FROM: A. COGNETTI COPIES: DV FILE  
 SUBJECT: ORGANIC DATA VALIDATION – PCB HOMOLOGUES  
 LOCKHEED MIDDLE RIVER COMPLEX (MRC) SEDIMENT INVESTIGATION  
 SAMPLE DELIVERY GROUP (SDG) 680-102359-1

SAMPLES: 36 / Sediment / PCB Homologues

SD-223-01	SD-223-02	SD-223-SS	SD-224-01	SD-224-02	SD-224-03
SD-224-SS	SD-225-01	SD-225-02	SD-225-03	SD-225-SS	SD-226-01
SD-226-02	SD-226-03	SD-226-SS	SD-227-01	SD-227-02	SD-227-SS
SD-228-01	SD-228-02	SD-228-03	SD-228-SS	SD-234-01	SD-234-SS
SD-235-01	SD-235-02	SD-235-03	SD-235-SS	SD-236-01	SD-236-02
SD-236-SS	SD-237-01	SD-237-02	SD-237-03	SD-237-SS	SD-Dup-03

Overview

The sample set for Lockheed MRC Sediment Investigation, SDG 680-102359-1, consisted of thirty-six (36) sediment samples. There is one (1) field duplicate sample pair included in this SDG: SD-Dup-03 and SD-237-02.

The samples were collected by Tetra Tech on June 13, 2014 and analyzed by Test America. All analyses were conducted in accordance with EPA Method 680 for PCBs analytical and reporting protocols.

The data contained in this SDG was validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The surrogate recovery of decachlorobiphenyl-13C12 was less than 10% in sample SD-226-SS. The laboratory states that the sample was re-extracted and re-analyzed with similar results. The nondetected results were qualified as rejected (UR) and the detected results were qualified as estimated (J).

Minor Problems

- The surrogate recovery of decachlorobiphenyl-13C12 was outside of quality control limits in several samples.

Sample	Dilution Factor	Surrogate %R	Laboratory Action	Validation Action
SD-226-01	5X	18%	Re-extracted and re-analyzed with similar results	J, UJ
SD-228-01	5X	18%	Re-extracted and re-analyzed with similar results	J, UJ

TO: M. Martin  
 FROM: A. Cagnetti  
 SDG: 680-102359-1  
 DATE: August 27, 2014

Sample	Dilution Factor	Surrogate %R	Laboratory Action	Validation Action
SD-228-02	5X	20%	Re-extracted and re-analyzed with similar results	J, UJ

- Samples SD-223-01, SD-223-SS, SD-224-01, SD-224-SS, SD-225-01, SD-225-SS, SD-226-01, SD-226-SS, SD-227-01, SD-227-SS, SD-228-01, and SD-228-SS contained less than 30% solids. The detected and nondetected results were qualified as estimated (J) and (UJ), respectively.
- Field duplicate imprecision was noted in the field duplicate pair SD-Dup-03 and SD-237-02 for several analytes. The RPD was greater than the 50% quality control limit for tetrachlorobiphenyls and trichlorobiphenyl. The variance was greater than 2X the reporting limit for hexachlorobiphenyl and pentachlorobiphenyls. The detected results of the aforementioned analytes were qualified as estimated (J).
- Several samples had internal standard areas outside quality control limits.

Sample	Internal Standard Area	Validation Action
SD-235-01	phenanthrene-d10 >130%	J
SD-226-01	phenanthrene-d10 >130%	J
SD-Dup-03	chrysene-d12 <70%	J, UJ
SD-227-SS	phenanthrene-d10 and chrysene-d12 <70%	J, UJ
SD-227-01	chrysene-d12 <70%	J, UJ
SD-227-02	chrysene-d12 <70%	J, UJ

Notes

Several samples had surrogate recoveries outside quality control limits. No action was taken as indicated in the table because of sample dilution.

Sample	Dilution Factor	Surrogate %R	Laboratory Action	Validation Action
SD-234-SS	10X	0%	Surrogate diluted out, no action	No action
SD-235-SS	50X	0%	Surrogate diluted out, no action	No action
SD-235-01	20X	0%	Surrogate diluted out, no action	No action
SD-237-SS	50X	0%	Surrogate diluted out, no action	No action
SD-237-01	10X	0%	Surrogate diluted out, no action	No action

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

**Laboratory Performance Issues:** The surrogate recovery of decachlorobiphenyl-13C12 was outside of quality control limits in several samples. Internal standard area noncompliances were noted in several samples.

TO: M. Martin  
FROM: A. Cagnetti  
SDG: 680-102359-1  
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**Other Factors Affecting Data Quality:** Several samples contained less than 30% solids. Field duplicate imprecision was noted in the field duplicate pair SD-Dup-03 and SD-237-02. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

The data for these analyses were reviewed with reference to EPA Method 680 and the USEPA National Functional Guidelines for Organic Data Validation (June 2008).

  
\_\_\_\_\_  
Tetra Tech  
Ann Cagnetti  
Chemist/Data Validator

  
\_\_\_\_\_  
Tetra Tech  
Joseph A. Samchuck  
Data Validation Manager

Attachments:

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

**APPENDIX A**

**QUALIFIED ANALYTICAL RESULTS**

**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 ( $< 2 \times$  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 standard deviations is greater than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed
- Z3 = Tentatively Identified Compound aldol condensate

**Appendix A**

Qualified Analytical Results



PROJ_NO: 05220	NSAMPLE	SD-223-01	SD-223-02	SD-223-SS	SD-224-01				
SDG: 680-102359-1	LAB_ID	680-102359-6	680-102359-7	680-102359-5	680-102359-2				
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	25.5	75.2	21.4	24.9				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	16 UJ	Y	Y	1.1 U	12 UJ	Y	17 UJ	Y	Y
DICHLOROBIPHENYLS	6.9 UJ	Y	Y	0.47 U	4.9 UJ	Y	7 UJ	Y	Y
HEPTACHLOROBIPHENYLS	250 J	Y	P	6 J	340 J	Y	310 J	Y	Y
HEXACHLOROBIPHENYL	650 J	Y	P	4.5 J	340 J	Y	670 J	Y	Y
MONOCHLOROBIPHENYLS	3.7 UJ	Y	Y	0.25 U	2.6 UJ	Y	3.8 UJ	Y	Y
NONACHLOROBIPHENYLS	65 UJ	Y	Y	4.4 U	46 U	Y	66 UJ	Y	UY
OCTACHLOROBIPHENYLS	28 J	PY	PY	0.7 U	21 J	PY	39 J	PY	PY
PENTACHLOROBIPHENYLS	1300 J	Y	Y	13	190 J	Y	750 J	Y	Y
TETRACHLOROBIPHENYLS	6100 J	Y	Y	100	320 J	Y	10000 J	Y	Y
TRICHLOROBIPHENYLS	310 J	Y	Y	7	2.4 UJ	Y	620 J	Y	Y

PROJ_NO: 05220	NSAMPLE	SD-224-02	SD-224-03	SD-224-SS	SD-225-01	
SDG: 680-102359-1	LAB_ID	680-102359-3	680-102359-4	680-102359-1	680-102359-13	
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	35.9	63.9	21.6	26.1	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	12 U	6.5 U		19 UJ	47 UJ	Y
DICHLOROBIPHENYL	4.9 U	2.7 U		8 UJ	20 UJ	Y
HEPTACHLOROBIPHENYL	6.9 U	3.9 U		490 J	380 J	PY
HEXACHLOROBIPHENYL	45 J	2.6 U	P	470 J	1000 J	Y
MONOCHLOROBIPHENYL	2.6 U	1.5 U		4.4 UJ	11 UJ	Y
NONACHLOROBIPHENYL	46 U	26 U		76 U	190 U	Y
OCTACHLOROBIPHENYL	7.4 U	4.1 U		61 J	30 UJ	Y
PENTACHLOROBIPHENYL	210	2.7 U		430 J	3200 J	Y
TETRACHLOROBIPHENYL	560	2.9 U		710 J	18000 J	Y
TRICHLOROBIPHENYL	200	1.3 U		20 J	1100 J	Y

PROJ_NO: 05220	NSAMPLE	SD-225-02	SD-225-03	SD-225-SS	SD-226-01				
SDG: 680-1023359-1	LAB_ID	680-1023359-14	680-1023359-15	680-1023359-12	680-1023359-9				
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	40.9	56.7	21.2	24.7				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	6.1 U			7.3 U	12 UJ	Y	17 UJ	17 UJ	RY
DICHLOROBIPHENYLS	2.6 U			3.1 U	4.9 UJ	Y	7.1 UJ	7.1 UJ	RY
HEPTACHLOROBIPHENYLS	26 J		P	4.4 U	890 J	Y	470 J	470 J	RY
HEXACHLOROBIPHENYL	140			2.9 U	1200 J	Y	420 J	420 J	NRY
MONOCHLOROBIPHENYLS	1.4 U			1.7 U	2.7 UJ	Y	3.8 UJ	3.8 UJ	RY
NONACHLOROBIPHENYLS	24 U			29 U	46 UJ	Y	67 UJ	67 UJ	RY
OCTACHLOROBIPHENYLS	3.9 U			4.6 U	190 J	Y	89 J	89 J	PRY
PENTACHLOROBIPHENYLS	450			3 U	1900 J	Y	730 J	730 J	NRY
TETRACHLOROBIPHENYLS	260			3.2 U	6500 J	Y	1800 J	1800 J	NRY
TRICHLOROBIPHENYLS	1.2 U			1.5 U	220 J	Y	77 J	77 J	NRY

PROJ_NO: 05220	NSAMPLE	SD-226-02	SD-226-03	SD-226-SS	SD-227-01				
SDG: 680-102359-1	LAB_ID	680-102359-10	680-102359-11	680-102359-8	680-102359-35				
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	40.0	58.1	19.1	24.6				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	10 U	10 U		7.1 U	4.3 UR	R	10 UJ	10 UJ	NY
DICHLOROBIPHENYL	4.4 U	4.4 U		3 U	1.8 UR	R	4.2 UJ	4.2 UJ	Y
HEPTACHLOROBIPHENYL	1700			4.3 U	21 J	PRY	46 J	46 J	NPY
HEXACHLOROBIPHENYL	2100			2.8 U	36 J	RY	220 J	220 J	Y
MONOCHLOROBIPHENYL	2.4 U	2.4 U		1.6 U	1 UR	R	2.3 UJ	2.3 UJ	Y
NONACHLOROBIPHENYL	41 U	41 U		28 U	17 UR	R	40 UJ	40 UJ	NY
OCTACHLOROBIPHENYL	330			4.6 U	2.8 UR	R	6.4 UJ	6.4 UJ	NY
PENTACHLOROBIPHENYL	2000			2.9 U	20 J	PRY	340 J	340 J	Y
TETRACHLOROBIPHENYL	5000			5.3 J	46 J	RY	850 J	850 J	Y
TRICHLOROBIPHENYL	420			1.5 U	0.89 UR	R	37 J	37 J	PY

PROJ_NO: 05220	NSAMPLE	SD-227-02	SD-227-SS	SD-228-01	SD-228-02	
SDG: 680-102359-1	LAB_ID	680-102359-36	680-102359-34	680-102359-17	680-102359-18	
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	54.0	19.6	29.9	36.4	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	4.5 UJ	13 UJ	NY	14 UJ	11 UJ	R
DICHLOROBIPHENYL	1.9 U	5.3 UJ	NY	8.3 J	4.8 UJ	R
HEPTACHLOROBIPHENYL	2.7 UJ	20 J	NPY	480 J	6.9 UJ	R
HEXACHLOROBIPHENYL	1.8 U	49 J	NPY	700 J	20 J	PR
MONOCHLOROBIPHENYL	1 U	2.9 UJ	NY	3.2 UJ	2.6 UJ	R
NONACHLOROBIPHENYL	18 UJ	50 UJ	NY	55 UJ	45 UJ	R
OCTACHLOROBIPHENYL	2.9 UJ	8.1 UJ	NY	8.8 UJ	7.3 UJ	R
PENTACHLOROBIPHENYL	1.9 U	68 J	NPY	790 J	66 J	PR
TETRACHLOROBIPHENYL	8.2 J	180 J	NY	3200 J	41 J	PR
TRICHLOROBIPHENYL	1.3 J	6.4 J	NPY	220 J	2.3 UJ	R

PROJ_NO: 05220	NSAMPLE	SD-228-03	SD-228-SS	SD-234-01	SD-234-SS				
SDG: 680-102359-1	LAB_ID	680-102359-19	680-102359-16	680-102359-21	680-102359-20				
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	47.5	22.1	81.6	40.6				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	8.7 U	11 UJ	Y	5.1 U	60 U				
DICHLOROBIPHENYLS	3.7 U	4.7 UJ	Y	2.1 U	32 J	P			
HEPTACHLOROBIPHENYLS	5.3 U	490 J	Y	94	17000				
HEXACHLOROBIPHENYL	3.5 U	510 J	Y	130	25000				
MONOCHLOROBIPHENYLS	2 U	2.5 UJ	Y	1.2 U	14 U				
NONACHLOROBIPHENYLS	35 U	44 UJ	Y	20 U	300 J	P			
OCTACHLOROBIPHENYLS	5.6 U	57 J	PY	8.8 J	3200				
PENTACHLOROBIPHENYLS	3.6 U	350 J	Y	73	9100				
TETRACHLOROBIPHENYLS	3.9 U	800 J	Y	210	37000				
TRICHLOROBIPHENYLS	1.8 U	2.3 UJ	Y	8.6 J	2200	P			

PROJ_NO: 05220	NSAMPLE	SD-235-01	SD-235-02	SD-235-03	SD-235-SS	
SDG: 680-102359-1	LAB_ID	680-102359-23	680-102359-24	680-102359-25	680-102359-22	
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	38.1	34.7	59.3	37.9	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	44 U	12 U		1.4 U	330 U	
DICHLOROBIPHENYLS	43 J	18 J	NP	0.59 U	140 U	
HEPTACHLOROBIPHENYLS	4500	140		5.4 J	53000	
HEXACHLOROBIPHENYL	4500 J	350	N	15	78000	
MONOCHLOROBIPHENYLS	10 U	2.7 U		0.32 U	75 U	
NONACHLOROBIPHENYLS	170 U	47 U		5.6 U	1300 U	
OCTACHLOROBIPHENYLS	920	7.6 U		0.89 U	9100	
PENTACHLOROBIPHENYLS	6600	810		42	29000	
TETRACHLOROBIPHENYLS	29000 J	4600	N	47	97000	
TRICHLOROBIPHENYLS	2100 J	440	N	0.29 U	5400	

PROJ_NO: 05220	NSAMPLE	SD-236-01	SD-236-02	SD-236-SS	SD-237-01	
SDG: 680-102359-1	LAB_ID	680-102359-27	680-102359-28	680-102359-26	680-102359-30	
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	76.4	82.9	79.6	35.8	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	3.2 U	1 U		1 U	69 U	
DICHLOROBIPHENYLS	1.4 U	0.42 U		0.44 U	29 U	
HEPTACHLOROBIPHENYLS	2 U	0.6 U		0.63 U	2700	
HEXACHLOROBIPHENYL	5.2 J	0.4 U	P	0.41 U	4000	
MONOCHLOROBIPHENYLS	0.74 U	0.23 U		0.24 U	16 U	
NONACHLOROBIPHENYLS	13 U	4 U		4.1 U	280 U	
OCTACHLOROBIPHENYLS	2.1 U	0.64 U		0.67 U	250 J	P
PENTACHLOROBIPHENYLS	8.8 J	0.41 U	P	0.43 U	4700	
TETRACHLOROBIPHENYLS	1.4 U	0.54 J	P	0.46 U	32000	
TRICHLOROBIPHENYLS	0.67 U	0.2 U		0.21 U	2500	



PROJ_NO: 05220	NSAMPLE	SD-237-02	SD-237-03	SD-237-SS	SD-Dup-03
SDG: 680-102359-1	LAB_ID	680-102359-31	680-102359-32	680-102359-29	680-102359-33
FRACTION: PCB	SAMP_DATE	6/13/2014	6/13/2014	6/13/2014	6/13/2014
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG
	PCT_SOLIDS	30.6	75.6	34.5	30.5
	DUP_OF				
PARAMETER	RESULT	VQL	RESULT	VQL	RESULT
DECACHLOROBIPHENYL	8.1 U	1.1 U	120 U	8.1 UJ	QLCD
DICHLOROBIPHENYL	3.4 U	0.46 U	51 U		N
HEPTACHLOROBIPHENYL	160	0.66 U	21000		
HEXACHLOROBIPHENYL	230 J	0.88 J	19000		
MONOCHLOROBIPHENYL	1.8 U	0.25 U	27 U		
NONACHLOROBIPHENYL	32 U	4.4 U	480 U		
OCTACHLOROBIPHENYL	13 J	0.7 U	4900		
PENTACHLOROBIPHENYL	680 J	2.7 J	16000		
TETRACHLOROBIPHENYL	1300 J	28	40000		
TRICHLOROBIPHENYL	160 J	2.1 J	2400		

PROJ_NO: 05220	NSAMPLE	SD-Dup-03	
SDG: 680-102359-1	LAB_ID	680-102359-33	
FRACTION: PCB	SAMP_DATE	6/13/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	
	UNITS	UG/KG	
	PCT_SOLIDS	30.5	
	DUP_OF	SD-237-02	
PARAMETER	RESULT	VQL	QLCD
DECACHLOROBIPHENYL			
DICHLOROBIPHENYLS	3.4 U		
HEPTACHLOROBIPHENYLS	4.9 UJ	N	
HEXACHLOROBIPHENYL	16 J	GP	
MONOCHLOROBIPHENYLS	1.9 U		
NONACHLOROBIPHENYLS	32 UJ	CN	
OCTACHLOROBIPHENYLS	5.2 UJ	N	
PENTACHLOROBIPHENYLS	45 J	GP	
TETRACHLOROBIPHENYLS	230 J	G	
TRICHLOROBIPHENYLS	67 J	G	

**APPENDIX B**

**RESULTS AS REPORTED BY THE LABORATORY**

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-223-01</u>	Lab Sample ID: <u>680-102359-6</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1316.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 08:45</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>29.97(g)</u>	Date Analyzed: <u>07/14/2014 02:34</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>74.5</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	16	U	330	16
25512-42-9	Dichlorobiphenyl	6.9	U	65	6.9
28655-71-2	Heptachlorobiphenyl	250		200	9.8
26601-64-9	Hexachlorobiphenyl	650		130	6.5
27323-18-8	Monochlorobiphenyl	3.7	U	65	3.7
53742-07-7	Nonachlorobiphenyl	65	U	330	65
55722-26-4	Octachlorobiphenyl	28	J	200	10
25429-29-2	Pentachlorobiphenyl	1300		130	6.7
26914-33-0	Tetrachlorobiphenyl	6100		130	7.3
25323-68-6	Trichlorobiphenyl	310		65	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	43		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-223-02</u>	Lab Sample ID: <u>680-102359-7</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1040.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 08:50</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>29.98(g)</u>	Date Analyzed: <u>07/11/2014 03:58</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>24.8</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338586</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.1	U	23	1.1
25512-42-9	Dichlorobiphenyl	0.47	U	4.4	0.47
28655-71-2	Heptachlorobiphenyl	6.0	J	13	0.66
26601-64-9	Hexachlorobiphenyl	4.5	J	8.9	0.44
27323-18-8	Monochlorobiphenyl	0.25	U	4.4	0.25
53742-07-7	Nonachlorobiphenyl	4.4	U	23	4.4
55722-26-4	Octachlorobiphenyl	0.70	U	13	0.70
25429-29-2	Pentachlorobiphenyl	13		8.9	0.45
26914-33-0	Tetrachlorobiphenyl	100		8.9	0.49
25323-68-6	Trichlorobiphenyl	7.0		4.4	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	67		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-223-SS</u>	Lab Sample ID: <u>680-102359-5</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2420.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 08:40</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/23/2014 08:38</u>
Sample wt/vol: <u>10.08(g)</u>	Date Analyzed: <u>07/25/2014 05:09</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>78.6</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340817</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	12	U	240	12
25512-42-9	Dichlorobiphenyl	4.9	U	46	4.9
28655-71-2	Heptachlorobiphenyl	340		140	7.0
26601-64-9	Hexachlorobiphenyl	340		93	4.6
27323-18-8	Monochlorobiphenyl	2.6	U	46	2.6
53742-07-7	Nonachlorobiphenyl	46	U	240	46
55722-26-4	Octachlorobiphenyl	21	J	140	7.4
25429-29-2	Pentachlorobiphenyl	190		93	4.7
26914-33-0	Tetrachlorobiphenyl	320		93	5.2
25323-68-6	Trichlorobiphenyl	2.4	U	46	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	34		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-224-01</u>	Lab Sample ID: <u>680-102359-2</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1312.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 08:25</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.01(g)</u>	Date Analyzed: <u>07/14/2014 00:40</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>75.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	17	U	340	17
25512-42-9	Dichlorobiphenyl	7.0	U	66	7.0
28655-71-2	Heptachlorobiphenyl	310		200	10
26601-64-9	Hexachlorobiphenyl	670		130	6.6
27323-18-8	Monochlorobiphenyl	3.8	U	66	3.8
53742-07-7	Nonachlorobiphenyl	66	U	340	66
55722-26-4	Octachlorobiphenyl	39	J	200	11
25429-29-2	Pentachlorobiphenyl	750		130	6.8
26914-33-0	Tetrachlorobiphenyl	10000		130	7.4
25323-68-6	Trichlorobiphenyl	620		66	3.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	52		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-224-02</u>	Lab Sample ID: <u>680-102359-3</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1313.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 08:30</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.08(g)</u>	Date Analyzed: <u>07/14/2014 01:08</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>64.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	12	U	240	12
25512-42-9	Dichlorobiphenyl	4.9	U	46	4.9
28655-71-2	Heptachlorobiphenyl	6.9	U	140	6.9
26601-64-9	Hexachlorobiphenyl	45	J	93	4.6
27323-18-8	Monochlorobiphenyl	2.6	U	46	2.6
53742-07-7	Nonachlorobiphenyl	46	U	240	46
55722-26-4	Octachlorobiphenyl	7.4	U	140	7.4
25429-29-2	Pentachlorobiphenyl	210		93	4.7
26914-33-0	Tetrachlorobiphenyl	560		93	5.1
25323-68-6	Trichlorobiphenyl	200		46	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	37		30-130



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-224-03</u>	Lab Sample ID: <u>680-102359-4</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1314.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 08:35</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.06(g)</u>	Date Analyzed: <u>07/14/2014 01:37</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>36.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	6.5	U	130	6.5
25512-42-9	Dichlorobiphenyl	2.7	U	26	2.7
28655-71-2	Heptachlorobiphenyl	3.9	U	78	3.9
26601-64-9	Hexachlorobiphenyl	2.6	U	52	2.6
27323-18-8	Monochlorobiphenyl	1.5	U	26	1.5
53742-07-7	Nonachlorobiphenyl	26	U	130	26
55722-26-4	Octachlorobiphenyl	4.1	U	78	4.1
25429-29-2	Pentachlorobiphenyl	2.7	U	52	2.7
26914-33-0	Tetrachlorobiphenyl	2.9	U	52	2.9
25323-68-6	Trichlorobiphenyl	1.3	U	26	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	81		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-224-SS</u>	Lab Sample ID: <u>680-102359-1</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1009.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 08:20</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/02/2014 08:53</u>
Sample wt/vol: <u>30.30(g)</u>	Date Analyzed: <u>07/10/2014 13:08</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>78.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338412</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	19	U	390	19
25512-42-9	Dichlorobiphenyl	8.0	U	76	8.0
28655-71-2	Heptachlorobiphenyl	490		230	11
26601-64-9	Hexachlorobiphenyl	470		150	7.6
27323-18-8	Monochlorobiphenyl	4.4	U	76	4.4
53742-07-7	Nonachlorobiphenyl	76	U	390	76
55722-26-4	Octachlorobiphenyl	61	J	230	12
25429-29-2	Pentachlorobiphenyl	430		150	7.8
26914-33-0	Tetrachlorobiphenyl	710		150	8.5
25323-68-6	Trichlorobiphenyl	20	J	76	3.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	41		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-225-01</u>	Lab Sample ID: <u>680-102359-13</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2508.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 09:20</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/23/2014 08:38</u>
Sample wt/vol: <u>10.08(g)</u>	Date Analyzed: <u>07/25/2014 21:25</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>73.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340971</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	47	U	970	47
25512-42-9	Dichlorobiphenyl	20	U	190	20
28655-71-2	Heptachlorobiphenyl	380	J	570	29
26601-64-9	Hexachlorobiphenyl	1000		380	19
27323-18-8	Monochlorobiphenyl	11	U	190	11
53742-07-7	Nonachlorobiphenyl	190	U	970	190
55722-26-4	Octachlorobiphenyl	30	U	570	30
25429-29-2	Pentachlorobiphenyl	3200		380	19
26914-33-0	Tetrachlorobiphenyl	18000		380	21
25323-68-6	Trichlorobiphenyl	1100		190	9.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	45		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-225-02 Lab Sample ID: 680-102359-14  
 Matrix: Solid Lab File ID: XG2432.D  
 Analysis Method: 680 Date Collected: 06/13/2014 09:25  
 Extract. Method: 680 Date Extracted: 07/23/2014 08:38  
 Sample wt/vol: 10.02 (g) Date Analyzed: 07/25/2014 11:04  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 59.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340819 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	6.1	U	120	6.1
25512-42-9	Dichlorobiphenyl	2.6	U	24	2.6
28655-71-2	Heptachlorobiphenyl	26	J	73	3.7
26601-64-9	Hexachlorobiphenyl	140		49	2.4
27323-18-8	Monochlorobiphenyl	1.4	U	24	1.4
53742-07-7	Nonachlorobiphenyl	24	U	120	24
55722-26-4	Octachlorobiphenyl	3.9	U	73	3.9
25429-29-2	Pentachlorobiphenyl	450		49	2.5
26914-33-0	Tetrachlorobiphenyl	260		49	2.7
25323-68-6	Trichlorobiphenyl	1.2	U	24	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	34		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-225-03 Lab Sample ID: 680-102359-15  
 Matrix: Solid Lab File ID: XG1329.D  
 Analysis Method: 680 Date Collected: 06/13/2014 09:30  
 Extract. Method: 680 Date Extracted: 06/26/2014 18:41  
 Sample wt/vol: 30.20(g) Date Analyzed: 07/14/2014 08:49  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 43.3 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 338831 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	7.3	U	150	7.3
25512-42-9	Dichlorobiphenyl	3.1	U	29	3.1
28655-71-2	Heptachlorobiphenyl	4.4	U	88	4.4
26601-64-9	Hexachlorobiphenyl	2.9	U	59	2.9
27323-18-8	Monochlorobiphenyl	1.7	U	29	1.7
53742-07-7	Nonachlorobiphenyl	29	U	150	29
55722-26-4	Octachlorobiphenyl	4.6	U	88	4.6
25429-29-2	Pentachlorobiphenyl	3.0	U	59	3.0
26914-33-0	Tetrachlorobiphenyl	3.2	U	59	3.2
25323-68-6	Trichlorobiphenyl	1.5	U	29	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	48		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-225-SS</u>	Lab Sample ID: <u>680-102359-12</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2423.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 09:15</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/23/2014 08:38</u>
Sample wt/vol: <u>10.08(g)</u>	Date Analyzed: <u>07/25/2014 06:35</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>78.8</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340817</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	12	U	240	12
25512-42-9	Dichlorobiphenyl	4.9	U	46	4.9
28655-71-2	Heptachlorobiphenyl	890		140	7.0
26601-64-9	Hexachlorobiphenyl	1200		94	4.6
27323-18-8	Monochlorobiphenyl	2.7	U	46	2.7
53742-07-7	Nonachlorobiphenyl	46	U	240	46
55722-26-4	Octachlorobiphenyl	190		140	7.4
25429-29-2	Pentachlorobiphenyl	1900		94	4.8
26914-33-0	Tetrachlorobiphenyl	6500		94	5.2
25323-68-6	Trichlorobiphenyl	220		46	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	39		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-226-01</u>	Lab Sample ID: <u>680-102359-9</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1317.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 09:00</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.03(g)</u>	Date Analyzed: <u>07/14/2014 03:02</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>75.3</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	17	U *	340	17
25512-42-9	Dichlorobiphenyl	7.1	U *	67	7.1
28655-71-2	Heptachlorobiphenyl	470	*	200	10
26601-64-9	Hexachlorobiphenyl	420	*	140	6.7
27323-18-8	Monochlorobiphenyl	3.8	U *	67	3.8
53742-07-7	Nonachlorobiphenyl	67	U *	340	67
55722-26-4	Octachlorobiphenyl	89	J *	200	11
25429-29-2	Pentachlorobiphenyl	730	*	140	6.9
26914-33-0	Tetrachlorobiphenyl	1800	*	140	7.5
25323-68-6	Trichlorobiphenyl	77	*	67	3.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	18	* X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-226-02 Lab Sample ID: 680-102359-10  
 Matrix: Solid Lab File ID: XG1318.D  
 Analysis Method: 680 Date Collected: 06/13/2014 09:05  
 Extract. Method: 680 Date Extracted: 06/26/2014 18:41  
 Sample wt/vol: 30.05(g) Date Analyzed: 07/14/2014 03:30  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 60.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 338830 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	210	10
25512-42-9	Dichlorobiphenyl	4.4	U	41	4.4
28655-71-2	Heptachlorobiphenyl	1700		120	6.2
26601-64-9	Hexachlorobiphenyl	2100		84	4.1
27323-18-8	Monochlorobiphenyl	2.4	U	41	2.4
53742-07-7	Nonachlorobiphenyl	41	U	210	41
55722-26-4	Octachlorobiphenyl	330		120	6.6
25429-29-2	Pentachlorobiphenyl	2000		84	4.2
26914-33-0	Tetrachlorobiphenyl	5000		84	4.6
25323-68-6	Trichlorobiphenyl	420		41	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	30		30-130



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-226-03</u>	Lab Sample ID: <u>680-102359-11</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1319.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 09:10</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.04(g)</u>	Date Analyzed: <u>07/14/2014 03:59</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>41.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	7.1	U	150	7.1
25512-42-9	Dichlorobiphenyl	3.0	U	28	3.0
28655-71-2	Heptachlorobiphenyl	4.3	U	86	4.3
26601-64-9	Hexachlorobiphenyl	2.8	U	58	2.8
27323-18-8	Monochlorobiphenyl	1.6	U	28	1.6
53742-07-7	Nonachlorobiphenyl	28	U	150	28
55722-26-4	Octachlorobiphenyl	4.6	U	86	4.6
25429-29-2	Pentachlorobiphenyl	2.9	U	58	2.9
26914-33-0	Tetrachlorobiphenyl	5.3	J	58	3.2
25323-68-6	Trichlorobiphenyl	1.5	U	28	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	76		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-226-SS Lab Sample ID: 680-102359-8  
 Matrix: Solid Lab File ID: XG1041.D  
 Analysis Method: 680 Date Collected: 06/13/2014 08:55  
 Extract. Method: 680 Date Extracted: 06/26/2014 18:41  
 Sample wt/vol: 30.05(g) Date Analyzed: 07/11/2014 04:26  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 80.9 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 338586 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.3	U	89	4.3
25512-42-9	Dichlorobiphenyl	1.8	U	17	1.8
28655-71-2	Heptachlorobiphenyl	21	J	52	2.6
26601-64-9	Hexachlorobiphenyl	36		35	1.7
27323-18-8	Monochlorobiphenyl	1.0	U	17	1.0
53742-07-7	Nonachlorobiphenyl	17	U	89	17
55722-26-4	Octachlorobiphenyl	2.8	U	52	2.8
25429-29-2	Pentachlorobiphenyl	20	J	35	1.8
26914-33-0	Tetrachlorobiphenyl	46		35	1.9
25323-68-6	Trichlorobiphenyl	0.89	U	17	0.89

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	5	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-227-01</u>	Lab Sample ID: <u>680-102359-35</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1615.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 13:15</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/14/2014 14:58</u>
Sample wt/vol: <u>10.12(g)</u>	Date Analyzed: <u>07/16/2014 17:28</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>75.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339278</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	200	10
25512-42-9	Dichlorobiphenyl	4.2	U	40	4.2
28655-71-2	Heptachlorobiphenyl	46	J	120	6.0
26601-64-9	Hexachlorobiphenyl	220		81	4.0
27323-18-8	Monochlorobiphenyl	2.3	U	40	2.3
53742-07-7	Nonachlorobiphenyl	40	U	200	40
55722-26-4	Octachlorobiphenyl	6.4	U	120	6.4
25429-29-2	Pentachlorobiphenyl	340		81	4.1
26914-33-0	Tetrachlorobiphenyl	850		81	4.5
25323-68-6	Trichlorobiphenyl	37	J	40	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	47		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-227-02</u>	Lab Sample ID: <u>680-102359-36</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1616.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 13:20</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/14/2014 14:58</u>
Sample wt/vol: <u>10.17(g)</u>	Date Analyzed: <u>07/16/2014 17:57</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>46.0</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339278</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.5	U	93	4.5
25512-42-9	Dichlorobiphenyl	1.9	U	18	1.9
28655-71-2	Heptachlorobiphenyl	2.7	U	55	2.7
26601-64-9	Hexachlorobiphenyl	1.8	U	37	1.8
27323-18-8	Monochlorobiphenyl	1.0	U	18	1.0
53742-07-7	Nonachlorobiphenyl	18	U	93	18
55722-26-4	Octachlorobiphenyl	2.9	U	55	2.9
25429-29-2	Pentachlorobiphenyl	1.9	U	37	1.9
26914-33-0	Tetrachlorobiphenyl	8.2	J	37	2.0
25323-68-6	Trichlorobiphenyl	1.3	J	18	0.93

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	61		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-227-SS</u>	Lab Sample ID: <u>680-102359-34</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1614.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 13:10</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/14/2014 14:58</u>
Sample wt/vol: <u>10.04(g)</u>	Date Analyzed: <u>07/16/2014 17:00</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>80.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339278</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	13	U *	260	13
25512-42-9	Dichlorobiphenyl	5.3	U *	50	5.3
28655-71-2	Heptachlorobiphenyl	20	J *	150	7.6
26601-64-9	Hexachlorobiphenyl	49	J *	100	5.0
27323-18-8	Monochlorobiphenyl	2.9	U *	50	2.9
53742-07-7	Nonachlorobiphenyl	50	U *	260	50
55722-26-4	Octachlorobiphenyl	8.1	U *	150	8.1
25429-29-2	Pentachlorobiphenyl	68	J *	100	5.2
26914-33-0	Tetrachlorobiphenyl	180	*	100	5.6
25323-68-6	Trichlorobiphenyl	6.4	J *	50	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	61	*	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-228-01</u>	Lab Sample ID: <u>680-102359-17</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1331.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 10:10</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.04 (g)</u>	Date Analyzed: <u>07/14/2014 09:46</u>
Con. Extract Vol.: <u>1 (mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1 (uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>70.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338831</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	14	U	280	14
25512-42-9	Dichlorobiphenyl	8.3	J	55	5.8
28655-71-2	Heptachlorobiphenyl	480		170	8.3
26601-64-9	Hexachlorobiphenyl	700		110	5.5
27323-18-8	Monochlorobiphenyl	3.2	U	55	3.2
53742-07-7	Nonachlorobiphenyl	55	U	280	55
55722-26-4	Octachlorobiphenyl	8.8	U	170	8.8
25429-29-2	Pentachlorobiphenyl	790		110	5.7
26914-33-0	Tetrachlorobiphenyl	3200		110	6.2
25323-68-6	Trichlorobiphenyl	220		55	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	18	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-228-02 Lab Sample ID: 680-102359-18  
 Matrix: Solid Lab File ID: XG1332.D  
 Analysis Method: 680 Date Collected: 06/13/2014 10:15  
 Extract. Method: 680 Date Extracted: 06/26/2014 18:41  
 Sample wt/vol: 29.96(g) Date Analyzed: 07/14/2014 10:15  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 63.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 338831 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	11	U	230	11
25512-42-9	Dichlorobiphenyl	4.8	U	45	4.8
28655-71-2	Heptachlorobiphenyl	6.9	U	140	6.9
26601-64-9	Hexachlorobiphenyl	20	J	92	4.5
27323-18-8	Monochlorobiphenyl	2.6	U	45	2.6
53742-07-7	Nonachlorobiphenyl	45	U	230	45
55722-26-4	Octachlorobiphenyl	7.3	U	140	7.3
25429-29-2	Pentachlorobiphenyl	66	J	92	4.7
26914-33-0	Tetrachlorobiphenyl	41	J	92	5.1
25323-68-6	Trichlorobiphenyl	2.3	U	45	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	20	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-228-03</u>	Lab Sample ID: <u>680-102359-19</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1333.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 10:20</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.05(g)</u>	Date Analyzed: <u>07/14/2014 10:43</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>52.5</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338831</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	8.7	U	180	8.7
25512-42-9	Dichlorobiphenyl	3.7	U	35	3.7
28655-71-2	Heptachlorobiphenyl	5.3	U	110	5.3
26601-64-9	Hexachlorobiphenyl	3.5	U	70	3.5
27323-18-8	Monochlorobiphenyl	2.0	U	35	2.0
53742-07-7	Nonachlorobiphenyl	35	U	180	35
55722-26-4	Octachlorobiphenyl	5.6	U	110	5.6
25429-29-2	Pentachlorobiphenyl	3.6	U	70	3.6
26914-33-0	Tetrachlorobiphenyl	3.9	U	70	3.9
25323-68-6	Trichlorobiphenyl	1.8	U	35	1.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	33		30-130



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-228-SS Lab Sample ID: 680-102359-16  
 Matrix: Solid Lab File ID: XG2433.D  
 Analysis Method: 680 Date Collected: 06/13/2014 10:05  
 Extract. Method: 680 Date Extracted: 07/23/2014 08:38  
 Sample wt/vol: 10.14(g) Date Analyzed: 07/25/2014 11:32  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 77.9 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340819 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	11	U	230	11
25512-42-9	Dichlorobiphenyl	4.7	U	44	4.7
28655-71-2	Heptachlorobiphenyl	490		130	6.7
26601-64-9	Hexachlorobiphenyl	510		90	4.4
27323-18-8	Monochlorobiphenyl	2.5	U	44	2.5
53742-07-7	Nonachlorobiphenyl	44	U	230	44
55722-26-4	Octachlorobiphenyl	57	J	130	7.1
25429-29-2	Pentachlorobiphenyl	350		90	4.5
26914-33-0	Tetrachlorobiphenyl	800		90	4.9
25323-68-6	Trichlorobiphenyl	2.3	U	44	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	33		30-130

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Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-234-01</u>	Lab Sample ID: <u>680-102359-21</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1335.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 10:35</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.08(g)</u>	Date Analyzed: <u>07/14/2014 11:40</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>18.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338831</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.1	U	100	5.1
25512-42-9	Dichlorobiphenyl	2.1	U	20	2.1
28655-71-2	Heptachlorobiphenyl	94		61	3.1
26601-64-9	Hexachlorobiphenyl	130		41	2.0
27323-18-8	Monochlorobiphenyl	1.2	U	20	1.2
53742-07-7	Nonachlorobiphenyl	20	U	100	20
55722-26-4	Octachlorobiphenyl	8.8	J	61	3.2
25429-29-2	Pentachlorobiphenyl	73		41	2.1
26914-33-0	Tetrachlorobiphenyl	210		41	2.3
25323-68-6	Trichlorobiphenyl	8.6	J	20	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	64		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-234-SS</u>	Lab Sample ID: <u>680-102359-20</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2509.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 10:30</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/23/2014 08:38</u>
Sample wt/vol: <u>10.13(g)</u>	Date Analyzed: <u>07/25/2014 21:53</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>59.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340971</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	60	U	1200	60
25512-42-9	Dichlorobiphenyl	32	J	240	26
28655-71-2	Heptachlorobiphenyl	17000		730	36
26601-64-9	Hexachlorobiphenyl	25000		490	24
27323-18-8	Monochlorobiphenyl	14	U	240	14
53742-07-7	Nonachlorobiphenyl	300	J	1200	240
55722-26-4	Octachlorobiphenyl	3200		730	39
25429-29-2	Pentachlorobiphenyl	9100		490	25
26914-33-0	Tetrachlorobiphenyl	37000		490	27
25323-68-6	Trichlorobiphenyl	2200		240	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-235-01</u>	Lab Sample ID: <u>680-102359-23</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1308.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 11:05</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>29.97(g)</u>	Date Analyzed: <u>07/13/2014 22:46</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>20</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>61.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	44	U *	890	44
25512-42-9	Dichlorobiphenyl	43	J *	170	18
28655-71-2	Heptachlorobiphenyl	4500	*	530	26
26601-64-9	Hexachlorobiphenyl	4500	*	350	17
27323-18-8	Monochlorobiphenyl	10	U *	170	10
53742-07-7	Nonachlorobiphenyl	170	U *	890	170
55722-26-4	Octachlorobiphenyl	920	*	530	28
25429-29-2	Pentachlorobiphenyl	6600	*	350	18
26914-33-0	Tetrachlorobiphenyl	29000	*	350	19
25323-68-6	Trichlorobiphenyl	2100	*	170	8.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D *	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-235-02</u>	Lab Sample ID: <u>680-102359-24</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1309.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 11:10</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.09(g)</u>	Date Analyzed: <u>07/13/2014 23:15</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>65.3</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	12	U	240	12
25512-42-9	Dichlorobiphenyl	18	J	47	5.0
28655-71-2	Heptachlorobiphenyl	140		140	7.2
26601-64-9	Hexachlorobiphenyl	350		96	4.7
27323-18-8	Monochlorobiphenyl	2.7	U	47	2.7
53742-07-7	Nonachlorobiphenyl	47	U	240	47
55722-26-4	Octachlorobiphenyl	7.6	U	140	7.6
25429-29-2	Pentachlorobiphenyl	810		96	4.9
26914-33-0	Tetrachlorobiphenyl	4600		96	5.3
25323-68-6	Trichlorobiphenyl	440		47	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	55		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-235-03</u>	Lab Sample ID: <u>680-102359-25</u>
Matrix: <u>Solid</u>	Lab File ID: <u>Fg0219.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 11:15</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>29.99(g)</u>	Date Analyzed: <u>07/03/2014 00:28</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>40.7</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>337435</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.4	U	29	1.4
25512-42-9	Dichlorobiphenyl	0.59	U	5.6	0.59
28655-71-2	Heptachlorobiphenyl	5.4	J	17	0.84
26601-64-9	Hexachlorobiphenyl	15		11	0.56
27323-18-8	Monochlorobiphenyl	0.32	U	5.6	0.32
53742-07-7	Nonachlorobiphenyl	5.6	U	29	5.6
55722-26-4	Octachlorobiphenyl	0.89	U	17	0.89
25429-29-2	Pentachlorobiphenyl	42		11	0.57
26914-33-0	Tetrachlorobiphenyl	47		11	0.62
25323-68-6	Trichlorobiphenyl	0.29	U	5.6	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	38		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-235-SS Lab Sample ID: 680-102359-22  
 Matrix: Solid Lab File ID: XG2510.D  
 Analysis Method: 680 Date Collected: 06/13/2014 11:00  
 Extract. Method: 680 Date Extracted: 07/23/2014 08:38  
 Sample wt/vol: 10.07(g) Date Analyzed: 07/25/2014 22:22  
 Con. Extract Vol.: 1(mL) Dilution Factor: 50  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 62.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340971 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	330	U	6700	330
25512-42-9	Dichlorobiphenyl	140	U	1300	140
28655-71-2	Heptachlorobiphenyl	53000		3900	200
26601-64-9	Hexachlorobiphenyl	78000		2600	130
27323-18-8	Monochlorobiphenyl	75	U	1300	75
53742-07-7	Nonachlorobiphenyl	1300	U	6700	1300
55722-26-4	Octachlorobiphenyl	9100		3900	210
25429-29-2	Pentachlorobiphenyl	29000		2600	130
26914-33-0	Tetrachlorobiphenyl	97000		2600	150
25323-68-6	Trichlorobiphenyl	5400		1300	67

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-236-01</u>	Lab Sample ID: <u>680-102359-27</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2438.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 12:10</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/23/2014 08:38</u>
Sample wt/vol: <u>10.03(g)</u>	Date Analyzed: <u>07/25/2014 13:55</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>23.6</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340819</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.2	U	67	3.2
25512-42-9	Dichlorobiphenyl	1.4	U	13	1.4
28655-71-2	Heptachlorobiphenyl	2.0	U	39	2.0
26601-64-9	Hexachlorobiphenyl	5.2	J	26	1.3
27323-18-8	Monochlorobiphenyl	0.74	U	13	0.74
53742-07-7	Nonachlorobiphenyl	13	U	67	13
55722-26-4	Octachlorobiphenyl	2.1	U	39	2.1
25429-29-2	Pentachlorobiphenyl	8.8	J	26	1.3
26914-33-0	Tetrachlorobiphenyl	1.4	U	26	1.4
25323-68-6	Trichlorobiphenyl	0.67	U	13	0.67

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	65		30-130



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-236-02</u>	Lab Sample ID: <u>680-102359-28</u>
Matrix: <u>Solid</u>	Lab File ID: <u>Fg0215.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 12:15</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.02(g)</u>	Date Analyzed: <u>07/02/2014 22:32</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>17.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>337435</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.0	U	20	1.0
25512-42-9	Dichlorobiphenyl	0.42	U	4.0	0.42
28655-71-2	Heptachlorobiphenyl	0.60	U	12	0.60
26601-64-9	Hexachlorobiphenyl	0.40	U	8.1	0.40
27323-18-8	Monochlorobiphenyl	0.23	U	4.0	0.23
53742-07-7	Nonachlorobiphenyl	4.0	U	20	4.0
55722-26-4	Octachlorobiphenyl	0.64	U	12	0.64
25429-29-2	Pentachlorobiphenyl	0.41	U	8.1	0.41
26914-33-0	Tetrachlorobiphenyl	0.54	J	8.1	0.45
25323-68-6	Trichlorobiphenyl	0.20	U	4.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	80		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-236-SS Lab Sample ID: 680-102359-26  
 Matrix: Solid Lab File ID: Fg0220.D  
 Analysis Method: 680 Date Collected: 06/13/2014 12:05  
 Extract. Method: 680 Date Extracted: 06/26/2014 18:41  
 Sample wt/vol: 30.02(g) Date Analyzed: 07/03/2014 00:56  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 20.4 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 337435 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.0	U	21	1.0
25512-42-9	Dichlorobiphenyl	0.44	U	4.1	0.44
28655-71-2	Heptachlorobiphenyl	0.63	U	13	0.63
26601-64-9	Hexachlorobiphenyl	0.41	U	8.4	0.41
27323-18-8	Monochlorobiphenyl	0.24	U	4.1	0.24
53742-07-7	Nonachlorobiphenyl	4.1	U	21	4.1
55722-26-4	Octachlorobiphenyl	0.67	U	13	0.67
25429-29-2	Pentachlorobiphenyl	0.43	U	8.4	0.43
26914-33-0	Tetrachlorobiphenyl	0.46	U	8.4	0.46
25323-68-6	Trichlorobiphenyl	0.21	U	4.1	0.21

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	57		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-237-01</u>	Lab Sample ID: <u>680-102359-30</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2532.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 12:35</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/23/2014 08:38</u>
Sample wt/vol: <u>10.02(g)</u>	Date Analyzed: <u>07/26/2014 08:52</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>64.2</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340977</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	69	U	1400	69
25512-42-9	Dichlorobiphenyl	29	U	280	29
28655-71-2	Heptachlorobiphenyl	2700		840	42
26601-64-9	Hexachlorobiphenyl	4000		560	28
27323-18-8	Monochlorobiphenyl	16	U	280	16
53742-07-7	Nonachlorobiphenyl	280	U	1400	280
55722-26-4	Octachlorobiphenyl	250	J	840	44
25429-29-2	Pentachlorobiphenyl	4700		560	28
26914-33-0	Tetrachlorobiphenyl	32000		560	31
25323-68-6	Trichlorobiphenyl	2500		280	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-237-02</u>	Lab Sample ID: <u>680-102359-31</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2440.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 12:40</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/23/2014 08:38</u>
Sample wt/vol: <u>10.10(g)</u>	Date Analyzed: <u>07/25/2014 14:52</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>69.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>340819</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	8.1	U	160	8.1
25512-42-9	Dichlorobiphenyl	3.4	U	32	3.4
28655-71-2	Heptachlorobiphenyl	160		97	4.9
26601-64-9	Hexachlorobiphenyl	230		65	3.2
27323-18-8	Monochlorobiphenyl	1.8	U	32	1.8
53742-07-7	Nonachlorobiphenyl	32	U	160	32
55722-26-4	Octachlorobiphenyl	13	J	97	5.1
25429-29-2	Pentachlorobiphenyl	680		65	3.3
26914-33-0	Tetrachlorobiphenyl	1300		65	3.6
25323-68-6	Trichlorobiphenyl	160		32	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	41		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-237-03</u>	Lab Sample ID: <u>680-102359-32</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1034.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 12:45</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>29.99(g)</u>	Date Analyzed: <u>07/11/2014 01:07</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>24.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338586</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.1	U	22	1.1
25512-42-9	Dichlorobiphenyl	0.46	U	4.4	0.46
28655-71-2	Heptachlorobiphenyl	0.66	U	13	0.66
26601-64-9	Hexachlorobiphenyl	0.88	J	8.9	0.44
27323-18-8	Monochlorobiphenyl	0.25	U	4.4	0.25
53742-07-7	Nonachlorobiphenyl	4.4	U	22	4.4
55722-26-4	Octachlorobiphenyl	0.70	U	13	0.70
25429-29-2	Pentachlorobiphenyl	2.7	J	8.9	0.45
26914-33-0	Tetrachlorobiphenyl	28		8.9	0.49
25323-68-6	Trichlorobiphenyl	2.1	J	4.4	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	47		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-237-SS</u>	Lab Sample ID: <u>680-102359-29</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1310.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 12:30</u>
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.02(g)</u>	Date Analyzed: <u>07/13/2014 23:43</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>50</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>65.5</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338830</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	120	U	2500	120
25512-42-9	Dichlorobiphenyl	51	U	480	51
28655-71-2	Heptachlorobiphenyl	21000		1400	72
26601-64-9	Hexachlorobiphenyl	19000		970	48
27323-18-8	Monochlorobiphenyl	27	U	480	27
53742-07-7	Nonachlorobiphenyl	480	U	2500	480
55722-26-4	Octachlorobiphenyl	4900		1400	77
25429-29-2	Pentachlorobiphenyl	16000		970	49
26914-33-0	Tetrachlorobiphenyl	40000		970	54
25323-68-6	Trichlorobiphenyl	2400		480	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: <u>SD-Dup-03</u>	Lab Sample ID: <u>680-102359-33</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1613.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/13/2014 00:00</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/14/2014 14:58</u>
Sample wt/vol: <u>10.03(g)</u>	Date Analyzed: <u>07/16/2014 16:31</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>69.5</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339278</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	8.1	U	170	8.1
25512-42-9	Dichlorobiphenyl	3.4	U	32	3.4
28655-71-2	Heptachlorobiphenyl	4.9	U	98	4.9
26601-64-9	Hexachlorobiphenyl	16	J	66	3.2
27323-18-8	Monochlorobiphenyl	1.9	U	32	1.9
53742-07-7	Nonachlorobiphenyl	32	U	170	32
55722-26-4	Octachlorobiphenyl	5.2	U	98	5.2
25429-29-2	Pentachlorobiphenyl	45	J	66	3.3
26914-33-0	Tetrachlorobiphenyl	230		66	3.6
25323-68-6	Trichlorobiphenyl	67		32	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	60		30-130

**APPENDIX C**

**SUPPORT DOCUMENTATION**



## CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Sediments

Report Number: 680-102359-1

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 06/14/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

### POLYCHLORINATED BIPHENYLS (PCBS)

Samples SD-224-SS (680-102359-1), SD-224-01 (680-102359-2), SD-224-02 (680-102359-3), SD-224-03 (680-102359-4), SD-223-SS (680-102359-5), SD-223-01 (680-102359-6), SD-223-02 (680-102359-7), SD-226-SS (680-102359-8), SD-226-01 (680-102359-9), SD-226-02 (680-102359-10), SD-226-03 (680-102359-11), SD-225-SS (680-102359-12), SD-225-01 (680-102359-13), SD-225-02 (680-102359-14), SD-225-03 (680-102359-15), SD-228-SS (680-102359-16), SD-228-01 (680-102359-17), SD-228-02 (680-102359-18), SD-228-03 (680-102359-19), SD-234-SS (680-102359-20), SD-234-01 (680-102359-21), SD-235-SS (680-102359-22), SD-235-01 (680-102359-23), SD-235-02 (680-102359-24), SD-235-03 (680-102359-25), SD-236-SS (680-102359-26), SD-236-01 (680-102359-27), SD-236-02 (680-102359-28), SD-237-SS (680-102359-29), SD-237-01 (680-102359-30), SD-237-02 (680-102359-31), SD-237-03 (680-102359-32), SD-Dup-03 (680-102359-33), SD-227-SS (680-102359-34), SD-227-01 (680-102359-35) and SD-227-02 (680-102359-36) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 06/26/2014, 07/02/2014, 07/14/2014 and 07/23/2014 and analyzed on 07/02/2014, 07/03/2014, 07/10/2014, 07/11/2014, 07/13/2014, 07/14/2014, 07/16/2014, 07/25/2014 and 07/26/2014.

Internal standard (ISTD) response for the following sample(s) was outside of acceptance limits when compared to the area of the CCVIS: (LCS 680-337170/12-A), (680-102359-1 MSD). SD-226-01 (680-102359-9), SD-235-01 (680-102359-23), (CCV 680-336975/24), SD-227-SS (680-102359-34). The 680 method allows that the sample also be compared to the average internal standard area of the calibration (ICISAV). The associated samples were within acceptance limits when compared to the ICISAV.

Surrogate recovery for the following sample(s) was outside control limits: SD-226-SS (680-102359-8), SD-226-01 (680-102359-9), SD-228-01 (680-102359-17), SD-228-02 (680-102359-18). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported. Sample was extracted at 30g, then reextracted at 10g and still experienced matrix interference.

The following sample(s) was diluted due to abundance of target analytes: SD-235-01 (680-102359-23), SD-237-SS (680-102359-29), SD-234-SS (680-102359-20), SD-235-SS (680-102359-22), SD-237-01 (680-102359-30). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Samples SD-224-SS (680-102359-1)[5X], SD-224-01 (680-102359-2)[5X], SD-224-02 (680-102359-3)[5X], SD-224-03 (680-102359-4)[5X], SD-223-01 (680-102359-6)[5X], SD-226-01 (680-102359-9)[5X], SD-226-02 (680-102359-10)[5X], SD-226-03 (680-102359-11)[5X], SD-225-01 (680-102359-13)[5X], SD-225-03 (680-102359-15)[5X], SD-228-01 (680-102359-17)[5X], SD-228-02 (680-102359-18)[5X], SD-228-03 (680-102359-19)[5X], SD-234-SS (680-102359-20)[10X], SD-234-01 (680-102359-21)[5X], SD-235-SS (680-102359-22)[50X], SD-235-01 (680-102359-23)[20X], SD-235-02 (680-102359-24)[5X], SD-237-SS (680-102359-29)[50X] and SD-237-01 (680-102359-30)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### PERCENT SOLIDS/MOISTURE

Samples SD-224-SS (680-102359-1), SD-224-01 (680-102359-2), SD-224-02 (680-102359-3), SD-224-03 (680-102359-4), SD-223-SS (680-102359-5), SD-223-01 (680-102359-6), SD-223-02 (680-102359-7), SD-226-SS (680-102359-8), SD-226-01 (680-102359-9), SD-226-02 (680-102359-10), SD-226-03 (680-102359-11), SD-225-SS (680-102359-12), SD-225-01 (680-102359-13), SD-225-02 (680-102359-14), SD-225-03 (680-102359-15), SD-228-SS (680-102359-16), SD-228-01 (680-102359-17), SD-228-02 (680-102359-18), SD-228-03 (680-102359-19), SD-234-SS (680-102359-20), SD-234-01 (680-102359-21), SD-235-SS (680-102359-22), SD-235-01 (680-102359-23), SD-235-02 (680-102359-24), SD-235-03 (680-102359-25), SD-236-SS (680-102359-26), SD-236-01 (680-102359-27), SD-236-02 (680-102359-28), SD-237-SS (680-102359-29), SD-237-01 (680-102359-30), SD-237-02 (680-102359-31), SD-237-03 (680-102359-32), SD-Dup-03 (680-102359-33), SD-227-SS (680-102359-34), SD-227-01 (680-102359-35) and SD-227-02 (680-102359-36) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 06/16/2014.

PCB

# Chain of Custody Record

<b>Client Information</b>		Sampler: <u>St. Germain</u>		Lab PM: <u>Lanier, Jerry A</u>		Carrier Tracking No(s):		COC No: <u>680-56831-24906.20</u>	
Client Contact: <u>Mike Martin</u>		Phone: <u>(703)342-8389</u>		E-Mail: <u>jerry.lanier@testamericainc.com</u>		Page: <u>20 of 40</u>		Job #: <u>1054</u>	
Company: <u>Tetra Tech, Inc.</u>		Address: <u>20251 Century Blvd Suite 200</u>		City: <u>Germentown</u>		State, Zip: <u>MD, 20874</u>		Due Date Requested:	
Phone: _____		TAT Requested (days):		PO #: _____		Purchase Order not required		WO #: _____	
Email: <u>Michael.Martin@tetratech.com</u>		Project #: <u>68012942</u>		SSOW#: _____		Analysis Requested		Preservation Codes:	
Site: _____		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=soli, O=soil, B=titania, AS=As)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=soli, O=soil, B=titania, AS=As)	
<u>SD-224-55</u>		<u>6/13/14</u>		<u>0820</u>		<u>C</u>		<u>Solid</u>	
<u>SD-224-01</u>				<u>0825</u>		<u>C</u>		<u>Solid</u>	
<u>SD-224-02</u>				<u>0830</u>		<u>C</u>		<u>Solid</u>	
<u>SD-224-03</u>				<u>0835</u>		<u>C</u>		<u>Solid</u>	
<u>SD-223-55</u>				<u>0840</u>		<u>C</u>		<u>Solid</u>	
<u>SD-223-01</u>				<u>0845</u>		<u>C</u>		<u>Solid</u>	
<u>SD-223-02</u>				<u>0850</u>		<u>C</u>		<u>Solid</u>	
<u>SD-226-55</u>				<u>0855</u>		<u>C</u>		<u>Solid</u>	
<u>SD-226-01</u>				<u>0900</u>		<u>C</u>		<u>Solid</u>	
<u>SD-226-02</u>				<u>0905</u>		<u>C</u>		<u>Solid</u>	
<u>SD-226-03</u>				<u>0910</u>		<u>C</u>		<u>Solid</u>	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
		<input type="checkbox"/> Unknown		<input checked="" type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)		Date:		Date:		Date:		Date:	
Empty Kit Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>		Date/Time: <u>6/13/14</u>	
Custody Seal No.:		Custody Seal Intact:		Custody Seal No.:		Custody Seal Intact:		Custody Seal No.:	
		<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No			



Special 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: 680-102359

Method of Shipment: \_\_\_\_\_

Received by: [Signature] Date/Time: 6/13/14 14:30 Company: TestAmerica

Received by: [Signature] Date/Time: 6/14/14 08:39 Company: TA

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks: 0.8ac

PCBs

# Chain of Custody Record

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Lab PM: Lanier, Jerry A.		COC No: 680-56831-24906.21	
Client Contact: Mike Martin		Phone: Jerry Lanier		Page: 2 of 4	
Company: Tetra Tech, Inc.		E-Mail: jerry.lanier@testamericainc.com		Job #:	
Address: 20251 Century Blvd Suite 200		Due Date Requested:		Carrier Tracking No(s):	
City: Germantown		TAT Requested (days):		Analysis Requested	
State, Zip: MD, 20874		PO #: Purchase Order not required		GA_01_R_Ra - (MOD) Radium-226/228	
Phone:		WO #:		A01_R_Th - Standard Target List	
Email: Michael.Martin@tetratech.com		Project #: 68012942		680 - Local Method	
Project Name: Sediments		SSOW#:		Perform MS/MSD (Yes or No)	
Site:		Sample Date		Field Filtered Sample (Yes or No)	
Sample Identification		Sample Time		Preservation Code	
SD-225-55	0915	C	Solid	X	
SD-225-01	0920	C	Solid	X	
SD-225-02	0925	C	Solid	X	
SD-225-03	0930	C	Solid	X	
SD-228-55	1005	C	Solid	X	
SD-228-01	1010	C	Solid	X	
SD-228-01	1015	C	Solid	X	
SD-228-03	1020	C	Solid	X	
SD-234-55	1030	C	Solid	X	
SD-234-01	1035	C	Solid	X	
SD-235-02 55	1100	C	Solid	X	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Special Instructions/Note:	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Total Number of Containers	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:		Special Instructions/Note:	
Empty Kit Relinquished by:		Method of Shipment:		Special Instructions/Note:	
Relinquished by: [Signature]		Date: 6/13/14		680-102359	
Relinquished by: [Signature]		Date: 6/13/14		Received by: [Signature]	
Relinquished by: [Signature]		Date: 6/13/14		Date/Time: 6/13/14 1430	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Date/Time: 6/14/14 08:39	
Cooler Temperature(s) °C and Other Remarks: 0.8 °C		Company: [Signature]		Date/Time: 6/14/14 08:39	

PCB

# Chain of Custody Record

Client Information		Lab PM: Lanier, Jerry A		Carrier Tracking No(s):		COC No: 680-56831-24906.23		
Client Contact: Mike Martin		Phone: Stu Cameron (703) 342-8389		E-Mail: jerry.lanier@testamericainc.com		Page: 22 of 48- 3 of 4		
Company: Tetra Tech, Inc.		Due Date Requested:		Analysis Requested		Job #:		
Address: 20251 Century Blvd Suite 200		TAT Requested (days): Standard		Preservation Codes:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		
City: Germantown		PO #: Purchase Order not required		A01R_Th - Standard Target List		Other:		
State, Zip: MD, 20874		WC #:		6020, 7470A				
Project Name: Sediments		Project #: 68012942		GA_01_R_Ra - (MOD) Radium-226/228				
Site:		SSOW#:		680 - Local Method				
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=ore/slag, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:
SD-235-01	6/13/14	1105	C	Solid	X	X		
SD-235-02		1110	C	Solid	X	X		
SD-235-03		1115	C	Solid	X	X		
SD-236-55		1205	C	Solid	X	X		
SD-236-01		1210	C	Solid	X	X		
SD-236-12		1215	C	Solid	X	X		
SD-237-55		1236	C	Solid	X	X		
SD-237-01		1235	C	Solid	X	X		
SD-237-02		1240	C	Solid	X	X		
SD-237-03		1245	C	Solid	X	X		
SD-DUP 03		0000	C	Solid	X	X		
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input checked="" type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)								
Empty Kit Relinquished by:								
Relinquished by: <i>[Signature]</i>		Date: 6/13/14		Company: TT		Time: 1717		Method of Shipment: 680-102359
Relinquished by: <i>[Signature]</i>		Date/Time: 6/13/14 08:39		Company: TT				Company: TT
Relinquished by: <i>[Signature]</i>		Date/Time:		Company:				Company: TT
Custody Seals Intact: A Yes A No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.8a				

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

**Chain of Custody Record**

PCBs

<b>Client Information</b> Client Contact: Mike Martin Company: Tetra Tech, Inc. Address: 20251 Century Blvd Suite 200 City: Germantown State, Zip: MD, 20874 Phone: [Blank] Email: Michael.Martin@tetratech.com Project Name: Sediments Site: [Blank]		Lab PM: Lanier, Jerry A E-Mail: jerry.lanier@testamericainc.com Carrier Tracking No(s): [Blank]		COC No: 680-56831-24906.25 Page: 4 of 4 Job #: [Blank]	
Due Date Requested: [Blank] TAT Requested (days): <b>Standard</b> PO #: [Blank] Purchase Order not required WO #: [Blank] Project #: 68012942 SSOW#: [Blank]		<b>Analysis Requested</b> GA_01_R_Ra - (MOD) Radium-226/228 A01R_Th - Standard Target List 680 - Local Method Perform (MS/MSD Res or No)			
Sample Identification SD-227-SS SD-227-01 SD-227-02		Sample Date 6/13/14 ↓	Sample Time 1310 1315 1320	Sample Type (C=Comp, G=grab) C C C	Matrix (W=water, G=solid, O=soil, L=tissue, A=air) Solid Solid Solid
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements: 680-102359			
Empty Kit Relinquished by: [Signature]		Method of Shipment: [Blank]			
Relinquished by: [Signature]		Date/Time: 6/13/14 1420 Company: ITX			
Relinquished by: [Signature]		Date/Time: 6/13/14 1740 Company: ITX			
Relinquished by: [Signature]		Date/Time: 6/14/14 08:39 Company: ITX			
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 0.8°C			

## SAMPLE SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102359-1

Sdg Number: 680102359-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-102359-1	SD-224-SS	Solid	06/13/2014 0820	06/14/2014 0839
680-102359-2	SD-224-01	Solid	06/13/2014 0825	06/14/2014 0839
680-102359-3	SD-224-02	Solid	06/13/2014 0830	06/14/2014 0839
680-102359-4	SD-224-03	Solid	06/13/2014 0835	06/14/2014 0839
680-102359-5	SD-223-SS	Solid	06/13/2014 0840	06/14/2014 0839
680-102359-6	SD-223-01	Solid	06/13/2014 0845	06/14/2014 0839
680-102359-7	SD-223-02	Solid	06/13/2014 0850	06/14/2014 0839
680-102359-8	SD-226-SS	Solid	06/13/2014 0855	06/14/2014 0839
680-102359-9	SD-226-01	Solid	06/13/2014 0900	06/14/2014 0839
680-102359-10	SD-226-02	Solid	06/13/2014 0905	06/14/2014 0839
680-102359-11	SD-226-03	Solid	06/13/2014 0910	06/14/2014 0839
680-102359-12	SD-225-SS	Solid	06/13/2014 0915	06/14/2014 0839
680-102359-13	SD-225-01	Solid	06/13/2014 0920	06/14/2014 0839
680-102359-14	SD-225-02	Solid	06/13/2014 0925	06/14/2014 0839
680-102359-15	SD-225-03	Solid	06/13/2014 0930	06/14/2014 0839
680-102359-16	SD-228-SS	Solid	06/13/2014 1005	06/14/2014 0839
680-102359-17	SD-228-01	Solid	06/13/2014 1010	06/14/2014 0839
680-102359-18	SD-228-02	Solid	06/13/2014 1015	06/14/2014 0839
680-102359-19	SD-228-03	Solid	06/13/2014 1020	06/14/2014 0839
680-102359-20	SD-234-SS	Solid	06/13/2014 1030	06/14/2014 0839
680-102359-21	SD-234-01	Solid	06/13/2014 1035	06/14/2014 0839
680-102359-22	SD-235-SS	Solid	06/13/2014 1100	06/14/2014 0839
680-102359-23	SD-235-01	Solid	06/13/2014 1105	06/14/2014 0839
680-102359-24	SD-235-02	Solid	06/13/2014 1110	06/14/2014 0839
680-102359-25	SD-235-03	Solid	06/13/2014 1115	06/14/2014 0839
680-102359-26	SD-236-SS	Solid	06/13/2014 1205	06/14/2014 0839
680-102359-27	SD-236-01	Solid	06/13/2014 1210	06/14/2014 0839
680-102359-28	SD-236-02	Solid	06/13/2014 1215	06/14/2014 0839
680-102359-29	SD-237-SS	Solid	06/13/2014 1230	06/14/2014 0839
680-102359-30	SD-237-01	Solid	06/13/2014 1235	06/14/2014 0839
680-102359-31	SD-237-02	Solid	06/13/2014 1240	06/14/2014 0839
680-102359-32	SD-237-03	Solid	06/13/2014 1245	06/14/2014 0839
680-102359-33	SD-Dup-03	Solid	06/13/2014 0000	06/14/2014 0839
680-102359-34	SD-227-SS	Solid	06/13/2014 1310	06/14/2014 0839
680-102359-35	SD-227-01	Solid	06/13/2014 1315	06/14/2014 0839
680-102359-36	SD-227-02	Solid	06/13/2014 1320	06/14/2014 0839

## METHOD SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102359-1

Sdg Number: 680102359-1

<b>Description</b>	<b>Lab Location</b>	<b>Method</b>	<b>Preparation Method</b>
<b>Matrix: Solid</b>			
Polychlorinated Biphenyls (PCBs) (GC/MS)	TAL SAV	EPA 680	
Extraction (Solid PCBs)	TAL SAV		EPA 680
Percent Moisture	TAL SAV	EPA Moisture	

### Lab References:

TAL SAV = TestAmerica Savannah

### Method References:

EPA = US Environmental Protection Agency

# HOLD TIME

SDG 680-102359-1

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PCB	UG/KG	SD-237-01	680-102359-30	NM	06/13/2014	07/23/2014	07/26/2014	40	3	43
PCB	UG/KG	SD-234-SS	680-102359-20	NM	06/13/2014	07/23/2014	07/26/2014	40	2	42
PCB	UG/KG	SD-223-SS	680-102359-5	NM	06/13/2014	07/23/2014	07/26/2014	40	2	42
PCB	UG/KG	SD-223-02	680-102359-7	NM	06/13/2014	06/26/2014	07/11/2014	13	15	28
PCB	UG/KG	SD-223-01	680-102359-6	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-Dup-03	680-102359-33	NM	06/13/2014	07/14/2014	07/16/2014	31	2	33
PCB	UG/KG	SD-237-SS	680-102359-29	NM	06/13/2014	06/26/2014	07/13/2014	13	17	30
PCB	UG/KG	SD-224-02	680-102359-3	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-237-02	680-102359-31	NM	06/13/2014	07/23/2014	07/26/2014	40	2	42
PCB	UG/KG	SD-224-03	680-102359-4	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-236-SS	680-102359-26	NM	06/13/2014	06/26/2014	07/03/2014	13	7	20
PCB	UG/KG	SD-236-02	680-102359-28	NM	06/13/2014	06/26/2014	07/02/2014	13	6	19
PCB	UG/KG	SD-236-01	680-102359-27	NM	06/13/2014	07/23/2014	07/26/2014	40	2	42
PCB	UG/KG	SD-235-SS	680-102359-22	NM	06/13/2014	07/23/2014	07/26/2014	40	2	42
PCB	UG/KG	SD-235-03	680-102359-25	NM	06/13/2014	06/26/2014	07/03/2014	13	7	20



SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	SD-235-02	680-102359-24	NM	06/13/2014	06/26/2014	07/13/2014	13	17	30
PCB	UG/KG	SD-235-01	680-102359-23	NM	06/13/2014	06/26/2014	07/13/2014	13	17	30
PCB	UG/KG	SD-237-03	680-102359-32	NM	06/13/2014	06/26/2014	07/11/2014	13	15	28
PCB	UG/KG	SD-226-03	680-102359-11	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-228-SS	680-102359-16	NM	06/13/2014	07/23/2014	07/25/2014	40	2	42
PCB	UG/KG	SD-228-03	680-102359-19	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-228-02	680-102359-18	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-228-01	680-102359-17	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-227-SS	680-102359-34	NM	06/13/2014	07/14/2014	07/16/2014	31	2	33
PCB	UG/KG	SD-227-02	680-102359-36	NM	06/13/2014	07/14/2014	07/16/2014	31	2	33
PCB	UG/KG	SD-224-01	680-102359-2	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-226-SS	680-102359-8	NM	06/13/2014	06/26/2014	07/11/2014	13	15	28
PCB	UG/KG	SD-234-01	680-102359-21	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-226-02	680-102359-10	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-226-01	680-102359-9	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-225-SS	680-102359-12	NM	06/13/2014	07/23/2014	07/25/2014	40	2	42
PCB	UG/KG	SD-225-03	680-102359-15	NM	06/13/2014	06/26/2014	07/14/2014	13	18	31
PCB	UG/KG	SD-225-02	680-102359-14	NM	06/13/2014	07/23/2014	07/25/2014	40	2	42

Wednesday, August 13, 2014

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PCB	UG/KG	SD-225-01	680-102359-13	NM	06/13/2014	07/23/2014	07/25/2014	40	2	42
PCB	UG/KG	SD-224-SS	680-102359-1	NM	06/13/2014	07/02/2014	07/10/2014	19	8	27
PCB	UG/KG	SD-227-01	680-102359-35	NM	06/13/2014	07/14/2014	07/16/2014	31	2	33

Field Duplicate Precision

ANALYTE	SD-Dup-03	SD-237-02	RPD	DIFFERENCE
HEPTACHLOROBIPHENYLS	ND	160	200.00	155.1
HEXACHLOROBIPHENYL	16	230	173.98	(214)
OCTACHLOROBIPHENYLS	ND	13	200.00	7.8
PENTACHLOROBIPHENYLS	45	680	175.17	(635)
TETRACHLOROBIPHENYLS	230	1300	(139.87)	(1070)
TRICHLOROBIPHENYLS	67	160	(81.94)	93

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: Fg0202.D DFTPP Injection Date: 07/02/2014  
 Instrument ID: CMSF DFTPP Injection Time: 16:15  
 Analysis Batch No.: 337435

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	40.0
197	Less than 1 % of mass 198	0.5
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	24.2
365	Greater than 1% of mass 198	3.0
441	Present but less than mass 443	12.1 (73.7)2
442	Greater than 40% of mass 198	82.6
443	17 - 23% of mass 442	16.4 (19.9)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-337435/3	Fg0203.D	07/02/2014	16:44
	ICISAV 680-337435/4	Fg0204.D	07/02/2014	17:13
	IC 680-337435/5	Fg0205.D	07/02/2014	17:42
	IC 680-337435/6	Fg0206.D	07/02/2014	18:11
	IC 680-337435/7	Fg0207.D	07/02/2014	18:40
	IC 680-337435/8	Fg0208.D	07/02/2014	19:09
	ICV 680-337435/9	Fg0209.D	07/02/2014	19:38
	MB 680-336450/16-A	Fg0211.D	07/02/2014	20:36
	LCS 680-336450/17-A	Fg0212.D	07/02/2014	21:05
SD-236-02 MS	680-102359-28 MS	Fg0213.D	07/02/2014	21:35
SD-236-02 MSD	680-102359-28 MSD	Fg0214.D	07/02/2014	22:03
SD-236-02	680-102359-28	Fg0215.D	07/02/2014	22:32
SD-235-03	680-102359-25	Fg0219.D	07/03/2014	00:28
SD-236-SS	680-102359-26	Fg0220.D	07/03/2014	00:56
	CCV 680-337435/22	Fg0222.D	07/03/2014	01:54

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102359-1

Analy Batch No.: 337435

SDG No.: 680102359-1

Instrument ID: CMSF

GC Column: HP-5MS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/02/2014 17:13

Calibration End Date: 07/02/2014 19:09

Calibration ID: 31767

Calibration Files:

LEVEL:	IAB SAMPLE ID:	IAB FILE ID:
Level 1	IC 680-337435/8	Fg0208.D
Level 2	IC 680-337435/7	Fg0207.D
Level 3	ICISAV 680-337435/4	Fg0204.D
Level 4	IC 680-337435/6	Fg0206.D
Level 5	IC 680-337435/5	Fg0205.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1								
Monochlorobiphenyl	0.8429	0.8197	0.8010	0.7597	0.7448	Ave		0.7936			5.2	20.0				
Dichlorobiphenyl	0.6304	0.6034	0.5910	0.5722	0.5450	Ave		0.5884			5.5	20.0				
Trichlorobiphenyl	0.4170	0.4288	0.4156	0.4115	0.4093	Ave		0.4164			1.8	20.0				
PCB-104			0.2442			Ave		0.2442				30.0				
Tetrachlorobiphenyl	0.2573	0.2611	0.2444	0.2392	0.2372	Ave		0.2478			4.4	20.0				
Pentachlorobiphenyl	0.2109	0.2093	0.2023	0.2018	0.1983	Ave		0.2045			2.6	20.0				
PCB-77			0.4022			Ave		0.4022				30.0				
Hexachlorobiphenyl	0.1716	0.1712	0.1580	0.1680	0.1741	Ave		0.1686			3.7	20.0				
Heptachlorobiphenyl	0.1475	0.1405	0.0937	0.1370	0.1345	Ave		0.1306			16.0	20.0				
Octachlorobiphenyl	0.1567	0.1641	0.1077	0.1572	0.1585	Ave		0.1488			16.0	20.0				
PCB-208			0.0738			Ave		0.0738				30.0				
Nonachlorobiphenyl			0.0589			Ave		0.0715			14.0	20.0				
Decachlorobiphenyl	0.0849	0.0709	0.0561	0.0732	0.0726	Ave		0.0715			14.0	20.0				
Decachlorobiphenyl-13C12	0.1197	0.1062	0.0784	0.1027	0.1024	Ave		0.1019			15.0	20.0				

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: ICV 680-337435/9 Calibration Date: 07/02/2014 19:38  
 Instrument ID: CMSF Calib Start Date: 07/02/2014 17:13  
 GC Column: HP-5MS ID: 0.25 (mm) Calib End Date: 07/02/2014 19:09  
 Lab File ID: Fg0209.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7936	0.7872		0.992	1.00	-0.8	20.0
Dichlorobiphenyl	Ave	0.5884	0.5999		1.02	1.00	1.9	20.0
Trichlorobiphenyl	Ave	0.4164	0.4402		1.06	1.00	5.7	20.0
Tetrachlorobiphenyl	Ave	0.2478	0.2429		1.96	2.00	-2.0	20.0
Pentachlorobiphenyl	Ave	0.2045	0.2022		1.98	2.00	-1.1	20.0
Hexachlorobiphenyl	Ave	0.1686	0.1558		1.85	2.00	-7.6	20.0
Heptachlorobiphenyl	Ave	0.1306	0.1175		2.70	3.00	-10.1	20.0
Octachlorobiphenyl	Ave	0.1488	0.1426		2.87	3.00	-4.2	20.0
DCB Decachlorobiphenyl	Ave	0.0715	0.0715		5.00	5.00	-0.0	20.0

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: Fg0211.D Lab Sample ID: MB 680-336450/16-A  
 Matrix: Solid Date Extracted: 06/26/2014 18:41  
 Instrument ID: CMSF Date Analyzed: 07/02/2014 20:36  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-336450/17-A	Fg0212.D	07/02/2014 21:05
SD-236-02 MS	680-102359-28 MS	Fg0213.D	07/02/2014 21:35
SD-236-02 MSD	680-102359-28 MSD	Fg0214.D	07/02/2014 22:03
SD-236-02	680-102359-28	Fg0215.D	07/02/2014 22:32
SD-235-03	680-102359-25	Fg0219.D	07/03/2014 00:28
SD-236-SS	680-102359-26	Fg0220.D	07/03/2014 00:56
SD-237-03	680-102359-32	XG1034.D	07/11/2014 01:07
SD-235-01	680-102359-23	XG1308.D	07/13/2014 22:46
SD-235-02	680-102359-24	XG1309.D	07/13/2014 23:15
SD-237-SS	680-102359-29	XG1310.D	07/13/2014 23:43

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: _____	Lab Sample ID: <u>MB 680-336450/16-A</u>
Matrix: <u>Solid</u>	Lab File ID: <u>Fg0211.D</u>
Analysis Method: <u>680</u>	Date Collected: _____
Extract. Method: <u>680</u>	Date Extracted: <u>06/26/2014 18:41</u>
Sample wt/vol: <u>30.02(g)</u>	Date Analyzed: <u>07/02/2014 20:36</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>337435</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	59		30-130



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-337435/22 Calibration Date: 07/03/2014 01:54  
 Instrument ID: CMSF Calib Start Date: 07/02/2014 17:13  
 GC Column: HP-5MS ID: 0.25 (mm) Calib End Date: 07/02/2014 19:09  
 Lab File ID: Fg0222.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7936	0.7632		0.962	1.00	-3.8	20.0
Dichlorobiphenyl	Ave	0.5884	0.5946		1.01	1.00	1.0	20.0
Trichlorobiphenyl	Ave	0.4164	0.4238		1.02	1.00	1.8	20.0
Tetrachlorobiphenyl	Ave	0.2478	0.2573		2.08	2.00	3.8	20.0
Pentachlorobiphenyl	Ave	0.2045	0.2068		2.02	2.00	1.1	20.0
Hexachlorobiphenyl	Ave	0.1686	0.1605		1.90	2.00	-4.8	20.0
Heptachlorobiphenyl	Ave	0.1306	0.1453		3.34	3.00	11.2	20.0
Octachlorobiphenyl	Ave	0.1488	0.1540		3.10	3.00	3.4	20.0
Nonachlorobiphenyl	Ave	0.0715	0.0987		5.52	4.00	38.0*	20.0
DCB Decachlorobiphenyl	Ave	0.0715	0.0718		5.02	5.00	0.4	20.0
Decachlorobiphenyl-13C12	Ave	0.1019	0.0938		4.60	5.00	-7.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: Fg0602.D DFTPP Injection Date: 07/06/2014  
 Instrument ID: CMSF DFTPP Injection Time: 12:56  
 Analysis Batch No.: 337751

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	48.3
197	Less than 1 % of mass 198	0.3
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	7.3
275	10 - 30% of mass 198	22.0
365	Greater than 1% of mass 198	3.0
441	Present but less than mass 443	10.7 (75.4) 2
442	Greater than 40% of mass 198	73.3
443	17 - 23% of mass 442	14.2 (19.4) 1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-337751/4	Fg0604.D	07/06/2014	13:56
	IC 680-337751/5	Fg0605.D	07/06/2014	14:25
	IC 680-337751/6	Fg0606.D	07/06/2014	14:54
	IC 680-337751/7	Fg0607.D	07/06/2014	15:23
	IC 680-337751/8	Fg0608.D	07/06/2014	15:52
	ICV 680-337751/9	Fg0609.D	07/06/2014	16:21

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102359-1 Analy Batch No.: 337751

SDG No.: 680102359-1

Instrument ID: CMSF GC Column: HP-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/06/2014 13:56 Calibration End Date: 07/06/2014 15:52 Calibration ID: 31869

Calibration Files:

LEVEL	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-337751/8	Fg0608.D
Level 2	IC 680-337751/7	Fg0607.D
Level 3	ICISAV 680-337751/4	Fg0604.D
Level 4	IC 680-337751/6	Fg0606.D
Level 5	IC 680-337751/5	Fg0605.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2							
Monochlorobiphenyl	1.0360	1.0204	0.9964	1.0400	0.9363	Ave	1.0058			4.2		20.0				
Dichlorobiphenyl	0.7057	0.6752	0.6652	0.6518	0.6177	Ave	0.6631			4.9		20.0				
Trichlorobiphenyl	0.4888	0.4754	0.4650	0.4816	0.4380	Ave	0.4698			4.2		20.0				
PCB-104			0.3015			Ave	0.3015					30.0				
Tetrachlorobiphenyl	0.3154	0.2898	0.2843	0.2951	0.2810	Ave	0.2931			4.6		20.0				
Pentachlorobiphenyl	0.2558	0.2565	0.2462	0.2491	0.2414	Ave	0.2498			2.6		20.0				
PCB-77			0.4559			Ave	0.4559					30.0				
Hexachlorobiphenyl	0.2207	0.2115	0.2067	0.2115	0.1994	Ave	0.2099			3.7		20.0				
Heptachlorobiphenyl	0.2233	0.2029	0.1917	0.2060	0.1840	Ave	0.2016			7.4		20.0				
Octachlorobiphenyl	0.2273	0.2205	0.2152	0.2207	0.2039	Ave	0.2175			4.0		20.0				
PCB-208			0.1309			Ave	0.1309					30.0				
Nonachlorobiphenyl			0.1070			Ave	0.1152			7.7		20.0				
DCB Decachlorobiphenyl	0.1251	0.1218	0.1143	0.1120	0.1025	Ave	0.1152			7.7		20.0				
Decachlorobiphenyl-13C12	0.1420	0.1470	0.1285	0.1330	0.1131	Ave	0.1327			9.9		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: ICV 680-337751/9 Calibration Date: 07/06/2014 16:21  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25(mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0609.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.003		0.997	1.00	-0.3	20.0
Dichlorobiphenyl	Ave	0.6631	0.6344		0.957	1.00	-4.3	20.0
Trichlorobiphenyl	Ave	0.4698	0.4964		1.06	1.00	5.7	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.2976		2.03	2.00	1.5	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2558		2.05	2.00	2.4	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2140		2.04	2.00	1.9	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2033		3.03	3.00	0.8	20.0
Octachlorobiphenyl	Ave	0.2175	0.2228		3.07	3.00	2.4	20.0
DCB Decachlorobiphenyl	Ave	0.1152	0.1150		4.99	5.00	-0.1	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: Fg0702.D DFTPP Injection Date: 07/07/2014  
 Instrument ID: CMSF DFTPP Injection Time: 15:25  
 Analysis Batch No.: 337937

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.9
197	Less than 1 % of mass 198	0.8
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.2
275	10 - 30% of mass 198	19.1
365	Greater than 1% of mass 198	2.7
441	Present but less than mass 443	9.7 (77.2)2
442	Greater than 40% of mass 198	64.6
443	17 - 23% of mass 442	12.6 (19.5)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-337937/3	Fg0703.D	07/07/2014	15:54
	CCVIS 680-337937/4	Fg0704.D	07/07/2014	16:47
	MB 680-337170/11-A	Fg0706.D	07/07/2014	18:05
	LCS 680-337170/12-A	Fg0707.D	07/07/2014	18:34
	CCV 680-337937/21	Fg0721.D	07/08/2014	01:19

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-337937/4 Calibration Date: 07/07/2014 16:47  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25 (mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0704.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.077		1.07	1.00	7.0	20.0
Dichlorobiphenyl	Ave	0.6631	0.6962		1.05	1.00	5.0	20.0
Trichlorobiphenyl	Ave	0.4698	0.5090		1.08	1.00	8.4	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.3010		2.05	2.00	2.7	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2791		2.23	2.00	11.7	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2071		1.97	2.00	-1.4	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2059		3.06	3.00	2.1	20.0
Octachlorobiphenyl	Ave	0.2175	0.2223		3.07	3.00	2.2	20.0
Nonachlorobiphenyl	Ave	0.1152	0.1419		4.93	4.00	23.2*	20.0
DCB Decachlorobiphenyl	Ave	0.1152	0.1138		4.94	5.00	-1.2	20.0
Decachlorobiphenyl-13C12	Ave	0.1327	0.1257		4.74	5.00	-5.3	20.0

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: Fg0706.D Lab Sample ID: MB 680-337170/11-A  
 Matrix: Solid Date Extracted: 07/02/2014 08:53  
 Instrument ID: CMSF Date Analyzed: 07/07/2014 18:05  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-337170/12-A	Fg0707.D	07/07/2014 18:34
SD-224-SS MS	680-102359-1 MS	XG1007.D	07/10/2014 12:11
SD-224-SS MSD	680-102359-1 MSD	XG1008.D	07/10/2014 12:39
SD-224-SS	680-102359-1	XG1009.D	07/10/2014 13:08

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102359-1</u>
SDG No.: <u>680102359-1</u>	
Client Sample ID: _____	Lab Sample ID: <u>MB 680-337170/11-A</u>
Matrix: <u>Solid</u>	Lab File ID: <u>Fg0706.D</u>
Analysis Method: <u>680</u>	Date Collected: _____
Extract. Method: <u>680</u>	Date Extracted: <u>07/02/2014 08:53</u>
Sample wt/vol: <u>30.15(g)</u>	Date Analyzed: <u>07/07/2014 18:05</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>337937</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	80		30-130



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-337937/21 Calibration Date: 07/08/2014 01:19  
 Instrument ID: CMSF Calib Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25 (mm) Calib End Date: 07/06/2014 15:52  
 Lab File ID: Fg0721.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	1.006	1.079		1.07	1.00	7.3	20.0
Dichlorobiphenyl	Ave	0.6631	0.6777		1.02	1.00	2.2	20.0
Trichlorobiphenyl	Ave	0.4698	0.4895		1.04	1.00	4.2	20.0
Tetrachlorobiphenyl	Ave	0.2931	0.3041		2.08	2.00	3.8	20.0
Pentachlorobiphenyl	Ave	0.2498	0.2502		2.00	2.00	0.2	20.0
Hexachlorobiphenyl	Ave	0.2099	0.2209		2.10	2.00	5.2	20.0
Heptachlorobiphenyl	Ave	0.2016	0.2096		3.12	3.00	3.9	20.0
Octachlorobiphenyl	Ave	0.2175	0.2224		3.07	3.00	2.2	20.0
Nonachlorobiphenyl	Ave	0.1152	0.1279		4.44	4.00	11.1	20.0
DCB Decachlorobiphenyl	Ave	0.1152	0.1087		4.72	5.00	-5.6	20.0
Decachlorobiphenyl-13C12	Ave	0.1327	0.1202		4.53	5.00	-9.5	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG0802.D DFTPP Injection Date: 07/08/2014  
 Instrument ID: CMSX DFTPP Injection Time: 11:48  
 Analysis Batch No.: 338065

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.8
197	Less than 1 % of mass 198	0.3
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	27.8
365	Greater than 1% of mass 198	4.5
441	Present but less than mass 443	14.0 (80.5)2
442	Greater than 40% of mass 198	92.8
443	17 - 23% of mass 442	17.3 (18.7)1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-338065/4	XG0804.D	07/08/2014	14:04
	IC 680-338065/5	XG0805.D	07/08/2014	14:32
	IC 680-338065/6	XG0806.D	07/08/2014	15:01
	IC 680-338065/7	XG0807.D	07/08/2014	15:29
	IC 680-338065/8	XG0808.D	07/08/2014	15:58
	ICV 680-338065/9	XG0809.D	07/08/2014	16:27

GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah

Job No.: 680-102359-1

Analy Batch No.: 338065

SDG No.: 680102359-1

Instrument ID: CMSX

GC Column: DB-5MS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2014 14:04

Calibration End Date: 07/08/2014 15:58

Calibration ID: 31919

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-338065/8	XG0808.D
Level 2	IC 680-338065/7	XG0807.D
Level 3	ICISAV 680-338065/4	XG0804.D
Level 4	IC 680-338065/6	XG0806.D
Level 5	IC 680-338065/5	XG0805.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	R <sup>2</sup> OR COD	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2									
Monochlorobiphenyl	0.9065	0.8925	0.9538	0.9322	0.9238	Ave								20.0	20.0			
Dichlorobiphenyl	0.5915	0.6255	0.6459	0.6725	0.6659	Ave								20.0	20.0			
Trichlorobiphenyl	0.3952	0.4252	0.4540	0.4764	0.4724	Ave								20.0	20.0			
PCB-104			0.3459			Ave								30.0	30.0			
Tetrachlorobiphenyl	0.2979	0.3138	0.3348	0.3431	0.3385	Ave								20.0	20.0			
Pentachlorobiphenyl	0.1953	0.2349	0.2632	0.2716	0.2824	Ave								20.0	20.0			
PCB-77			0.4735			Ave								30.0	30.0			
Hexachlorobiphenyl	0.1989	0.2390	0.2639	0.2669	0.2604	Ave								20.0	20.0			
Heptachlorobiphenyl	0.1683	0.1973	0.2134	0.2347	0.2265	Ave								20.0	20.0			
Octachlorobiphenyl	0.1458	0.1847	0.1949	0.2143	0.2163	Ave								20.0	20.0			
PCB-208			0.0906			Ave								30.0	30.0			
Nonachlorobiphenyl			0.0725			Ave								20.0	20.0			
DCB Decachlorobiphenyl	0.0507	0.0661	0.0711	0.0735	0.0747	Ave								20.0	20.0			
Decachlorobiphenyl-13C12	0.0604	0.0799	0.0831	0.0851	0.0829	Ave								20.0	20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: ICV 680-338065/9 Calibration Date: 07/08/2014 16:27  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG0809.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8805		0.955	1.00	-4.5	20.0
Dichlorobiphenyl	Ave	0.6403	0.6291		0.983	1.00	-1.7	20.0
Trichlorobiphenyl	Ave	0.4446	0.4497		1.01	1.00	1.1	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3210		1.97	2.00	-1.4	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2325		1.86	2.00	-6.8	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2501		2.03	2.00	1.7	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2019		2.91	3.00	-3.0	20.0
Octachlorobiphenyl	Ave	0.1912	0.1790		2.81	3.00	-6.4	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0596		4.44	5.00	-11.3	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG1002.D DFTPP Injection Date: 07/10/2014  
 Instrument ID: CMSX DFTPP Injection Time: 09:26  
 Analysis Batch No.: 338412

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.8
275	10 - 30% of mass 198	27.9
365	Greater than 1% of mass 198	4.5
441	Present but less than mass 443	15.5 (82.2)2
442	Greater than 40% of mass 198	99.7
443	17 - 23% of mass 442	18.8 (18.9)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-338412/3	XG1003.D	07/10/2014	09:57
	CCVIS 680-338412/4	XG1004.D	07/10/2014	10:45
SD-224-SS MS	680-102359-1 MS	XG1007.D	07/10/2014	12:11
SD-224-SS MSD	680-102359-1 MSD	XG1008.D	07/10/2014	12:39
SD-224-SS	680-102359-1	XG1009.D	07/10/2014	13:08
	CCV 680-338412/20	XG1020.D	07/10/2014	18:23

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-338412/4 Calibration Date: 07/10/2014 10:45  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1004.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8663		0.940	1.00	-6.0	20.0
Dichlorobiphenyl	Ave	0.6403	0.6240		0.975	1.00	-2.5	20.0
Trichlorobiphenyl	Ave	0.4446	0.4559		1.03	1.00	2.5	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3204		1.97	2.00	-1.6	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2650		2.12	2.00	6.2	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2613		2.13	2.00	6.3	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2299		3.31	3.00	10.5	20.0
Octachlorobiphenyl	Ave	0.1912	0.2078		3.26	3.00	8.7	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0946		5.63	4.00	40.7*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0721		5.36	5.00	7.3	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0825		5.27	5.00	5.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-338412/20 Calibration Date: 07/10/2014 18:23  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1020.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8077		0.876	1.00	-12.4	20.0
Dichlorobiphenyl	Ave	0.6403	0.6223		0.972	1.00	-2.8	20.0
Trichlorobiphenyl	Ave	0.4446	0.4553		1.02	1.00	2.4	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3124		1.92	2.00	-4.1	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2555		2.05	2.00	2.4	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2443		1.99	2.00	-0.6	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2111		3.04	3.00	1.5	20.0
Octachlorobiphenyl	Ave	0.1912	0.1892		2.97	3.00	-1.0	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0778		4.63	4.00	15.7	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0584		4.35	5.00	-13.1	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0695		4.44	5.00	-11.3	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG1023.D DFTPP Injection Date: 07/10/2014  
 Instrument ID: CMSX DFTPP Injection Time: 19:50  
 Analysis Batch No.: 338586

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.6
197	Less than 1 % of mass 198	0.4
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	7.0
275	10 - 30% of mass 198	28.2
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	15.1 (82.2) 2
442	Greater than 40% of mass 198	95.9
443	17 - 23% of mass 442	18.4 (19.2) 1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-338586/3	XG1024.D	07/10/2014	20:21
	CCVIS 680-338586/4	XG1025.D	07/10/2014	20:51
SD-237-03	680-102359-32	XG1034.D	07/11/2014	01:07
	MB 680-336444/21-A	XG1036.D	07/11/2014	02:04
SD-223-02 MS	680-102359-7 MS	XG1038.D	07/11/2014	03:01
SD-223-02 MSD	680-102359-7 MSD	XG1039.D	07/11/2014	03:29
SD-223-02	680-102359-7	XG1040.D	07/11/2014	03:58
SD-226-SS	680-102359-8	XG1041.D	07/11/2014	04:26
	CCV 680-338586/22	XG1043.D	07/11/2014	05:23



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-338586/4 Calibration Date: 07/10/2014 20:51  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1025.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8134		0.882	1.00	-11.8	20.0
Dichlorobiphenyl	Ave	0.6403	0.6189		0.967	1.00	-3.3	20.0
Trichlorobiphenyl	Ave	0.4446	0.4617		1.04	1.00	3.8	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3199		1.96	2.00	-1.8	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2668		2.14	2.00	6.9	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2595		2.11	2.00	5.6	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2249		3.24	3.00	8.1	20.0
Octachlorobiphenyl	Ave	0.1912	0.2022		3.17	3.00	5.8	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0848		5.05	4.00	26.2*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0630		4.68	5.00	-6.3	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0739		4.72	5.00	-5.7	20.0

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG1036.D Lab Sample ID: MB 680-336444/21-A  
 Matrix: Solid Date Extracted: 06/26/2014 18:41  
 Instrument ID: CMSX Date Analyzed: 07/11/2014 02:04  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SD-223-02 MS	680-102359-7 MS	XG1038.D	07/11/2014 03:01
SD-223-02 MSD	680-102359-7 MSD	XG1039.D	07/11/2014 03:29
SD-223-02	680-102359-7	XG1040.D	07/11/2014 03:58
SD-226-SS	680-102359-8	XG1041.D	07/11/2014 04:26
	LCS 680-336444/22-A	XG1306.D	07/13/2014 21:49
SD-224-01	680-102359-2	XG1312.D	07/14/2014 00:40
SD-224-02	680-102359-3	XG1313.D	07/14/2014 01:08
SD-224-03	680-102359-4	XG1314.D	07/14/2014 01:37
SD-223-01	680-102359-6	XG1316.D	07/14/2014 02:34
SD-226-01	680-102359-9	XG1317.D	07/14/2014 03:02
SD-226-02	680-102359-10	XG1318.D	07/14/2014 03:30
SD-226-03	680-102359-11	XG1319.D	07/14/2014 03:59
SD-225-03	680-102359-15	XG1329.D	07/14/2014 08:49
SD-228-01	680-102359-17	XG1331.D	07/14/2014 09:46
SD-228-02	680-102359-18	XG1332.D	07/14/2014 10:15
SD-228-03	680-102359-19	XG1333.D	07/14/2014 10:43
SD-234-01	680-102359-21	XG1335.D	07/14/2014 11:40

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-336444/21-A  
 Matrix: Solid Lab File ID: XG1036.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 06/26/2014 18:41  
 Sample wt/vol: 30.01(g) Date Analyzed: 07/11/2014 02:04  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 338586 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	54		30-130

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-338586/22 Calibration Date: 07/11/2014 05:23  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1043.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8875		0.963	1.00	-3.7	20.0
Dichlorobiphenyl	Ave	0.6403	0.6727		1.05	1.00	5.1	20.0
Trichlorobiphenyl	Ave	0.4446	0.4726		1.06	1.00	6.3	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3289		2.02	2.00	1.0	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2728		2.19	2.00	9.3	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2664		2.17	2.00	8.3	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2242		3.23	3.00	7.8	20.0
Octachlorobiphenyl	Ave	0.1912	0.2094		3.29	3.00	9.5	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0901		5.36	4.00	34.0*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0687		5.11	5.00	2.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0795		5.07	5.00	1.5	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG1302.D DFTPP Injection Date: 07/13/2014  
 Instrument ID: CMSX DFTPP Injection Time: 19:52  
 Analysis Batch No.: 338830

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.8
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	7.0
275	10 - 30% of mass 198	28.0
365	Greater than 1% of mass 198	4.8
441	Present but less than mass 443	13.9 (77.0)2
442	Greater than 40% of mass 198	92.9
443	17 - 23% of mass 442	18.1 (19.5)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-338830/3	XG1303.D	07/13/2014	20:22
	CCVIS 680-338830/4	XG1304.D	07/13/2014	20:53
	LCS 680-336444/22-A	XG1306.D	07/13/2014	21:49
SD-235-01	680-102359-23	XG1308.D	07/13/2014	22:46
SD-235-02	680-102359-24	XG1309.D	07/13/2014	23:15
SD-237-SS	680-102359-29	XG1310.D	07/13/2014	23:43
SD-224-01	680-102359-2	XG1312.D	07/14/2014	00:40
SD-224-02	680-102359-3	XG1313.D	07/14/2014	01:08
SD-224-03	680-102359-4	XG1314.D	07/14/2014	01:37
SD-223-01	680-102359-6	XG1316.D	07/14/2014	02:34
SD-226-01	680-102359-9	XG1317.D	07/14/2014	03:02
SD-226-02	680-102359-10	XG1318.D	07/14/2014	03:30
SD-226-03	680-102359-11	XG1319.D	07/14/2014	03:59
	CCV 680-338830/22	XG1322.D	07/14/2014	05:24

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-338830/4 Calibration Date: 07/13/2014 20:53  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1304.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.9649		1.05	1.00	4.7	20.0
Dichlorobiphenyl	Ave	0.6403	0.6696		1.05	1.00	4.6	20.0
Trichlorobiphenyl	Ave	0.4446	0.4816		1.08	1.00	8.3	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3417		2.10	2.00	4.9	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2819		2.26	2.00	13.0	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2690		2.19	2.00	9.4	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2289		3.30	3.00	10.0	20.0
Octachlorobiphenyl	Ave	0.1912	0.2078		3.26	3.00	8.7	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0953		5.67	4.00	41.8*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0704		5.24	5.00	4.8	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0795		5.08	5.00	1.5	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-338830/22 Calibration Date: 07/14/2014 05:24  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1322.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.9849		1.07	1.00	6.9	20.0
Dichlorobiphenyl	Ave	0.6403	0.6655		1.04	1.00	3.9	20.0
Trichlorobiphenyl	Ave	0.4446	0.4938		1.11	1.00	11.1	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3455		2.12	2.00	6.1	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2884		2.31	2.00	15.6	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2810		2.29	2.00	14.3	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2314		3.34	3.00	11.2	20.0
Octachlorobiphenyl	Ave	0.1912	0.2137		3.35	3.00	11.8	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0926		5.51	4.00	37.7*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0704		5.24	5.00	4.7	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0786		5.02	5.00	0.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG1325.D DFTPP Injection Date: 07/14/2014  
 Instrument ID: CMSX DFTPP Injection Time: 06:51  
 Analysis Batch No.: 338831

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.8
275	10 - 30% of mass 198	28.7
365	Greater than 1% of mass 198	4.7
441	Present but less than mass 443	15.5 (84.6)2
442	Greater than 40% of mass 198	96.1
443	17 - 23% of mass 442	18.4 (19.1)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-338831/3	XG1326.D	07/14/2014	07:22
	CCVIS 680-338831/4	XG1327.D	07/14/2014	07:52
SD-225-03	680-102359-15	XG1329.D	07/14/2014	08:49
SD-228-01	680-102359-17	XG1331.D	07/14/2014	09:46
SD-228-02	680-102359-18	XG1332.D	07/14/2014	10:15
SD-228-03	680-102359-19	XG1333.D	07/14/2014	10:43
SD-234-01	680-102359-21	XG1335.D	07/14/2014	11:40
	CCV 680-338831/21	XG1344.D	07/14/2014	16:31



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-338831/4 Calibration Date: 07/14/2014 07:52  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1327.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8594		0.932	1.00	-6.8	20.0
Dichlorobiphenyl	Ave	0.6403	0.6515		1.02	1.00	1.8	20.0
Trichlorobiphenyl	Ave	0.4446	0.4746		1.07	1.00	6.7	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3434		2.11	2.00	5.5	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2798		2.24	2.00	12.2	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2677		2.18	2.00	8.9	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2207		3.18	3.00	6.1	20.0
Octachlorobiphenyl	Ave	0.1912	0.2088		3.28	3.00	9.2	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0883		5.26	4.00	31.4*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0693		5.15	5.00	3.1	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0776		4.96	5.00	-0.9	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-338831/21 Calibration Date: 07/14/2014 16:31  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1344.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8814		0.956	1.00	-4.4	20.0
Dichlorobiphenyl	Ave	0.6403	0.6251		0.976	1.00	-2.4	20.0
Trichlorobiphenyl	Ave	0.4446	0.4693		1.06	1.00	5.5	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3192		1.96	2.00	-2.0	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2688		2.15	2.00	7.7	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2510		2.04	2.00	2.1	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2058		2.97	3.00	-1.1	20.0
Octachlorobiphenyl	Ave	0.1912	0.1892		2.97	3.00	-1.0	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0812		4.83	4.00	20.8*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0631		4.69	5.00	-6.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0698		4.45	5.00	-10.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG1602.D DFTPP Injection Date: 07/16/2014  
 Instrument ID: CMSX DFTPP Injection Time: 11:11  
 Analysis Batch No.: 339278

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	52.0
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	28.8
365	Greater than 1% of mass 198	4.3
441	Present but less than mass 443	11.0 (64.2)2
442	Greater than 40% of mass 198	89.6
443	17 - 23% of mass 442	17.2 (19.2)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-339278/3	XG1603.D	07/16/2014	11:41
	CCVIS 680-339278/4	XG1604.D	07/16/2014	12:14
	LCS 680-338912/19-A	XG1606.D	07/16/2014	13:11
	MB 680-338912/18-A	XG1607.D	07/16/2014	13:40
SD-Dup-03	680-102359-33	XG1613.D	07/16/2014	16:31
SD-227-SS	680-102359-34	XG1614.D	07/16/2014	17:00
SD-227-01	680-102359-35	XG1615.D	07/16/2014	17:28
SD-227-02	680-102359-36	XG1616.D	07/16/2014	17:57
	CCV 680-339278/23	XG1623.D	07/16/2014	21:17

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-339278/4 Calibration Date: 07/16/2014 12:14  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1604.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8561		0.929	1.00	-7.1	20.0
Dichlorobiphenyl	Ave	0.6403	0.6489		1.01	1.00	1.3	20.0
Trichlorobiphenyl	Ave	0.4446	0.4765		1.07	1.00	7.2	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3327		2.04	2.00	2.2	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2688		2.15	2.00	7.7	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2530		2.06	2.00	2.9	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2130		3.07	3.00	2.4	20.0
Octachlorobiphenyl	Ave	0.1912	0.1962		3.08	3.00	2.6	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0897		5.34	4.00	33.4*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0685		5.10	5.00	1.9	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0770		4.92	5.00	-1.6	20.0

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
SDG No.: 680102359-1  
Lab File ID: XG1607.D Lab Sample ID: MB 680-338912/18-A  
Matrix: Solid Date Extracted: 07/14/2014 14:58  
Instrument ID: CMSX Date Analyzed: 07/16/2014 13:40  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-338912/19-A	XG1606.D	07/16/2014 13:11
SD-Dup-03	680-102359-33	XG1613.D	07/16/2014 16:31
SD-227-SS	680-102359-34	XG1614.D	07/16/2014 17:00
SD-227-01	680-102359-35	XG1615.D	07/16/2014 17:28
SD-227-02	680-102359-36	XG1616.D	07/16/2014 17:57

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-338912/18-A  
 Matrix: Solid Lab File ID: XG1607.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/14/2014 14:58  
 Sample wt/vol: 10.05(g) Date Analyzed: 07/16/2014 13:40  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339278 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.5	U	51	2.5
25512-42-9	Dichlorobiphenyl	1.0	U	9.9	1.0
28655-71-2	Heptachlorobiphenyl	1.5	U	30	1.5
26601-64-9	Hexachlorobiphenyl	0.99	U	20	0.99
27323-18-8	Monochlorobiphenyl	0.57	U	9.9	0.57
53742-07-7	Nonachlorobiphenyl	9.9	U	51	9.9
55722-26-4	Octachlorobiphenyl	1.6	U	30	1.6
25429-29-2	Pentachlorobiphenyl	1.0	U	20	1.0
26914-33-0	Tetrachlorobiphenyl	1.1	U	20	1.1
25323-68-6	Trichlorobiphenyl	0.51	U	9.9	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	72		30-130

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-339278/23 Calibration Date: 07/16/2014 21:17  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1623.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8503		0.922	1.00	-7.8	20.0
Dichlorobiphenyl	Ave	0.6403	0.6550		1.02	1.00	2.3	20.0
Trichlorobiphenyl	Ave	0.4446	0.4796		1.08	1.00	7.9	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3319		2.04	2.00	1.9	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2663		2.13	2.00	6.7	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2599		2.11	2.00	5.7	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2180		3.14	3.00	4.8	20.0
Octachlorobiphenyl	Ave	0.1912	0.1889		2.96	3.00	-1.2	20.0
Nonachlorobiphenyl	Ave	0.0672	0.0858		5.10	4.00	27.6*	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0618		4.60	5.00	-8.1	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0661		4.22	5.00	-15.6	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG1907.D DFTPP Injection Date: 07/19/2014  
 Instrument ID: CMSX DFTPP Injection Time: 21:51  
 Analysis Batch No.: 339932

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	54.3
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.9
275	10 - 30% of mass 198	30.0
365	Greater than 1% of mass 198	4.8
441	Present but less than mass 443	13.3 (84.6)2
442	Greater than 40% of mass 198	86.0
443	17 - 23% of mass 442	15.7 (18.3)1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-339932/4	XG1909.D	07/19/2014	22:52
	IC 680-339932/5	XG1910.D	07/19/2014	23:20
	IC 680-339932/6	XG1911.D	07/19/2014	23:49
	IC 680-339932/7	XG1912.D	07/20/2014	00:17
	IC 680-339932/8	XG1913.D	07/20/2014	00:46
	ICV 680-339932/9	XG1914.D	07/20/2014	01:14



GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102359-1 Analy Batch No.: 339932

SDG No.: 680102359-1

Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2014 22:52 Calibration End Date: 07/20/2014 00:46 Calibration ID: 32129

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-339932/8	XG1913.D
Level 2	IC 680-339932/7	XG1912.D
Level 3	ICISAV 680-339932/4	XG1909.D
Level 4	IC 680-339932/6	XG1911.D
Level 5	IC 680-339932/5	XG1910.D

ANALYTE	RRF					CURVE			COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	TYPE	B	M1	M2										
Monochlorobiphenyl	0.8353	0.8456	0.9098	0.8813	0.8734	Ave				0.8691				3.4		20.0			
Dichlorobiphenyl	0.5776	0.5823	0.6122	0.6067	0.5987	Ave				0.5955				2.5		20.0			
Trichlorobiphenyl	0.3996	0.4135	0.4348	0.4389	0.4410	Ave				0.4256				4.3		20.0			
PCB-104			0.3302			Ave				0.3302						30.0			
Tetrachlorobiphenyl	0.2755	0.2817	0.3033	0.2909	0.2951	Ave				0.2893				3.8		20.0			
Pentachlorobiphenyl	0.2123	0.2203	0.2262	0.2270	0.2357	Ave				0.2243				3.9		20.0			
PCB-77			0.4767			Ave				0.4767						30.0			
Hexachlorobiphenyl	0.1966	0.2022	0.2225	0.2132	0.2185	Ave				0.2106				5.2		20.0			
Heptachlorobiphenyl	0.1540	0.1656	0.1696	0.1700	0.1695	Ave				0.1657				4.1		20.0			
Octachlorobiphenyl	0.1373	0.1488	0.1535	0.1521	0.1669	Ave				0.1517				7.0		20.0			
PCB-208			0.0569			Ave				0.0569						30.0			
Nonachlorobiphenyl			0.0443			Ave				0.0363				11.0		20.0			
DCB Decachlorobiphenyl	0.0321	0.0328	0.0379	0.0370	0.0414	Ave				0.0363				11.0		20.0			
Decachlorobiphenyl-13C12	0.0407	0.0484	0.0517	0.0504	0.0567	Ave				0.0496				12.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: ICV 680-339932/9 Calibration Date: 07/20/2014 01:14  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG1914.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8287		0.953	1.00	-4.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5788		0.972	1.00	-2.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.4300		1.01	1.00	1.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2870		1.98	2.00	-0.8	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2168		1.93	2.00	-3.3	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2122		2.02	2.00	0.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1650		2.99	3.00	-0.4	20.0
Octachlorobiphenyl	Ave	0.1517	0.1560		3.08	3.00	2.8	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0351		4.84	5.00	-3.1	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG2401.D DFTPP Injection Date: 07/24/2014  
 Instrument ID: CMSX DFTPP Injection Time: 20:22  
 Analysis Batch No.: 340817

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	47.9
197	Less than 1 % of mass 198	0.3
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	28.1
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	8.2 (50.0)2
442	Greater than 40% of mass 198	84.4
443	17 - 23% of mass 442	16.4 (19.5)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340817/3	XG2403.D	07/24/2014	20:55
	CCVIS 680-340817/4	XG2404.D	07/24/2014	21:26
	MB 680-339379/20-A	XG2414.D	07/25/2014	02:16
	LCS 680-339379/21-A	XG2415.D	07/25/2014	02:45
SD-223-SS	680-102359-5	XG2420.D	07/25/2014	05:09
SD-225-SS	680-102359-12	XG2423.D	07/25/2014	06:35
	CCV 680-340817/24	XG2424.D	07/25/2014	07:04

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-340817/4 Calibration Date: 07/24/2014 21:26  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2404.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.9678		1.11	1.00	11.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.6292		1.06	1.00	5.7	20.0
Trichlorobiphenyl	Ave	0.4256	0.4222		0.992	1.00	-0.8	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2970		2.05	2.00	2.7	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2158		1.92	2.00	-3.8	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2048		1.95	2.00	-2.7	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1633		2.96	3.00	-1.5	20.0
Octachlorobiphenyl	Ave	0.1517	0.1477		2.92	3.00	-2.6	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0523		5.77	4.00	44.3*	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0355		4.90	5.00	-2.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0491		4.95	5.00	-1.0	20.0

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG2414.D Lab Sample ID: MB 680-339379/20-A  
 Matrix: Solid Date Extracted: 07/23/2014 08:38  
 Instrument ID: CMSX Date Analyzed: 07/25/2014 02:16  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-339379/21-A	XG2415.D	07/25/2014 02:45
SD-223-SS	680-102359-5	XG2420.D	07/25/2014 05:09
SD-225-SS	680-102359-12	XG2423.D	07/25/2014 06:35
SD-225-02	680-102359-14	XG2432.D	07/25/2014 11:04
SD-228-SS	680-102359-16	XG2433.D	07/25/2014 11:32
SD-236-01	680-102359-27	XG2438.D	07/25/2014 13:55
SD-237-02	680-102359-31	XG2440.D	07/25/2014 14:52
SD-225-01	680-102359-13	XG2508.D	07/25/2014 21:25
SD-234-SS	680-102359-20	XG2509.D	07/25/2014 21:53
SD-235-SS	680-102359-22	XG2510.D	07/25/2014 22:22
SD-237-01	680-102359-30	XG2532.D	07/26/2014 08:52

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-339379/20-A  
 Matrix: Solid Lab File ID: XG2414.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/23/2014 08:38  
 Sample wt/vol: 30.04 (g) Date Analyzed: 07/25/2014 02:16  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340817 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	60		30-130

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-340817/24 Calibration Date: 07/25/2014 07:04  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2424.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8198		0.943	1.00	-5.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5624		0.945	1.00	-5.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.4042		0.950	1.00	-5.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2629		1.82	2.00	-9.1	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2071		1.85	2.00	-7.7	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1977		1.88	2.00	-6.1	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1616		2.93	3.00	-2.5	20.0
Octachlorobiphenyl	Ave	0.1517	0.1462		2.89	3.00	-3.6	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0538		5.94	4.00	48.4*	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0335		4.62	5.00	-7.6	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0459		4.63	5.00	-7.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG2427.D DFTPP Injection Date: 07/25/2014  
 Instrument ID: CMSX DFTPP Injection Time: 08:32  
 Analysis Batch No.: 340819

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.2
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	29.4
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	14.2 (80.7)2
442	Greater than 40% of mass 198	90.8
443	17 - 23% of mass 442	17.6 (19.4)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340819/3	XG2428.D	07/25/2014	09:03
	CCVIS 680-340819/4	XG2429.D	07/25/2014	09:38
SD-225-02	680-102359-14	XG2432.D	07/25/2014	11:04
SD-228-SS	680-102359-16	XG2433.D	07/25/2014	11:32
SD-236-01	680-102359-27	XG2438.D	07/25/2014	13:55
SD-237-02	680-102359-31	XG2440.D	07/25/2014	14:52
	CCV 680-340819/19	XG2444.D	07/25/2014	16:47



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-340819/4 Calibration Date: 07/25/2014 09:38  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2429.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8277		0.952	1.00	-4.8	20.0
Dichlorobiphenyl	Ave	0.5955	0.5648		0.948	1.00	-5.2	20.0
Trichlorobiphenyl	Ave	0.4256	0.4042		0.950	1.00	-5.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2636		1.82	2.00	-8.9	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2074		1.85	2.00	-7.5	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1941		1.84	2.00	-7.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1608		2.91	3.00	-3.0	20.0
Octachlorobiphenyl	Ave	0.1517	0.1470		2.91	3.00	-3.1	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0547		6.03	4.00	50.9*	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0347		4.79	5.00	-4.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0474		4.78	5.00	-4.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-340819/19 Calibration Date: 07/25/2014 16:47  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2444.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.7786		0.896	1.00	-10.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.5347		0.898	1.00	-10.2	20.0
Trichlorobiphenyl	Ave	0.4256	0.3938		0.925	1.00	-7.5	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2537		1.75	2.00	-12.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1954		1.74	2.00	-12.9	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1931		1.83	2.00	-8.3	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1524		2.76	3.00	-8.1	20.0
Octachlorobiphenyl	Ave	0.1517	0.1343		2.66	3.00	-11.5	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0499		5.51	4.00	37.7*	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0306		4.22	5.00	-15.6	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0442		4.46	5.00	-10.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG2502.D DFTPP Injection Date: 07/25/2014  
 Instrument ID: CMSX DFTPP Injection Time: 18:29  
 Analysis Batch No.: 340971

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.5
275	10 - 30% of mass 198	29.0
365	Greater than 1% of mass 198	3.9
441	Present but less than mass 443	9.3 (52.2)2
442	Greater than 40% of mass 198	90.8
443	17 - 23% of mass 442	17.9 (19.7)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340971/3	XG2503.D	07/25/2014	18:59
	CCVIS 680-340971/4	XG2504.D	07/25/2014	19:30
SD-225-01	680-102359-13	XG2508.D	07/25/2014	21:25
SD-234-SS	680-102359-20	XG2509.D	07/25/2014	21:53
SD-235-SS	680-102359-22	XG2510.D	07/25/2014	22:22
	CCV 680-340971/25	XG2525.D	07/26/2014	05:27

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-340971/4 Calibration Date: 07/25/2014 19:30  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2504.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8017		0.923	1.00	-7.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5563		0.934	1.00	-6.6	20.0
Trichlorobiphenyl	Ave	0.4256	0.3997		0.939	1.00	-6.1	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2602		1.80	2.00	-10.1	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2010		1.79	2.00	-10.4	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1945		1.85	2.00	-7.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1524		2.76	3.00	-8.0	20.0
Octachlorobiphenyl	Ave	0.1517	0.1344		2.66	3.00	-11.4	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0474		5.23	4.00	30.8	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0304		4.19	5.00	-16.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0442		4.45	5.00	-10.9	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-340971/25 Calibration Date: 07/26/2014 05:27  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2525.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8156		0.938	1.00	-6.2	20.0
Dichlorobiphenyl	Ave	0.5955	0.5691		0.956	1.00	-4.4	20.0
Trichlorobiphenyl	Ave	0.4256	0.4048		0.951	1.00	-4.9	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2686		1.86	2.00	-7.1	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2080		1.85	2.00	-7.3	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1988		1.89	2.00	-5.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1617		2.93	3.00	-2.4	20.0
Octachlorobiphenyl	Ave	0.1517	0.1480		2.93	3.00	-2.4	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0562		6.20	4.00	55.0*	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0360		4.96	5.00	-0.8	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0464		4.68	5.00	-6.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab File ID: XG2528.D DFTPP Injection Date: 07/26/2014  
 Instrument ID: CMSX DFTPP Injection Time: 06:55  
 Analysis Batch No.: 340977

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	58.7
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.9
275	10 - 30% of mass 198	27.4
365	Greater than 1% of mass 198	3.8
441	Present but less than mass 443	11.3 (81.0)2
442	Greater than 40% of mass 198	71.0
443	17 - 23% of mass 442	14.0 (19.7)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340977/3	XG2529.D	07/26/2014	07:25
	CCVIS 680-340977/4	XG2530.D	07/26/2014	07:55
SD-237-01	680-102359-30	XG2532.D	07/26/2014	08:52
	CCV 680-340977/19	XG2547.D	07/26/2014	16:02

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCVIS 680-340977/4 Calibration Date: 07/26/2014 07:55  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2530.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8296		0.955	1.00	-4.5	20.0
Dichlorobiphenyl	Ave	0.5955	0.5831		0.979	1.00	-2.1	20.0
Trichlorobiphenyl	Ave	0.4256	0.4191		0.985	1.00	-1.5	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2788		1.93	2.00	-3.6	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2171		1.94	2.00	-3.2	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2078		1.97	2.00	-1.3	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1661		3.01	3.00	0.2	20.0
Octachlorobiphenyl	Ave	0.1517	0.1504		2.97	3.00	-0.8	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0538		5.94	4.00	48.4*	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0350		4.83	5.00	-3.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0470		4.74	5.00	-5.2	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Lab Sample ID: CCV 680-340977/19 Calibration Date: 07/26/2014 16:02  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2547.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8014		0.922	1.00	-7.8	20.0
Dichlorobiphenyl	Ave	0.5955	0.5616		0.943	1.00	-5.7	20.0
Trichlorobiphenyl	Ave	0.4256	0.3935		0.925	1.00	-7.5	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2603		1.80	2.00	-10.0	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1991		1.78	2.00	-11.2	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1897		1.80	2.00	-9.9	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1470		2.66	3.00	-11.3	20.0
Octachlorobiphenyl	Ave	0.1517	0.1339		2.65	3.00	-11.7	20.0
Nonachlorobiphenyl	Ave	0.0363	0.0482		5.32	4.00	33.0	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0296		4.08	5.00	-18.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0424		4.28	5.00	-14.5	20.0



FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102359-1

SDG No.: 680102359-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #	
SD-224-SS	680-102359-1	41	
SD-224-01	680-102359-2	52	
SD-224-02	680-102359-3	37	
SD-224-03	680-102359-4	81	
SD-223-SS	680-102359-5	34	
SD-223-01	680-102359-6	43	
SD-223-02	680-102359-7	67	
SD-226-SS	680-102359-8	5	X N
SD-226-01	680-102359-9	18	X 5X
SD-226-02	680-102359-10	30	
SD-226-03	680-102359-11	76	
SD-225-SS	680-102359-12	39	
SD-225-01	680-102359-13	45	
SD-225-02	680-102359-14	34	
SD-225-03	680-102359-15	48	
SD-228-SS	680-102359-16	33	
SD-228-01	680-102359-17	18	X 5X
SD-228-02	680-102359-18	20	X 5X
SD-228-03	680-102359-19	33	
SD-234-SS	680-102359-20	0	D 10X
SD-234-01	680-102359-21	64	
SD-235-SS	680-102359-22	0	D 50X
SD-235-01	680-102359-23	0	* 20X
SD-235-02	680-102359-24	55	
SD-235-03	680-102359-25	38	
SD-236-SS	680-102359-26	57	
SD-236-01	680-102359-27	65	
SD-236-02	680-102359-28	80	
SD-237-SS	680-102359-29	0	D 50X
SD-237-01	680-102359-30	0	D 10X
SD-237-02	680-102359-31	41	
SD-237-03	680-102359-32	47	
SD-Dup-03	680-102359-33	60	
SD-227-SS	680-102359-34	61	* 1X
SD-227-01	680-102359-35	47	ck

QC LIMITS  
30-130

13DCB = Decachlorobiphenyl-13C12

# Column to be used to flag recovery values

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102359-1

SDG No.: 680102359-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #
SD-227-02	680-102359-36	61
	MB 680-336444/21-A	54
	MB 680-336450/16-A	59
	MB 680-337170/11-A	80
	MB 680-338912/18-A	72
	MB 680-339379/20-A	60
	LCS 680-336444/22-A	39
	LCS 680-336450/17-A	76
	LCS 680-337170/12-A	85 *
	LCS 680-338912/19-A	47
	LCS 680-339379/21-A	69
SD-224-SS MS	680-102359-1 MS	40
SD-223-02 MS	680-102359-7 MS	70
SD-236-02 MS	680-102359-28 MS	64
SD-224-SS MSD	680-102359-1 MSD	58 *
SD-223-02 MSD	680-102359-7 MSD	67
SD-236-02 MSD	680-102359-28 MSD	51

13DCB = Decachlorobiphenyl-13C12

QC LIMITS  
30-130

# Column to be used to flag recovery values

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: XG1306.D  
 Lab ID: LCS 680-336444/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	133	40	30-130	
Dichlorobiphenyl	66.7	26.9	40	30-130	
Heptachlorobiphenyl	200	93.2	47	40-140	
Hexachlorobiphenyl	133	64.1	48	40-140	
Monochlorobiphenyl	66.7	26.2	39	30-130	
Nonachlorobiphenyl	333	193	58	30-130	
Octachlorobiphenyl	200	91.9	46	40-140	
Pentachlorobiphenyl	133	64.2	48	40-140	
Tetrachlorobiphenyl	133	57.5	43	40-140	
Trichlorobiphenyl	66.7	29.3	44	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: Fg0212.D  
 Lab ID: LCS 680-336450/17-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	264	79	30-130	
Dichlorobiphenyl	66.7	41.0	61	30-130	
Heptachlorobiphenyl	200	146	73	40-140	
Hexachlorobiphenyl	133	93.1	70	40-140	
Monochlorobiphenyl	66.7	39.2	59	30-130	
Nonachlorobiphenyl	333	338	101	30-130	
Octachlorobiphenyl	200	154	77	40-140	
Pentachlorobiphenyl	133	91.9	69	40-140	
Tetrachlorobiphenyl	133	85.3	64	40-140	
Trichlorobiphenyl	66.7	43.0	65	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: Fg0707.D  
 Lab ID: LCS 680-337170/12-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	279	84	30-130	*
Dichlorobiphenyl	66.6	48.9	73	30-130	*
Heptachlorobiphenyl	200	159	80	40-140	*
Hexachlorobiphenyl	133	107	80	40-140	*
Monochlorobiphenyl	66.6	49.3	74	30-130	*
Nonachlorobiphenyl	333	340	102	30-130	*
Octachlorobiphenyl	200	168	84	40-140	*
Pentachlorobiphenyl	133	107	80	40-140	*
Tetrachlorobiphenyl	133	98.0	74	40-140	*
Trichlorobiphenyl	66.6	48.1	72	30-130	*

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: XG1606.D  
 Lab ID: LCS 680-338912/19-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	997	522	52	30-130	
Dichlorobiphenyl	199	101	51	30-130	
Heptachlorobiphenyl	598	332	55	40-140	
Hexachlorobiphenyl	399	225	56	40-140	
Monochlorobiphenyl	199	91.4	46	30-130	
Nonachlorobiphenyl	997	731	73	30-130	
Octachlorobiphenyl	598	324	54	40-140	
Pentachlorobiphenyl	399	234	59	40-140	
Tetrachlorobiphenyl	399	212	53	40-140	
Trichlorobiphenyl	199	107	54	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: XG2415.D  
 Lab ID: LCS 680-339379/21-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	247	74	30-130	
Dichlorobiphenyl	66.6	35.5	53	30-130	
Heptachlorobiphenyl	200	131	66	40-140	
Hexachlorobiphenyl	133	82.7	62	40-140	
Monochlorobiphenyl	66.6	34.1	51	30-130	
Nonachlorobiphenyl	333	364	109	30-130	
Octachlorobiphenyl	200	135	67	40-140	
Pentachlorobiphenyl	133	79.2	59	40-140	
Tetrachlorobiphenyl	133	74.6	56	40-140	
Trichlorobiphenyl	66.6	37.5	56	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: XG1007.D  
 Lab ID: 680-102359-1 MS Client ID: SD-224-SS MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	1540	19 U	601	39	30-130	
Dichlorobiphenyl	307	8.0 U	160	52	30-130	
Heptachlorobiphenyl	922	490	1010	56	40-140	
Hexachlorobiphenyl	614	470	853	62	40-140	
Monochlorobiphenyl	307	4.4 U	152	49	30-130	
Nonachlorobiphenyl	1540	76 U	942	61	30-130	
Octachlorobiphenyl	922	61 J	502	48	40-140	
Pentachlorobiphenyl	614	430	764	54	40-140	
Tetrachlorobiphenyl	614	710	1170	75	40-140	
Trichlorobiphenyl	307	20 J	188	55	30-130	

# Column to be used to flag recovery and RPD values



FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: XG1008.D  
 Lab ID: 680-102359-1 MSD Client ID: SD-224-SS MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	1530	870	57	37	50	30-130	*
Dichlorobiphenyl	306	180	59	12	50	30-130	*
Heptachlorobiphenyl	918	1080	64	7	50	40-140	*
Hexachlorobiphenyl	612	868	64	2	50	40-140	*
Monochlorobiphenyl	306	164	54	8	50	30-130	*
Nonachlorobiphenyl	1530	1250	82	28	50	30-130	*
Octachlorobiphenyl	918	617	60	20	50	40-140	*
Pentachlorobiphenyl	612	820	63	7	50	40-140	*
Tetrachlorobiphenyl	612	1070	58	9	50	40-140	*
Trichlorobiphenyl	306	211	63	12	50	30-130	*

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: XG1038.D  
 Lab ID: 680-102359-7 MS Client ID: SD-223-02 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	442	1.1 U	308	70	30-130	
Dichlorobiphenyl	88.5	0.47 U	58.2	66	30-130	
Heptachlorobiphenyl	265	6.0 J	210	77	40-140	
Hexachlorobiphenyl	177	4.5 J	140	76	40-140	
Monochlorobiphenyl	88.5	0.25 U	50.7	57	30-130	
Nonachlorobiphenyl	442	4.4 U	450	102	30-130	
Octachlorobiphenyl	265	0.70 U	202	76	40-140	
Pentachlorobiphenyl	177	13	147	76	40-140	
Tetrachlorobiphenyl	177	100	210	62	40-140	
Trichlorobiphenyl	88.5	7.0	70.1	71	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: XG1039.D  
 Lab ID: 680-102359-7 MSD Client ID: SD-223-02 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	442	296	67	4	50	30-130	
Dichlorobiphenyl	88.4	57.2	65	2	50	30-130	
Heptachlorobiphenyl	265	197	72	7	50	40-140	
Hexachlorobiphenyl	177	132	72	6	50	40-140	
Monochlorobiphenyl	88.4	48.4	55	5	50	30-130	
Nonachlorobiphenyl	442	416	94	8	50	30-130	
Octachlorobiphenyl	265	192	72	5	50	40-140	
Pentachlorobiphenyl	177	135	69	8	50	40-140	
Tetrachlorobiphenyl	177	198	55	6	50	40-140	
Trichlorobiphenyl	88.4	65.0	66	7	50	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: Fg0213.D  
 Lab ID: 680-102359-28 MS Client ID: SD-236-02 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	402	1.0 U	270	67	30-130	
Dichlorobiphenyl	80.4	0.42 U	45.3	56	30-130	
Heptachlorobiphenyl	241	0.60 U	161	67	40-140	
Hexachlorobiphenyl	161	0.40 U	99.2	62	40-140	
Monochlorobiphenyl	80.4	0.23 U	42.9	53	30-130	
Nonachlorobiphenyl	402	4.0 U	350	87	30-130	
Octachlorobiphenyl	241	0.64 U	159	66	40-140	
Pentachlorobiphenyl	161	0.41 U	97.6	61	40-140	
Tetrachlorobiphenyl	161	0.54 J	103	64	40-140	
Trichlorobiphenyl	80.4	0.20 U	47.6	59	30-130	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Matrix: Solid Level: Low Lab File ID: Fg0214.D  
 Lab ID: 680-102359-28 MSD Client ID: SD-236-02 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	402	210	52	25	50	30-130	
Dichlorobiphenyl	80.5	35.6	44	24	50	30-130	
Heptachlorobiphenyl	241	131	54	21	50	40-140	
Hexachlorobiphenyl	161	79.6	49	22	50	40-140	
Monochlorobiphenyl	80.5	33.3	41	25	50	30-130	
Nonachlorobiphenyl	402	272	68	25	50	30-130	
Octachlorobiphenyl	241	129	53	21	50	40-140	
Pentachlorobiphenyl	161	75.9	47	25	50	40-140	
Tetrachlorobiphenyl	161	76.0	47	30	50	40-140	
Trichlorobiphenyl	80.5	37.4	46	24	50	30-130	

# Column to be used to flag recovery and RPD values

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Instrument ID: CMSX Calibration Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/08/2014 15:58  
 Calibration ID: 31919

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		82146	10.37	111835	16.51		
UPPER LIMIT		123219	10.87	167753	17.01		
LOWER LIMIT		41073	9.87	55918	16.01		
	<i>1.5x</i>						
	<i>50%</i>						
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-338065/9		84988	10.37	88856	16.51		
CCVIS 680-338412/4		86819	10.38	130449	16.51		
680-102359-1 MS	SD-224-SS MS	108119	10.38	125009	16.51		
680-102359-1 MSD	SD-224-SS MSD	113906	10.38	134326	16.51		
680-102359-1	SD-224-SS	107560	10.38	129154	16.51		
CCV 680-338412/20		80906	10.38	108335	16.51		
CCVIS 680-338586/4		88499	10.38	128461	16.51		
680-102359-32	SD-237-03	79260	10.38	104124	16.51		
MB 680-336444/21-A		78790	10.38	106159	16.51		
680-102359-7 MS	SD-223-02 MS	77430	10.38	112663	16.51		
680-102359-7 MSD	SD-223-02 MSD	71990	10.38	104490	16.51		
680-102359-7	SD-223-02	87723	10.38	120614	16.51		
680-102359-8	SD-226-SS	83087	10.38	119853	16.51		
CCV 680-338586/22		74923	10.38	121188	16.51		
CCVIS 680-338830/4		76464	10.29	116578	16.41		
LCS 680-336444/22-A		94277	10.29	116089	16.41		
680-102359-23	SD-235-01	101818	10.29	134545	16.41		
680-102359-24	SD-235-02	97893	10.29	136319	16.41		
680-102359-29	SD-237-SS	82430	10.29	111197	16.41		
680-102359-2	SD-224-01	69290	10.29	96162	16.41		
680-102359-3	SD-224-02	88795	10.29	131053	16.42		
680-102359-4	SD-224-03	86085	10.29	116828	16.41		
680-102359-6	SD-223-01	88608	10.29	125758	16.41		
680-102359-9	SD-226-01	103168	10.29	141765	16.41		
680-102359-10	SD-226-02	95547	10.29	125325	16.42		
680-102359-11	SD-226-03	79237	10.29	104516	16.41		
CCV 680-338830/22		76454	10.29	119149	16.41		
CCVIS 680-338831/4		78618	10.29	119625	16.41		
680-102359-15	SD-225-03	74807	10.29	101141	16.41		
680-102359-17	SD-228-01	75558	10.29	100678	16.41		

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Instrument ID: CMSX Calibration Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/08/2014 15:58  
 Calibration ID: 31919

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		82146	10.37	111835	16.51		
UPPER LIMIT		123219	10.87	167753	17.01		
LOWER LIMIT		41073	9.87	55918	16.01		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102359-18	SD-228-02	88111	10.29	122932	16.42		
680-102359-19	SD-228-03	76462	10.29	97576	16.41		
680-102359-21	SD-234-01	86379	10.29	116035	16.41		
CCV 680-338831/21		86965	10.29	129566	16.41		
CCVIS 680-339278/4		103968	10.23	144255	16.36		
LCS 680-338912/19-A		82669	10.23	83557	16.36		
MB 680-338912/18-A		75728	10.23	84284	16.36		
680-102359-33	SD-Dup-03	78993	10.23	83039	16.36		
680-102359-34	SD-227-SS	69413	10.23	84835	16.36		
680-102359-35	SD-227-01	75528	10.23	77898	16.36		
680-102359-36	SD-227-02	79442	10.23	79636	16.36		
CCV 680-339278/23		83397	10.23	105135	16.36		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-338412/4 Date Analyzed: 07/10/2014 10:45  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1004.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		86819	10.38	130449	16.51		
UPPER LIMIT		112865	10.88	169584	17.01		
LOWER LIMIT		60773	9.88	91314	16.01		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102359-1 MS	SD-224-SS MS	108119	10.38	125009	16.51		
680-102359-1 MSD	SD-224-SS MSD	113906	10.38	134326	16.51		
680-102359-1	SD-224-SS	107560	10.38	129154	16.51		
CCV 680-338412/20		80906	10.38	108335	16.51		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits



FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-338586/4 Date Analyzed: 07/10/2014 20:51  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1025.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	88499	10.38	128461	16.51		
UPPER LIMIT	115049	10.88	166999	17.01		
LOWER LIMIT	61949	9.88	89923	16.01		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102359-32	SD-237-03		79260	10.38	104124	16.51
MB 680-336444/21-A			78790	10.38	106159	16.51
680-102359-7 MS	SD-223-02 MS		77430	10.38	112663	16.51
680-102359-7 MSD	SD-223-02 MSD		71990	10.38	104490	16.51
680-102359-7	SD-223-02		87723	10.38	120614	16.51
680-102359-8	SD-226-SS		83087	10.38	119853	16.51
CCV 680-338586/22			74923	10.38	121188	16.51

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Instrument ID: CMSF Calibration Start Date: 07/02/2014 17:13  
 GC Column: HP-5MS ID: 0.25 (mm) Calibration End Date: 07/02/2014 19:09  
 Calibration ID: 31767

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		81597	11.59	120611	17.82		
UPPER LIMIT		122396	12.09	180917	18.32		
LOWER LIMIT		40799	11.09	60306	17.32		
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-337435/9		71483	11.61	90364	17.82		
MB 680-336450/16-A		86302	11.59	134082	17.82		
LCS 680-336450/17-A		85948	11.59	132678	17.82		
680-102359-28 MS	SD-236-02 MS	100434	11.61	164120	17.84		
680-102359-28 MSD	SD-236-02 MSD	83515	11.61	126440	17.84		
680-102359-28	SD-236-02	68872	11.61	106874	17.82		
680-102359-25	SD-235-03	85521	11.61	134819	17.86		
680-102359-26	SD-236-SS	74585	11.61	111358	17.84		
CCV 680-337435/22		82213	11.61	130071	17.84		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Instrument ID: CMSF Calibration Start Date: 07/06/2014 13:56  
 GC Column: HP-5MS ID: 0.25 (mm) Calibration End Date: 07/06/2014 15:52  
 Calibration ID: 31869

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	32586	11.44	49110	17.66		
UPPER LIMIT	48879	11.94	73665	18.16		
LOWER LIMIT	16293	10.94	24555	17.16		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-337751/9	35720	11.44	49992	17.66		
CCVIS 680-337937/4	38199	11.37	63851	17.58		
MB 680-337170/11-A	48585	11.37	64660	17.59		
LCS 680-337170/12-A	49267*	11.37	68087	17.58		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-337937/4 Date Analyzed: 07/07/2014 16:47  
 Instrument ID: CMSF GC Column: HP-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): Fg0704.D Heated Purge: (Y/N) N  
 Calibration ID: 31869

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	38199	11.37	63851	17.58		
UPPER LIMIT	49659	11.87	83006	18.08		
LOWER LIMIT	26739	10.87	44696	17.08		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-337170/11-A	48585	11.37	64660	17.59		
LCS 680-337170/12-A	49267*	11.37	68087	17.58		
CCV 680-337937/21	44464	11.37	66808	17.58		

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-338830/4 Date Analyzed: 07/13/2014 20:53  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1304.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		76464	10.29	116578	16.41		
UPPER LIMIT		99403	10.79	151551	16.91		
LOWER LIMIT		53525	9.79	81605	15.91		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-336444/22-A		94277	10.29	116089	16.41		
680-102359-23	SD-235-01 ✓	101818	10.29	134545	16.41		
680-102359-24	SD-235-02	97893	10.29	136319	16.41		
680-102359-29	SD-237-SS	82430	10.29	111197	16.41		
680-102359-2	SD-224-01	69290	10.29	96162	16.41		
680-102359-3	SD-224-02	88795	10.29	131053	16.42		
680-102359-4	SD-224-03	86085	10.29	116828	16.41		
680-102359-6	SD-223-01	88608	10.29	125758	16.41		
680-102359-9	SD-226-01 ✓	103168	10.29	141765	16.41		
680-102359-10	SD-226-02	95547	10.29	125325	16.42		
680-102359-11	SD-226-03	79237	10.29	104516	16.41		
CCV 680-338830/22		76454	10.29	119149	16.41		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-338831/4 Date Analyzed: 07/14/2014 07:52  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1327.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	78618	10.29	119625	16.41		
UPPER LIMIT	102203	10.79	155513	16.91		
LOWER LIMIT	55033	9.79	83738	15.91		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102359-15	SD-225-03	74807	10.29	101141	16.41	
680-102359-17	SD-228-01	75558	10.29	100678	16.41	
680-102359-18	SD-228-02	88111	10.29	122932	16.42	
680-102359-19	SD-228-03	76462	10.29	97576	16.41	
680-102359-21	SD-234-01	86379	10.29	116035	16.41	
CCV 680-338831/21		86965	10.29	129566	16.41	

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-339278/4 Date Analyzed: 07/16/2014 12:14  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1604.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		103968	10.23	144255	16.36		
UPPER LIMIT		135158	10.73	187532	16.86		
LOWER LIMIT		72778	9.73	100979	15.86		
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-338912/19-A		82669	10.23	83557	16.36		
MB 680-338912/18-A		75728	10.23	84284	16.36		
680-102359-33	SD-Dup-03	78993	10.23	83039	16.36		
680-102359-34	SD-227-SS	69413	10.23	84835	16.36		
680-102359-35	SD-227-01	75528	10.23	77898	16.36		
680-102359-36	SD-227-02	79442	10.23	79636	16.36		
CCV 680-339278/23		83397	10.23	105135	16.36		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	160628	10.11	229918	16.23		
UPPER LIMIT	240942	10.61	344877	16.73		
LOWER LIMIT	80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-339932/9			166018	10.11	232985	16.22
CCVIS 680-340817/4			127048	9.98	129555	16.08
MB 680-339379/20-A			113469	9.98	109556	16.08
LCS 680-339379/21-A			118660	9.98	129222	16.08
680-102359-5	SD-223-SS		144426	9.98	165001	16.09
680-102359-12	SD-225-SS		147768	9.98	161248	16.09
CCV 680-340817/24			139441	9.98	163441	16.09
680-102359-14	SD-225-02		139274	10.00	167791	16.13
680-102359-16	SD-228-SS		128435	9.98	148433	16.09
680-102359-27	SD-236-01		122332	9.98	137731	16.09
680-102359-31	SD-237-02		148379	10.00	171641	16.11
CCV 680-340819/19			139435	9.98	153028	16.09
CCVIS 680-340971/4			126429	9.98	126053	16.09
680-102359-13	SD-225-01		139196	9.98	138655	16.09
680-102359-20	SD-234-SS		140847	9.98	144615	16.09
680-102359-22	SD-235-SS		143500	9.98	155534	16.09
CCV 680-340971/25			127070	9.98	135551	16.09
CCVIS 680-340977/4			124896	9.98	130014	16.09
680-102359-30	SD-237-01		126132	9.98	131032	16.09
CCV 680-340977/19			139321	9.98	145026	16.09

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits



FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-340817/4 Date Analyzed: 07/24/2014 21:26  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2404.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	127048	9.98	129555	16.08		
UPPER LIMIT	165162	10.48	168422	16.58		
LOWER LIMIT	88934	9.48	90689	15.58		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-339379/20-A			113469	9.98	109556	16.08
LCS 680-339379/21-A			118660	9.98	129222	16.08
680-102359-5	SD-223-SS		144426	9.98	165001	16.09
680-102359-12	SD-225-SS		147768	9.98	161248	16.09
CCV 680-340817/24			139441	9.98	163441	16.09

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

2

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-340819/4 Date Analyzed: 07/25/2014 09:38  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2429.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		132233	9.98	151205	16.09		
UPPER LIMIT		171903	10.48	196567	16.59		
LOWER LIMIT		92563	9.48	105844	15.59		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102359-14	SD-225-02	139274	10.00	167791	16.13		
680-102359-16	SD-228-SS	128435	9.98	148433	16.09		
680-102359-27	SD-236-01	122332	9.98	137731	16.09		
680-102359-31	SD-237-02	148379	10.00	171641	16.11		
CCV 680-340819/19		139435	9.98	153028	16.09		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-340971/4 Date Analyzed: 07/25/2014 19:30  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2504.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	126429	9.98	126053	16.09		
UPPER LIMIT	164358	10.48	163869	16.59		
LOWER LIMIT	88500	9.48	88237	15.59		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102359-13	SD-225-01		139196	9.98	138655	16.09
680-102359-20	SD-234-SS		140847	9.98	144615	16.09
680-102359-22	SD-235-SS		143500	9.98	155534	16.09
CCV 680-340971/25			127070	9.98	135551	16.09

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Sample No.: CCVIS 680-340977/4 Date Analyzed: 07/26/2014 07:55  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2530.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	124896	9.98	130014	16.09		
UPPER LIMIT	162365	10.48	169018	16.59		
LOWER LIMIT	87427	9.48	91010	15.59		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102359-30	SD-237-01		126132	9.98	131032	16.09
CCV 680-340977/19			139321	9.98	145026	16.09

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

Sample Calc

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102359-1  
 SDG No.: 680102359-1  
 Client Sample ID: SD-235-SS Lab Sample ID: 680-102359-22  
 Matrix: Solid Lab File ID: XG2510.D  
 Analysis Method: 680 Date Collected: 06/13/2014 11:00  
 Extract. Method: 680 Date Extracted: 07/23/2014 08:38  
 Sample wt/vol: 10.07 (g) Date Analyzed: 07/25/2014 22:22  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 50  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 62.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340971 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	330	U	6700	330
25512-42-9	Dichlorobiphenyl	140	U	1300	140
28655-71-2	Heptachlorobiphenyl	53000		3900	200
26601-64-9	Hexachlorobiphenyl	78000		2600	130
27323-18-8	Monochlorobiphenyl	75	U	1300	75
53742-07-7	Nonachlorobiphenyl	1300	U	6700	1300
55722-26-4	Octachlorobiphenyl	9100		3900	210
25429-29-2	Pentachlorobiphenyl	29000		2600	130
26914-33-0	Tetrachlorobiphenyl	97000		2600	150
25323-68-6	Trichlorobiphenyl	5400		1300	67

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

SAMPLE ID SD-235-SS

SAMPLE CALC for tetrachlorobiphenyl

IS AREA ✓	DILUTION ✓	COMPOUND OF INTEREST ✓	AREA	IS AMOUNT (ug/mL) ✓	Final Extract Volume (mL) ✓	AVE RRF	CONCENTRATION PPB
143500	50	409261	0.75	1	0.2893	96864.05	

Sample Weight (g)  
10.07

Percent Solids  
37.9

TestAmerica Savannah  
Target Compound Quantitation Report

*Sample Calculation*

Data File: \\SAVCHROM\ChromData\CMSX\20140725-11341.b\XG2510.D  
 Lims ID: ~~680-102359-A-22-B~~ Lab Sample ID: 680-102359-22  
 Client ID: SD-235-SS  
 Sample Type: Client  
 Inject. Date: 25-Jul-2014 22:22:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Injection Vol: 1.0 ul Dil. Factor: 50.0000  
 Sample Info: 102359-A-22-B DL=50  
 Misc. Info.: 680-0011341-010  
 Operator ID: nmd Instrument ID: CMSX  
 Method: \\SAVCHROM\ChromData\CMSX\20140725-11341.b\680\CMSX.m  
 Limit Group: 680  
 Last Update: 28-Jul-2014 14:49:13 Calib Date: 20-Jul-2014 00:46:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\SAVCHROM\ChromData\CMSX\20140719-11146.b\XG1913.D  
 Column 1 : Det: MS SCAN  
 Process Host: XAWRK020

First Level Reviewer: davisn Date: 28-Jul-2014 14:49:13

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/ml	Flags
* 5 Phenanthrene-d10	188	9.981	9.981	0.0	65	143500	0.7500	
A 25 Trichlorobiphenyl	256	10.870	9.556 - 12.184		0	33465	0.4110	
A <u>26 Tetrachlorobiphenyl</u>	292	12.352	10.652 - 14.052		0	<u>409261</u>	7.39	
A 27 Pentachlorobiphenyl	326	13.748	11.909 - 15.587		0	95882	2.23	
A 28 1,1'-Biphenyl, hexachloro-	360	15.037	13.086 - 16.988		0	239295	5.94	
* 15 Chrysene-d12	240	16.094	16.094	0.0	100	155534	0.7500	
A 29 1,1'-Biphenyl, heptachloro-	394	16.159	14.698 - 17.620		0	128561	4.05	
A 30 1,1'-Biphenyl, octachloro-	430	17.239	16.173 - 18.305		0	20123	0.6933	
A 31 1,1'-Biphenyl, nonachloro-	464	18.291	17.739 - 18.842		0	550	0.0793	

Reagents:

SM-680istd\_00028 Amount Added: 30.00 Units: uL Run Reagent

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

*Sample Calculation*

Lab Name: TestAmerica Savannah Job No.: 680-102359-1 Analy Batch No.: 339932

SDG No.: 680102359-1

Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2014 22:52 Calibration End Date: 07/20/2014 00:46 Calibration ID: 32129

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-339932/8	XG1913.D
Level 2	IC 680-339932/7	XG1912.D
Level 3	ICISAV 680-339932/4	XG1909.D
Level 4	IC 680-339932/6	XG1911.D
Level 5	IC 680-339932/5	XG1910.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1								
Monochlorobiphenyl	0.8353	0.8456	0.9098	0.8813	0.8734	Ave	0.8691			3.4	20.0					
Dichlorobiphenyl	0.5776	0.5823	0.6122	0.6067	0.5987	Ave	0.5955			2.5	20.0					
Trichlorobiphenyl	0.3996	0.4135	0.4348	0.4389	0.4410	Ave	0.4256			4.3	20.0					
<del>PCB-104</del>						Ave	0.3302				30.0					
Tetrachlorobiphenyl	0.2755	0.2817	0.3033	0.2909	0.2951	Ave	0.2893			3.8	20.0					
Pentachlorobiphenyl	0.2123	0.2203	0.2262	0.2270	0.2357	Ave	0.2243			3.9	20.0					
PCB-77			0.4767			Ave	0.4767				30.0					
Hexachlorobiphenyl	0.1966	0.2022	0.2225	0.2132	0.2185	Ave	0.2106			5.2	20.0					
Heptachlorobiphenyl	0.1540	0.1656	0.1696	0.1700	0.1695	Ave	0.1657			4.1	20.0					
Octachlorobiphenyl	0.1373	0.1488	0.1535	0.1521	0.1669	Ave	0.1517			7.0	20.0					
PCB-208			0.0569			Ave	0.0569				30.0					
Nonachlorobiphenyl			0.0443			Ave	0.0363				20.0					
Decachlorobiphenyl	0.0321	0.0328	0.0379	0.0370	0.0414	Ave	0.0363			11.0	20.0					
Decachlorobiphenyl-13Cl2	0.0407	0.0484	0.0517	0.0504	0.0567	Ave	0.0496			12.0	20.0					

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.





**TO:** M. MARTIN **DATE:** AUGUST 28, 2014  
**FROM:** A. COGNETTI **COPIES:** DV FILE  
**SUBJECT:** ORGANIC DATA VALIDATION – PCB HOMOLOGUES  
 LOCKHEED MIDDLE RIVER COMPLEX (MRC) SEDIMENT INVESTIGATION  
 SAMPLE DELIVERY GROUP (SDG) 680-102468-1

**SAMPLES:** 49 / Sediment / PCB Homologues

SD-238-01	SD-238-02	SD-238-03	SD-238-SS	SD-239-01
SD-239-02	SD-239-03	SD-239-SS	SD-240-01	SD-240-02
SD-240-03	SD-240-SS	SD-241-01	SD-241-02	SD-241-03
SD-241-SS	SD-242-01	SD-242-02	SD-242-03	SD-242-SS
SD-243-01	SD-243-02	SD-243-03	SD-243-SS	SD-244-01
SD-244-02	SD-244-03	SD-244-SS	SD-245-01	SD-245-02
SD-245-03	SD-245-SS	SD-246-01	SD-246-02	SD-246-03
SD-246-SS	SD-247-01	SD-247-02	SD-247-03	SD-247-SS
SD-248-01	SD-248-02	SD-248-03	SD-248-SS	SD-249-01
SD-249-02	SD-249-03	SD-249-SS	SD-Dup-04	

Overview

The sample set for Lockheed MRC Sediment Investigation, SDG 680-102468-1, consisted of forty-nine (49) sediment samples. There is one (1) field duplicate sample pair included in this SDG: SD-Dup-04 and SD-241-02.

The samples were collected by Tetra Tech on June 17, 2014 and analyzed by Test America. All analyses were conducted in accordance with EPA Method 680 for PCBs analytical and reporting protocols.

The data contained in this SDG was validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The surrogate recovery of decachlorobiphenyl-13C12 was less than 10% in sample SD-248-01. The sample also had low MS/MSD %Rs. The nondetected results were qualified as rejected (UR) and the detected results were qualified as estimated (J).

TO: M. Martin  
 FROM: A. Cognetti  
 SDG: 680-102468-1  
 DATE: August 28, 2014

Minor Problems

- The surrogate recovery of decachlorobiphenyl-13C12 was outside of quality control limits in several samples. According to the laboratory case narrative, the laboratory re-extracted and re-analyzed all samples with noncompliant recoveries. However, the re-extracted results were not provided by the laboratory. The following table identifies the samples affected by the surrogate recovery noncompliance and the validation action.

Sample	Dilution Factor	Surrogate %R	Laboratory Action	Validation Action
SD-239-01	1X	25%	Re-extracted and re-analyzed with similar results	J, UJ
SD-238-01	1X	10%	Re-extracted and re-analyzed with similar results	J, UJ
SD-238-02	1X	27%	Re-extracted and re-analyzed with similar results	J, UJ
SD-240-SS	1X	21%	Re-extracted and re-analyzed with similar results	J, UJ
SD-241-SS	1X	27%	Re-extracted and re-analyzed with similar results	J, UJ
SD-242-SS	1X	16%	Re-extracted and re-analyzed with similar results	J, UJ
SD-242-01	1X	28%	Re-extracted and re-analyzed with similar results	J, UJ
SD-244-01	5X	15%	Re-extracted and re-analyzed with similar results	J, UJ
SD-244-02	2X	19%	Re-extracted and re-analyzed with similar results	J, UJ
SD-245-SS	1X	13%	Re-extracted and re-analyzed with similar results	J, UJ
SD-245-02	2X	17%	Re-extracted and re-analyzed with similar results	J, UJ
SD-246-02	1X	13%	Re-extracted and re-analyzed with similar results	J, UJ
SD-247-01	5X	21%	Re-extracted and re-analyzed with similar results	J, UJ

TO: M. Martin  
 FROM: A. Cognetti  
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Sample	Dilution Factor	Surrogate %R	Laboratory Action	Validation Action
SD-248-SS	1X	20%	Re-extracted and re-analyzed with similar results	J, UJ

- The matrix spike/ matrix spike duplicate (MS/MSD) percent recoveries (%Rs) of all PCB homologs were less than the lower quality control limit in spike sample SD-247-02. The detected and nondetected results in sample SD-247-02 were qualified as estimated (J) and (UJ), respectively.
- The MS %Rs and relative percent differences for all PCB homologs were outside quality control limits in spiked sample SD-248-01. The MS %Rs were less than the lower quality control limit and the RPDs exceeded quality control limits. The MSD %Rs for decachlorobiphenyl, heptachlorobiphenyl, monochlorobiphenyl, and octachlorobiphenyl were less than the lower quality control limit. The MSD %R of tetrachlorobiphenyl exceeded quality control limits. The detected results in sample SD-248-01 were qualified as estimated (J). Nondetected results were qualified for a more severe surrogate recovery noncompliance.
- The internal standard areas of chrysene-d12 and phenanthrene-d10 were less than 50% of the IC Mean Area on 7/18/2104 and less than the 70% quality control limit in the CCV in samples SD-242-SS and SD-243-01. The detected and nondetected results quantitated using this internal standard were qualified as estimated (J) and (UJ), respectively.
- The internal standard area of chrysene-d12 was less than the 70% quality control limit in the CCV for several samples. The affected samples were as follows: SD-239-SS, SD-239-02, SD-239-03, SD-238-03, SD-241-SS, SD-241-03, SD-242-01, SD-247-02, SD-243-SS and SD-243002. The detected and nondetected results quantitated using this internal standard were qualified as estimated (J) and (UJ), respectively.
- The internal standard area of chrysene-d12 was less than 50% from the mean IC in sample SD-248-03. The detected and nondetected results were qualified as estimated (J) and (UJ), respectively.
- Samples SD-238-01, SD-238-SS, SD-239-SS, SD-240-SS, SD-241-SS, SD-242-02, SD-242-02, SD-242-SS, SD-245-01, SD-245-02, SD-245-03, SD-245-SS and SD-248-SS contained less than 30% solids. The detected and nondetected results were qualified as estimated (J) and (UJ), respectively.
- Field duplicate imprecision was noted in the field duplicate pair SD-Dup-04 and SD-241-02 for several analytes. The RPDs were greater than the 50% quality control limit for heptachlorobiphenyl, hexachlorobiphenyl, pentachlorobiphenyl and tetrachlorobiphenyl. The detected results of the aforementioned analytes were qualified as estimated (J).

Notes

Several samples had surrogate recoveries outside quality control limits. No action was taken as indicated in the table because of sample dilution.

Sample	Dilution Factor	Surrogate %R	Laboratory Action	Validation Action
SD-240-01	20X	0%	Surrogate diluted out, no action	No action
SD-241-01	10X	0%	Surrogate diluted out, no	No action

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 FROM: A. Cagnetti  
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Sample	Dilution Factor	Surrogate %R	Laboratory Action	Validation Action
			action	
SD-242-02	10X	0%	Surrogate diluted out, no action	No action
SD-244-SS	20X	0%	Surrogate diluted out, no action	No action
SD-245-01	19X	0%	Surrogate diluted out, no action	No action
SD-246-SS	50X	0%	Surrogate diluted out, no action	No action
SD-246-01	20X	0%	Surrogate diluted out, no action	No action
SD-247-SS	10X	0%	Surrogate diluted out, no action	No action
SD-247-SS	10X	0%	Surrogate diluted out, no action	No action
SD-247-03	10X	0%	Surrogate diluted out, no action	No action
SD-247-03	10X	0%	Surrogate diluted out, no action	No action
SD-249-01	50X	0%	Surrogate diluted out, no action	No action

The laboratory control sample (LCS) percent recovery (%R) of nonachlorobiphenyl was greater than the upper quality control limit in batches 680-338581 and 680-340491. No action was taken on the nondetected nonachlorobiphenyl results in the affected samples.

In spiked sample SD-242-02, the RPDs for all analytes were greater than the upper quality control limit. In addition, the MS %Rs for all analytes were outside quality control limits except for heptachlorobiphenyl and nonachlorobiphenyl. The MSD %Rs for heptachlorobiphenyl, hexachlorobiphenyl, pentachlorobiphenyl and trichlorobiphenyl were outside quality control limits. No action was taken because the MS/MSD sample was diluted 10X for analysis.

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

**EXECUTIVE SUMMARY**

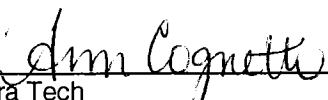
**Laboratory Performance Issues:** The surrogate recovery of decachlorobiphenyl-13C12 was outside of quality control limits in several samples. The internal standard areas were outside quality control limits in several samples.


**Other Factors Affecting Data Quality:** Several samples contained less than 30% solids. MS/MSD noncompliances were noted in samples SD-247-02 and SD-248-01. Field duplicate imprecision was noted in the field duplicate pair SD-Dup-04 and SD-241-02. Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

TO: M. Martin  
FROM: A. Cognetti  
SDG: 680-102468-1  
DATE: August 28, 2014

Page: 5

The data for these analyses were reviewed with reference to EPA Method 680 and the USEPA National Functional Guidelines for Organic Data Validation (June 2008).

  
\_\_\_\_\_  
Tetra Tech  
Ann Cognetti  
Chemist/Data Validator

  
\_\_\_\_\_  
Tetra Tech  
Joseph A. Samchuck  
Data Validation Manager

Attachments:

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

**APPENDIX A**

**QUALIFIED ANALYTICAL RESULTS**

**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 ( $< 2 \times$  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 standard deviations is greater than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed
- Z3 = Tentatively Identified Compound aldol condensate

PROJ_NO: 05220		SD-238-01		SD-238-02		SD-238-03		SD-238-SS	
SDG: 680-102468-1		680-102468-6		680-102468-7		680-102468-8		680-102468-5	
FRACTION: PCB		6/17/2014		6/17/2014		6/17/2014		6/17/2014	
MEDIA: SEDIMENT		NM		NM		NM		NM	
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PCT_SOLIDS	23.5	35.3	61.2	20.2					
DUP_OF									
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	11 UJ	RY	RY	7 UJ	4 UJ	N	12 UJ	12 UJ	Y
DICHLOROBIPHENYLS	4.4 UJ	RY	RY	3 UJ	1.7 U		5.1 UJ	5.1 UJ	Y
HEPTACHLOROBIPHENYLS	13 J	PRY	PRY	180 J	2.4 UJ	N	7.3 UJ	7.3 UJ	Y
HEXACHLOROBIPHENYL	40 J	PRY	PRY	250 J	1.6 U		4.8 UJ	4.8 UJ	Y
MONOCHLOROBIPHENYLS	2.4 UJ	RY	RY	1.6 UJ	0.92 U		2.8 UJ	2.8 UJ	Y
NONACHLOROBIPHENYLS	42 UJ	RY	RY	28 UJ	16 UJ	N	48 UJ	48 UJ	Y
OCTACHLOROBIPHENYLS	6.7 UJ	RY	PR	41 J	2.6 UJ	N	7.8 UJ	7.8 UJ	Y
PENTACHLOROBIPHENYLS	6.4 J	PRY	RY	280 J	1.6 U		7.2 J	7.2 J	PY
TETRACHLOROBIPHENYLS	8.6 J	PRY	PRY	660 J	33		43 J	43 J	PY
TRICHLOROBIPHENYLS	2.2 UJ	RY	RY	29 J	3 J	P	6.1 J	6.1 J	PY



PROJ_NO: 05220	NSAMPLE	SD-239-01	SD-239-02	SD-239-03	SD-239-SS	
SDG: 680-102468-1	LAB_ID	680-102468-2	680-102468-3	680-102468-4	680-102468-1	
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	30.9	37.9	53.8	22.9	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	7.9 UJ	R	R	4.6 UJ	11 UJ	NY
DICHLOROBIPHENYLS	5 J	PR	PR	1.9 U	4.5 UJ	Y
HEPTACHLOROBIPHENYLS	150 J	R	R	2.8 UJ	310 J	NY
HEXACHLOROBIPHENYL	73 J	R	R	1.8 U	270 J	Y
MONOCHLOROBIPHENYLS	1.8 UJ	R	R	1.1 U	2.4 UJ	Y
NONACHLOROBIPHENYLS	32 UJ	R	R	18 UJ	42 UJ	NY
OCTACHLOROBIPHENYLS	16 J	PR	PR	2.9 UJ	52 J	NPY
PENTACHLOROBIPHENYLS	170 J	R	R	1.9 U	400 J	Y
TETRACHLOROBIPHENYLS	2000 J	R	R	18 J	1700 J	Y
TRICHLOROBIPHENYLS	190 J	R	R	1.3 J	140 J	Y

PROJ_NO: 05220	NSAMPLE	SD-240-01	SD-240-02	SD-240-03	SD-240-SS						
SDG: 680-102468-1	LAB_ID	680-102468-10	680-102468-11	680-102468-12	680-102468-9						
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014						
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM						
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG						
	PCT_SOLIDS	35.5	33.0	54.4	26.0						
	DUP_OF										
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		
DECACHLOROBIPHENYL	140 U	U		7.4 U	U		4.5 U	U		9.5 UJ	RY
DICHLOROBIPHENYLS	58 U	U		3.9 J	J	P	1.9 U	U		4 UJ	RY
HEPTACHLOROBIPHENYLS	8900			290			26 J	J	P	420 J	RY
HEXACHLOROBIPHENYL	12000			340			61			590 J	RY
MONOCHLOROBIPHENYLS	32 U	U		1.7 U	U		1 U	U		2.2 UJ	RY
NONACHLOROBIPHENYLS	550 U	U		30 U	U		18 U	U		38 UJ	RY
OCTACHLOROBIPHENYLS	1400 J	J	P	63 J	J	P	2.9 U	U		110 J	PRY
PENTACHLOROBIPHENYLS	15000			750			110			890 J	RY
TETRACHLOROBIPHENYLS	59000			3000			390			2700 J	RY
TRICHLOROBIPHENYLS	4300			200			21			130 J	RY

PROJ_NO: 05220	NSAMPLE	SD-241-01	SD-241-02	SD-241-03	SD-241-SS				
SDG: 680-102468-1	LAB_ID	680-102468-14	680-102468-15	680-102468-16	680-102468-13				
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	32.2	43.3	47.9	23.9				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	77 U	U		5.7 U	UJ	N	10 UJ	UJ	NRY
DICHLOROBIPHENYLS	33 U	U	P	2.5 J	U	P	4.3 UJ	UJ	RY
HEPTACHLOROBIPHENYLS	26000	J	G	370 J	UJ	N	920 J	J	NRY
HEXACHLOROBIPHENYL	25000	J	G	390 J	J	P	910 J	J	RY
MONOCHLOROBIPHENYLS	18 U	U		1.3 U	U		2.3 UJ	UJ	RY
NONACHLOROBIPHENYLS	310 U	U		23 U	UJ	N	40 UJ	UJ	NRY
OCTACHLOROBIPHENYLS	1100	J	P	66 J	UJ	N	230 J	J	NRY
PENTACHLOROBIPHENYLS	11000	J	G	660 J	J	P	1100 J	J	RY
TETRACHLOROBIPHENYLS	56000	J	G	3500 J	J	G	2800 J	J	RY
TRICHLOROBIPHENYLS	3000	J		270	J	P	120 J	J	RY

PROJ_NO: 05220	NSAMPLE	SD-242-01	SD-242-02	SD-242-03	SD-242-SS	
SDG: 680-102468-1	LAB_ID	680-102468-19	680-102468-20	680-102468-21	680-102468-18	
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	
	PCT_SOLIDS	23.0	29.5	38.9	21.1	
	DUP_OF					
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	11 UJ	84 UJ	Y	13 U	12 UJ	NRY
DICHLOROBIPHENYLS	4.5 UJ	35 UJ	Y	5.4 U	4.9 UJ	RY
HEPTACHLOROBIPHENYLS	280 J	1300 J	Y	1400	52 J	NPRY
HEXACHLOROBIPHENYL	340 J	1300 J	Y	1700	91 J	PRY
MONOCHLOROBIPHENYLS	2.5 UJ	19 UJ	Y	2.9 U	2.7 UJ	RY
NONACHLOROBIPHENYLS	43 UJ	330 UJ	Y	50 U	46 UJ	NRY
OCTACHLOROBIPHENYLS	17 J	54 UJ	Y	180	7.5 UJ	NRY
PENTACHLOROBIPHENYLS	240 J	5900 J	Y	1900	47 J	PRY
TETRACHLOROBIPHENYLS	290 J	39000 J	Y	6900	35 J	PRY
TRICHLOROBIPHENYLS	21 J	2800 J	Y	350	3.3 J	PRY

PROJ_NO: 05220	NSAMPLE		SD-243-01		SD-243-02		SD-243-03		SD-243-SS			
	SDG: 680-102468-1	LAB_ID	680-102468-23	680-102468-24	680-102468-25	680-102468-22	FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014		
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	NM	UG/KG	UG/KG	UG/KG	UG/KG		
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	63.6	66.9	65.0	55.8		
	PCT_SOLIDS	63.6	66.9	65.0	55.8							
	DUP_OF											
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	3.9	UJ	N	3.7	UJ	N	3.8	U		4.4	UJ	N
DICHLOROBIPHENYLS	1.6	UJ	N	1.5	U		1.6	U		1.9	U	
HEPTACHLOROBIPHENYLS	2.3	UJ	N	2.2	UJ	N	2.3	U		310	J	N
HEXACHLOROBIPHENYL	1.5	UJ	N	1.5	U		1.5	U		390		
MONOCHLOROBIPHENYLS	0.89	UJ	N	0.84	U		0.88	U		1	U	
NONACHLOROBIPHENYLS	15	UJ	N	15	UJ	N	15	U		18	UJ	N
OCTACHLOROBIPHENYLS	2.5	UJ	N	2.3	UJ	N	2.4	U		13	J	NP
PENTACHLOROBIPHENYLS	5.5	J	NP	1.5	U		1.6	U		200		
TETRACHLOROBIPHENYLS	27	J	NP	29			3.5	J	P	440		
TRICHLOROBIPHENYLS	1.5	J	NP	1.7	J	P	0.78	U		32		

PROJ_NO: 05220	NSAMPLE	SD-244-01			SD-244-02			SD-244-03			SD-244-SS		
		LAB_ID	680-102468-27	680-102468-28	680-102468-29	680-102468-26	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	QC_TYPE	NM	UG/KG
FRACTION: PCB	SAMP_DATE	6/17/2014	NM	UG/KG	34.7	UG/KG	59.8	UG/KG	34.1	PCT_SOLIDS	35.6	DUP_OF	
MEDIA: SEDIMENT	PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
	DECACHLOROBIPHENYL	34 UJ	14 UJ	R	14 UJ	14 UJ	R	4.1 U	140 U		140 U		
	DICHLOROBIPHENYL	14 UJ	13 J	R	13 J	13 J	PR	1.7 U	60 U		60 U		
	HEPTACHLOROBIPHENYL	3900 J	280 J	R	280 J	280 J	R	2.5 U	15000		15000		
	HEXACHLOROBIPHENYL	4800 J	390 J	R	390 J	390 J	R	26 J	16000		16000		
	MONOCHLOROBIPHENYL	7.9 UJ	3.2 UJ	R	3.2 UJ	3.2 UJ	R	0.94 U	33 U		33 U		
	NONACHLOROBIPHENYL	140 UJ	56 UJ	R	56 UJ	56 UJ	R	16 U	570 U		570 U		
	OCTACHLOROBIPHENYL	490 J	9.1 UJ	R	9.1 UJ	9.1 UJ	R	2.6 U	270 J		270 J		P
	PENTACHLOROBIPHENYL	3700 J	1200 J	R	1200 J	1200 J	R	36	18000		18000		
	TETRACHLOROBIPHENYL	15000 J	4500 J	R	4500 J	4500 J	R	71	62000		62000		
	TRICHLOROBIPHENYL	1100 J	560 J	R	560 J	560 J	R	2.9 J	4100		4100		

PROJ_NO: 05220	NSAMPLE	SD-245-01	SD-245-02	SD-245-03	SD-245-SS				
SDG: 680-102468-1	LAB_ID	680-102468-31	680-102468-32	680-102468-33	680-102468-30				
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014				
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM				
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG				
	PCT_SOLIDS	29.9	29.1	27.3	23.3				
	DUP_OF								
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	82 UJ	Y	RY	17 UJ	Y	RY	9.1 UJ	10 UJ	RY
DICHLOROBIPHENYLS	34 UJ	Y	PRY	20 J	Y	PRY	3.8 UJ	4.4 UJ	RY
HEPTACHLOROBIPHENYLS	4800 J	Y	RY	230 J	Y	RY	5.5 UJ	1700 J	RY
HEXACHLOROBIPHENYL	1900 J	Y	RY	240 J	Y	RY	87 J	890 J	RY
MONOCHLOROBIPHENYLS	19 UJ	Y	PRY	4.1 J	Y	PRY	2.1 UJ	2.4 UJ	RY
NONACHLOROBIPHENYLS	320 UJ	Y	RY	67 UJ	Y	RY	36 UJ	48 J	PRY
OCTACHLOROBIPHENYLS	52 UJ	Y	RY	11 UJ	Y	RY	5.8 UJ	180 J	RY
PENTACHLOROBIPHENYLS	9800 J	Y	RY	1600 J	Y	RY	210 J	1000 J	RY
TETRACHLOROBIPHENYLS	58000 J	Y	RY	12000 J	Y	RY	790 J	4300 J	RY
TRICHLOROBIPHENYLS	3300 J	Y	RY	940 J	Y	RY	1.9 UJ	290 J	RY

PROJ_NO: 05220	NSAMPLE	SD-246-01	SD-246-02	SD-246-03	SD-246-SS					
SDG: 680-102468-1	LAB_ID	680-102468-35	680-102468-36	680-102468-37	680-102468-34					
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014					
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM					
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG					
	PCT_SOLIDS	36.2	35.6	66.3	32.8					
	DUP_OF									
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL	140 U			6.9 UJ			3.7 U			380 U
DICHLOROBIPHENYL	150 J		P	11 J		PR	1.6 U			160 U
HEPTACHLOROBIPHENYL	10000			110 J		R	2.2 U			15000
HEXACHLOROBIPHENYL	11000			250 J		R	1.5 U			17000
MONOCHLOROBIPHENYL	31 U			1.6 UJ		R	0.85 U			86 U
NONACHLOROBIPHENYL	540 U			28 UJ		R	15 U			1500 U
OCTACHLOROBIPHENYL	1400 J		P	32 J		PR	2.4 U			2700 J
PENTACHLOROBIPHENYL	22000			810 J		R	3.2 J		P	25000
TETRACHLOROBIPHENYL	100000			6000 J		R	14 J		P	110000
TRICHLOROBIPHENYL	7600			450 J		R	2.9 J		P	7700



PROJ_NO: 05220	NSAMPLE	SD-247-01		SD-247-02		SD-247-03		SD-247-SS	
		LAB_ID	680-102468-39	680-102468-40	680-102468-41	680-102468-38	SDG: 680-102468-1	6/17/2014	6/17/2014
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
PCT_SOLIDS	33.4	31.1	59.3	30.7	30.7	30.7	30.7	30.7	30.7
DUP_OF									
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL		37 UJ	R	7.9 UJ	14 U	DN	14 U	80 U	
DICHLOROBIPHENYL		34 J	PR	3.3 UJ	6 U	D	6 U	35 J	P
HEPTACHLOROBIPHENYL		620 J	R	52 J	8.5 U	DNP	8.5 U	8900	
HEXACHLOROBIPHENYL		910 J	R	220 J	5.6 U	D	5.6 U	11000	
MONOCHLOROBIPHENYL		8.8 J	PR	1.8 UJ	3.2 U	D	3.2 U	18 U	
NONACHLOROBIPHENYL		150 UJ	R	32 UJ	56 U	DN	56 U	320 U	
OCTACHLOROBIPHENYL		65 J	PR	5.1 UJ	9 U	DN	9 U	1300	
PENTACHLOROBIPHENYL		3900 J	R	710 J	5.8 U	D	5.8 U	9400	
TETRACHLOROBIPHENYL		25000 J	R	3200 J	94 J	D	94 J	41000	P
TRICHLOROBIPHENYL		2100 J	R	79 J	2.9 U	D	2.9 U	3300	

PROJ_NO: 05220	NSAMPLE		SD-248-01		SD-248-02		SD-248-03		SD-248-SS			
	LAB_ID	680-102468-43	680-102468-44	680-102468-45	680-102468-46	680-102468-47	680-102468-48	680-102468-49	680-102468-50			
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014	6/17/2014			
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM			
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG			
	PCT_SOLIDS	32.7	43.7	53.4	53.4	53.4	53.4	53.4	25.5			
	DUP_OF											
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DECACHLOROBIPHENYL	2.5	UR	R	1.9	U		4.6	UJ	N	3.2	UJ	RY
DICHLOROBIPHENYL	1.1	UR	R	0.8	U		2	U		1.4	UJ	RY
HEPTACHLOROBIPHENYL	15	J	DPR	1.1	U		2.8	UJ	N	48	J	RY
HEXACHLOROBIPHENYL	52	J	DR	0.75	U		1.8	U		180	J	RY
MONOCHLOROBIPHENYL	0.58	UR	R	0.43	U		1.1	U		0.74	UJ	RY
NONACHLOROBIPHENYL	10	UR	R	7.5	U		18	UJ	N	13	UJ	RY
OCTACHLOROBIPHENYL	1.6	UR	R	1.2	U		3	UJ	N	5.9	J	PRY
PENTACHLOROBIPHENYL	62	J	DR	1.6	J	P	1.9	U		230	J	RY
TETRACHLOROBIPHENYL	210	J	DR	19			2.1	U		420	J	RY
TRICHLOROBIPHENYL	13	J	DR	1.1	J	P	0.95	U		10	J	PRY

PROJ_NO: 05220	NSAMPLE	SD-249-01	SD-249-02	SD-249-03	SD-249-SS					
SDG: 680-102468-1	LAB_ID	680-102468-47	680-102468-48	680-102468-49	680-102468-46					
FRACTION: PCB	SAMP_DATE	6/17/2014	6/17/2014	6/17/2014	6/17/2014					
MEDIA: SEDIMENT	QC_TYPE	NM	NM	NM	NM					
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG					
	PCT_SOLIDS	58.8	72.7	70.7	63.0					
	DUP_OF									
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
DECACHLOROBIPHENYL		70 U		1.1 U		1.2 U		1.2 U		3.9 U
DICHLOROBIPHENYLS		30 U		0.48 U		0.5 U		0.5 U		1.7 U
HEPTACHLOROBIPHENYLS	15000			270		230		230		310
HEXACHLOROBIPHENYL	17000			310		330		330		360
MONOCHLOROBIPHENYLS	16 U			0.26 U		0.27 U		0.27 U		0.9 U
NONACHLOROBIPHENYLS	280 UJ		C	4.6 U		4.7 U		4.7 U		16 U
OCTACHLOROBIPHENYLS	2400			52		42		42		45 J
PENTACHLOROBIPHENYLS	14000			150		250		250		140
TETRACHLOROBIPHENYLS	46000			910		250		250		550
TRICHLOROBIPHENYLS	2700			63		23		23		29

PROJ_NO: 05220	NSAMPLE	SD-Dup-04	
SDG: 680-102468-1	LAB_ID	680-102468-17	
FRACTION: PCB	SAMP_DATE	6/17/2014	
MEDIA: SEDIMENT	QC_TYPE	NM	
	UNITS	UG/KG	
	PCT_SOLIDS	42.4	
	DUP_OF	SD-241-02	
PARAMETER	RESULT	VQL	QLCD
DECACHLOROBIPHENYL		12 U	
DICHLOROBIPHENYL		4.9 U	
HEPTACHLOROBIPHENYL		3500 J	G
HEXACHLOROBIPHENYL		3000 J	G
MONOCHLOROBIPHENYL		2.6 U	
NONACHLOROBIPHENYL		46 U	
OCTACHLOROBIPHENYL		42 J	P
PENTACHLOROBIPHENYL		2200 J	G
TETRACHLOROBIPHENYL		7300 J	G
TRICHLOROBIPHENYL		370	

**APPENDIX B**

**RESULTS AS REPORTED BY THE LABORATORY**

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-238-01</u>	Lab Sample ID: <u>680-102468-6</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1643.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 08:25</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.07(g)</u>	Date Analyzed: <u>07/17/2014 07:20</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>76.5</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339357</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	11	U	220	11
25512-42-9	Dichlorobiphenyl	4.4	U	42	4.4
28655-71-2	Heptachlorobiphenyl	13	J	130	6.3
26601-64-9	Hexachlorobiphenyl	40	J	85	4.2
27323-18-8	Monochlorobiphenyl	2.4	U	42	2.4
53742-07-7	Nonachlorobiphenyl	42	U *	220	42
55722-26-4	Octachlorobiphenyl	6.7	U	130	6.7
25429-29-2	Pentachlorobiphenyl	6.4	J	85	4.3
26914-33-0	Tetrachlorobiphenyl	8.6	J	85	4.7
25323-68-6	Trichlorobiphenyl	2.2	U	42	2.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	10	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-238-02 Lab Sample ID: 680-102468-7  
 Matrix: Solid Lab File ID: XG1644.D  
 Analysis Method: 680 Date Collected: 06/17/2014 08:30  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.06(g) Date Analyzed: 07/17/2014 07:49  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 64.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339357 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	7.0	U	140	7.0
25512-42-9	Dichlorobiphenyl	3.0	U	28	3.0
28655-71-2	Heptachlorobiphenyl	180		85	4.2
26601-64-9	Hexachlorobiphenyl	250		57	2.8
27323-18-8	Monochlorobiphenyl	1.6	U	28	1.6
53742-07-7	Nonachlorobiphenyl	28	U *	140	28
55722-26-4	Octachlorobiphenyl	41	J	85	4.5
25429-29-2	Pentachlorobiphenyl	280		57	2.9
26914-33-0	Tetrachlorobiphenyl	660		57	3.1
25323-68-6	Trichlorobiphenyl	29		28	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	27	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-238-03 Lab Sample ID: 680-102468-8  
 Matrix: Solid Lab File ID: XG1645.D  
 Analysis Method: 680 Date Collected: 06/17/2014 08:35  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.17 (g) Date Analyzed: 07/17/2014 08:17  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1  
 Injection Volume: 1 (uL) Level: (low/med) Low  
 % Moisture: 38.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339357 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.0	U	82	4.0
25512-42-9	Dichlorobiphenyl	1.7	U	16	1.7
28655-71-2	Heptachlorobiphenyl	2.4	U	48	2.4
26601-64-9	Hexachlorobiphenyl	1.6	U	32	1.6
27323-18-8	Monochlorobiphenyl	0.92	U	16	0.92
53742-07-7	Nonachlorobiphenyl	16	U *	82	16
55722-26-4	Octachlorobiphenyl	2.6	U	48	2.6
25429-29-2	Pentachlorobiphenyl	1.6	U	32	1.6
26914-33-0	Tetrachlorobiphenyl	33		32	1.8
25323-68-6	Trichlorobiphenyl	3.0	J	16	0.82

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	89		30-130



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-238-SS Lab Sample ID: 680-102468-5  
 Matrix: Solid Lab File ID: XG1642.D  
 Analysis Method: 680 Date Collected: 06/17/2014 08:20  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.12(g) Date Analyzed: 07/17/2014 06:52  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 79.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339357 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	12	U	250	12
25512-42-9	Dichlorobiphenyl	5.1	U	48	5.1
28655-71-2	Heptachlorobiphenyl	7.3	U	150	7.3
26601-64-9	Hexachlorobiphenyl	4.8	U	98	4.8
27323-18-8	Monochlorobiphenyl	2.8	U	48	2.8
53742-07-7	Nonachlorobiphenyl	48	U *	250	48
55722-26-4	Octachlorobiphenyl	7.8	U	150	7.8
25429-29-2	Pentachlorobiphenyl	7.2	J	98	5.0
26914-33-0	Tetrachlorobiphenyl	43	J	98	5.4
25323-68-6	Trichlorobiphenyl	6.1	J	48	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STI00281	Decachlorobiphenyl-13C12	109		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-239-01</u>	Lab Sample ID: <u>680-102468-2</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1342.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 07:40</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.13(g)</u>	Date Analyzed: <u>07/14/2014 15:34</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>69.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338831</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	7.9	U	160	7.9
25512-42-9	Dichlorobiphenyl	5.0	J	32	3.3
28655-71-2	Heptachlorobiphenyl	150		96	4.8
26601-64-9	Hexachlorobiphenyl	73		64	3.2
27323-18-8	Monochlorobiphenyl	1.8	U	32	1.8
53742-07-7	Nonachlorobiphenyl	32	U *	160	32
55722-26-4	Octachlorobiphenyl	16	J	96	5.1
25429-29-2	Pentachlorobiphenyl	170		64	3.3
26914-33-0	Tetrachlorobiphenyl	2000		64	3.5
25323-68-6	Trichlorobiphenyl	190		32	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	25	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-239-02 Lab Sample ID: 680-102468-3  
 Matrix: Solid Lab File ID: XG1343.D  
 Analysis Method: 680 Date Collected: 06/17/2014 07:45  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.15(g) Date Analyzed: 07/14/2014 16:03  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 62.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 338831 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	6.5	U	130	6.5
25512-42-9	Dichlorobiphenyl	2.7	U	26	2.7
28655-71-2	Heptachlorobiphenyl	3.9	U	78	3.9
26601-64-9	Hexachlorobiphenyl	4.0	J	52	2.6
27323-18-8	Monochlorobiphenyl	1.5	U	26	1.5
53742-07-7	Nonachlorobiphenyl	26	U *	130	26
55722-26-4	Octachlorobiphenyl	4.1	U	78	4.1
25429-29-2	Pentachlorobiphenyl	15	J	52	2.7
26914-33-0	Tetrachlorobiphenyl	9.1	J	52	2.9
25323-68-6	Trichlorobiphenyl	1.3	U	26	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	68		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-239-03 Lab Sample ID: 680-102468-4  
 Matrix: Solid Lab File ID: XG1641.D  
 Analysis Method: 680 Date Collected: 06/17/2014 07:50  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.07(g) Date Analyzed: 07/17/2014 06:23  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 46.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339357 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.6	U	94	4.6
25512-42-9	Dichlorobiphenyl	1.9	U	18	1.9
28655-71-2	Heptachlorobiphenyl	2.8	U	55	2.8
26601-64-9	Hexachlorobiphenyl	1.8	U	37	1.8
27323-18-8	Monochlorobiphenyl	1.1	U	18	1.1
53742-07-7	Nonachlorobiphenyl	18	U *	94	18
55722-26-4	Octachlorobiphenyl	2.9	U	55	2.9
25429-29-2	Pentachlorobiphenyl	1.9	U	37	1.9
26914-33-0	Tetrachlorobiphenyl	18	J	37	2.1
25323-68-6	Trichlorobiphenyl	1.3	J	18	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	59		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-239-SS</u>	Lab Sample ID: <u>680-102468-1</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1341.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 07:35</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.16(g)</u>	Date Analyzed: <u>07/14/2014 15:05</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>77.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>338831</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	11	U	220	11
25512-42-9	Dichlorobiphenyl	4.5	U	42	4.5
28655-71-2	Heptachlorobiphenyl	310		130	6.4
26601-64-9	Hexachlorobiphenyl	270		86	4.2
27323-18-8	Monochlorobiphenyl	2.4	U	42	2.4
53742-07-7	Nonachlorobiphenyl	42	U *	220	42
55722-26-4	Octachlorobiphenyl	52	J	130	6.8
25429-29-2	Pentachlorobiphenyl	400		86	4.4
26914-33-0	Tetrachlorobiphenyl	1700		86	4.8
25323-68-6	Trichlorobiphenyl	140		42	2.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	56		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-240-01</u>	Lab Sample ID: <u>680-102468-10</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1668.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 08:50</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.16(g)</u>	Date Analyzed: <u>07/17/2014 10:39</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>20</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>64.5</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339357</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	140	U	2800	140
25512-42-9	Dichlorobiphenyl	58	U	550	58
28655-71-2	Heptachlorobiphenyl	8900		1700	83
26601-64-9	Hexachlorobiphenyl	12000		1100	55
27323-18-8	Monochlorobiphenyl	32	U	550	32
53742-07-7	Nonachlorobiphenyl	550	U *	2800	550
55722-26-4	Octachlorobiphenyl	1400	J	1700	88
25429-29-2	Pentachlorobiphenyl	15000		1100	57
26914-33-0	Tetrachlorobiphenyl	59000		1100	62
25323-68-6	Trichlorobiphenyl	4300		550	28

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-240-02</u>	Lab Sample ID: <u>680-102468-11</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1648.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 08:55</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.15(g)</u>	Date Analyzed: <u>07/17/2014 09:42</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>67.0</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339357</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	7.4	U	150	7.4
25512-42-9	Dichlorobiphenyl	3.9	J	30	3.1
28655-71-2	Heptachlorobiphenyl	290		90	4.5
26601-64-9	Hexachlorobiphenyl	340		60	3.0
27323-18-8	Monochlorobiphenyl	1.7	U	30	1.7
53742-07-7	Nonachlorobiphenyl	30	U *	150	30
55722-26-4	Octachlorobiphenyl	63	J	90	4.7
25429-29-2	Pentachlorobiphenyl	750		60	3.0
26914-33-0	Tetrachlorobiphenyl	3000		60	3.3
25323-68-6	Trichlorobiphenyl	200		30	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	30		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-240-03</u>	Lab Sample ID: <u>680-102468-12</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1649.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 09:00</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.19(g)</u>	Date Analyzed: <u>07/17/2014 10:11</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>45.6</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339357</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.5	U	92	4.5
25512-42-9	Dichlorobiphenyl	1.9	U	18	1.9
28655-71-2	Heptachlorobiphenyl	26	J	54	2.7
26601-64-9	Hexachlorobiphenyl	61		36	1.8
27323-18-8	Monochlorobiphenyl	1.0	U	18	1.0
53742-07-7	Nonachlorobiphenyl	18	U *	92	18
55722-26-4	Octachlorobiphenyl	2.9	U	54	2.9
25429-29-2	Pentachlorobiphenyl	110		36	1.8
26914-33-0	Tetrachlorobiphenyl	390		36	2.0
25323-68-6	Trichlorobiphenyl	21		18	0.92

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	79		30-130



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GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-240-SS</u>	Lab Sample ID: <u>680-102468-9</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1646.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 08:45</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.02(g)</u>	Date Analyzed: <u>07/17/2014 08:45</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>74.0</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339357</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	9.5	U	200	9.5
25512-42-9	Dichlorobiphenyl	4.0	U	38	4.0
28655-71-2	Heptachlorobiphenyl	420		120	5.8
26601-64-9	Hexachlorobiphenyl	590		77	3.8
27323-18-8	Monochlorobiphenyl	2.2	U	38	2.2
53742-07-7	Nonachlorobiphenyl	38	U *	200	38
55722-26-4	Octachlorobiphenyl	110	J	120	6.1
25429-29-2	Pentachlorobiphenyl	890		77	3.9
26914-33-0	Tetrachlorobiphenyl	2700		77	4.3
25323-68-6	Trichlorobiphenyl	130		38	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	21	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-241-01</u>	Lab Sample ID: <u>680-102468-14</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1916.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 09:15</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.04(g)</u>	Date Analyzed: <u>07/20/2014 02:11</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>67.8</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339932</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	77	U	1600	77
25512-42-9	Dichlorobiphenyl	33	U	310	33
28655-71-2	Heptachlorobiphenyl	26000		930	46
26601-64-9	Hexachlorobiphenyl	25000		620	31
27323-18-8	Monochlorobiphenyl	18	U	310	18
53742-07-7	Nonachlorobiphenyl	310	U *	1600	310
55722-26-4	Octachlorobiphenyl	1100		930	49
25429-29-2	Pentachlorobiphenyl	11000		620	32
26914-33-0	Tetrachlorobiphenyl	56000		620	34
25323-68-6	Trichlorobiphenyl	3000		310	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-241-02</u>	Lab Sample ID: <u>680-102468-15</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1808.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 09:20</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.11(g)</u>	Date Analyzed: <u>07/18/2014 12:59</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>56.7</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339564</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.7	U	120	5.7
25512-42-9	Dichlorobiphenyl	2.5	J	23	2.4
28655-71-2	Heptachlorobiphenyl	370		69	3.4
26601-64-9	Hexachlorobiphenyl	390		46	2.3
27323-18-8	Monochlorobiphenyl	1.3	U	23	1.3
53742-07-7	Nonachlorobiphenyl	23	U *	120	23
55722-26-4	Octachlorobiphenyl	66	J	69	3.6
25429-29-2	Pentachlorobiphenyl	660		46	2.3
26914-33-0	Tetrachlorobiphenyl	3500		46	2.5
25323-68-6	Trichlorobiphenyl	270		23	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	57		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-241-03 Lab Sample ID: 680-102468-16  
 Matrix: Solid Lab File ID: XG1809.D  
 Analysis Method: 680 Date Collected: 06/17/2014 09:25  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.03(g) Date Analyzed: 07/18/2014 13:27  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 52.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339564 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	5.2	U	110	5.2
25512-42-9	Dichlorobiphenyl	2.2	U	21	2.2
28655-71-2	Heptachlorobiphenyl	3.1	U	62	3.1
26601-64-9	Hexachlorobiphenyl	9.7	J	42	2.1
27323-18-8	Monochlorobiphenyl	1.2	U	21	1.2
53742-07-7	Nonachlorobiphenyl	21	U *	110	21
55722-26-4	Octachlorobiphenyl	3.3	U	62	3.3
25429-29-2	Pentachlorobiphenyl	33	J	42	2.1
26914-33-0	Tetrachlorobiphenyl	250		42	2.3
25323-68-6	Trichlorobiphenyl	19	J	21	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	84		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-241-SS Lab Sample ID: 680-102468-13  
 Matrix: Solid Lab File ID: XG1806.D  
 Analysis Method: 680 Date Collected: 06/17/2014 09:10  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.26(g) Date Analyzed: 07/18/2014 12:02  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 76.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339564 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	210	10
25512-42-9	Dichlorobiphenyl	4.3	U	40	4.3
28655-71-2	Heptachlorobiphenyl	920		120	6.1
26601-64-9	Hexachlorobiphenyl	910		82	4.0
27323-18-8	Monochlorobiphenyl	2.3	U	40	2.3
53742-07-7	Nonachlorobiphenyl	40	U *	210	40
55722-26-4	Octachlorobiphenyl	230		120	6.5
25429-29-2	Pentachlorobiphenyl	1100		82	4.2
26914-33-0	Tetrachlorobiphenyl	2800		82	4.5
25323-68-6	Trichlorobiphenyl	120		40	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	27	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-242-01 Lab Sample ID: 680-102468-19  
 Matrix: Solid Lab File ID: XG1812.D  
 Analysis Method: 680 Date Collected: 06/17/2014 09:45  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.09(g) Date Analyzed: 07/18/2014 14:53  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 77.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339564 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	11	U	220	11
25512-42-9	Dichlorobiphenyl	4.5	U	43	4.5
28655-71-2	Heptachlorobiphenyl	280		130	6.5
26601-64-9	Hexachlorobiphenyl	340		87	4.3
27323-18-8	Monochlorobiphenyl	2.5	U	43	2.5
53742-07-7	Nonachlorobiphenyl	43	U *	220	43
55722-26-4	Octachlorobiphenyl	17	J	130	6.8
25429-29-2	Pentachlorobiphenyl	240		87	4.4
26914-33-0	Tetrachlorobiphenyl	290		87	4.8
25323-68-6	Trichlorobiphenyl	21	J	43	2.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	28	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-242-02 Lab Sample ID: 680-102468-20  
 Matrix: Solid Lab File ID: XG1918.D  
 Analysis Method: 680 Date Collected: 06/17/2014 09:50  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.06(g) Date Analyzed: 07/20/2014 03:08  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 70.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	84	U	1700	84
25512-42-9	Dichlorobiphenyl	35	U	330	35
28655-71-2	Heptachlorobiphenyl	1300		1000	51
26601-64-9	Hexachlorobiphenyl	1300		680	33
27323-18-8	Monochlorobiphenyl	19	U	330	19
53742-07-7	Nonachlorobiphenyl	330	U *	1700	330
55722-26-4	Octachlorobiphenyl	54	U	1000	54
25429-29-2	Pentachlorobiphenyl	5900		680	34
26914-33-0	Tetrachlorobiphenyl	39000		680	37
25323-68-6	Trichlorobiphenyl	2800		330	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-242-03 Lab Sample ID: 680-102468-21  
 Matrix: Solid Lab File ID: XG1919.D  
 Analysis Method: 680 Date Collected: 06/17/2014 09:55  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.08(g) Date Analyzed: 07/20/2014 03:36  
 Con. Extract Vol.: 1(mL) Dilution Factor: 2  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 61.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	13	U	260	13
25512-42-9	Dichlorobiphenyl	5.4	U	50	5.4
28655-71-2	Heptachlorobiphenyl	1400		150	7.7
26601-64-9	Hexachlorobiphenyl	1700		100	5.0
27323-18-8	Monochlorobiphenyl	2.9	U	50	2.9
53742-07-7	Nonachlorobiphenyl	50	U	260	50
55722-26-4	Octachlorobiphenyl	180		150	8.1
25429-29-2	Pentachlorobiphenyl	1900		100	5.2
26914-33-0	Tetrachlorobiphenyl	6900		100	5.7
25323-68-6	Trichlorobiphenyl	350		50	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	31		30-130



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-242-SS</u>	Lab Sample ID: <u>680-102468-18</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1811.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 09:40</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:11</u>
Sample wt/vol: <u>10.08(g)</u>	Date Analyzed: <u>07/18/2014 14:24</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>78.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339564</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	12	U *	240	12
25512-42-9	Dichlorobiphenyl	4.9	U *	46	4.9
28655-71-2	Heptachlorobiphenyl	52	J *	140	7.0
26601-64-9	Hexachlorobiphenyl	91	J *	94	4.6
27323-18-8	Monochlorobiphenyl	2.7	U *	46	2.7
53742-07-7	Nonachlorobiphenyl	46	U *	240	46
55722-26-4	Octachlorobiphenyl	7.5	U *	140	7.5
25429-29-2	Pentachlorobiphenyl	47	J *	94	4.8
26914-33-0	Tetrachlorobiphenyl	35	J *	94	5.2
25323-68-6	Trichlorobiphenyl	3.3	J *	46	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	16	* X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-243-01</u>	Lab Sample ID: <u>680-102468-23</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1821.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 10:15</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.13(g)</u>	Date Analyzed: <u>07/18/2014 19:09</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>36.4</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339564</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.9	U *	79	3.9
25512-42-9	Dichlorobiphenyl	1.6	U *	15	1.6
28655-71-2	Heptachlorobiphenyl	2.3	U *	47	2.3
26601-64-9	Hexachlorobiphenyl	1.5	U *	31	1.5
27323-18-8	Monochlorobiphenyl	0.89	U *	15	0.89
53742-07-7	Nonachlorobiphenyl	15	U *	79	15
55722-26-4	Octachlorobiphenyl	2.5	U *	47	2.5
25429-29-2	Pentachlorobiphenyl	5.5	J *	31	1.6
26914-33-0	Tetrachlorobiphenyl	27	J *	31	1.7
25323-68-6	Trichlorobiphenyl	1.5	J *	15	0.79

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	72	*	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-243-02 Lab Sample ID: 680-102468-24  
 Matrix: Solid Lab File ID: XG1822.D  
 Analysis Method: 680 Date Collected: 06/17/2014 10:20  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.20(g) Date Analyzed: 07/18/2014 19:38  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 33.1 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339564 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.7	U	75	3.7
25512-42-9	Dichlorobiphenyl	1.5	U	15	1.5
28655-71-2	Heptachlorobiphenyl	2.2	U	44	2.2
26601-64-9	Hexachlorobiphenyl	1.5	U	29	1.5
27323-18-8	Monochlorobiphenyl	0.84	U	15	0.84
53742-07-7	Nonachlorobiphenyl	15	U	75	15
55722-26-4	Octachlorobiphenyl	2.3	U	44	2.3
25429-29-2	Pentachlorobiphenyl	1.5	U	29	1.5
26914-33-0	Tetrachlorobiphenyl	29		29	1.6
25323-68-6	Trichlorobiphenyl	1.7	J	15	0.75

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	62		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-243-03</u>	Lab Sample ID: <u>680-102468-25</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1920.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 10:25</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.00(g)</u>	Date Analyzed: <u>07/20/2014 04:05</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>35.0</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339932</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.8	U	78	3.8
25512-42-9	Dichlorobiphenyl	1.6	U	15	1.6
28655-71-2	Heptachlorobiphenyl	2.3	U	46	2.3
26601-64-9	Hexachlorobiphenyl	1.5	U	31	1.5
27323-18-8	Monochlorobiphenyl	0.88	U	15	0.88
53742-07-7	Nonachlorobiphenyl	15	U	78	15
55722-26-4	Octachlorobiphenyl	2.4	U	46	2.4
25429-29-2	Pentachlorobiphenyl	1.6	U	31	1.6
26914-33-0	Tetrachlorobiphenyl	3.5	J	31	1.7
25323-68-6	Trichlorobiphenyl	0.78	U	15	0.78

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	57		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-243-SS Lab Sample ID: 680-102468-22  
 Matrix: Solid Lab File ID: XG1820.D  
 Analysis Method: 680 Date Collected: 06/17/2014 10:10  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.09(g) Date Analyzed: 07/18/2014 18:41  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 44.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339564 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.4	U	91	4.4
25512-42-9	Dichlorobiphenyl	1.9	U	18	1.9
28655-71-2	Heptachlorobiphenyl	310		53	2.7
26601-64-9	Hexachlorobiphenyl	390		36	1.8
27323-18-8	Monochlorobiphenyl	1.0	U	18	1.0
53742-07-7	Nonachlorobiphenyl	18	U	91	18
55722-26-4	Octachlorobiphenyl	13	J	53	2.8
25429-29-2	Pentachlorobiphenyl	200		36	1.8
26914-33-0	Tetrachlorobiphenyl	440		36	2.0
25323-68-6	Trichlorobiphenyl	32		18	0.91

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	44		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-244-01 Lab Sample ID: 680-102468-27  
 Matrix: Solid Lab File ID: XG2536.D  
 Analysis Method: 680 Date Collected: 06/17/2014 10:50  
 Extract. Method: 680 Date Extracted: 07/23/2014 17:34  
 Sample wt/vol: 10.16(g) Date Analyzed: 07/26/2014 10:46  
 Con. Extract Vol.: 1(mL) Dilution Factor: 5  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 64.4 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340977 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	34	U	700	34
25512-42-9	Dichlorobiphenyl	14	U	140	14
28655-71-2	Heptachlorobiphenyl	3900		410	21
26601-64-9	Hexachlorobiphenyl	4800		280	14
27323-18-8	Monochlorobiphenyl	7.9	U	140	7.9
53742-07-7	Nonachlorobiphenyl	140	U *	700	140
55722-26-4	Octachlorobiphenyl	490		410	22
25429-29-2	Pentachlorobiphenyl	3700		280	14
26914-33-0	Tetrachlorobiphenyl	15000		280	15
25323-68-6	Trichlorobiphenyl	1100		140	7.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	15	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-244-02</u>	Lab Sample ID: <u>680-102468-28</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1923.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 10:55</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.13(g)</u>	Date Analyzed: <u>07/20/2014 05:30</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>2</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>65.3</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339932</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	14	U	290	14
25512-42-9	Dichlorobiphenyl	13	J	56	6.0
28655-71-2	Heptachlorobiphenyl	280		170	8.5
26601-64-9	Hexachlorobiphenyl	390		110	5.6
27323-18-8	Monochlorobiphenyl	3.2	U	56	3.2
53742-07-7	Nonachlorobiphenyl	56	U	290	56
55722-26-4	Octachlorobiphenyl	9.1	U	170	9.1
25429-29-2	Pentachlorobiphenyl	1200		110	5.8
26914-33-0	Tetrachlorobiphenyl	4500		110	6.3
25323-68-6	Trichlorobiphenyl	560		56	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	19	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-244-03</u>	Lab Sample ID: <u>680-102468-29</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1924.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 11:00</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.19(g)</u>	Date Analyzed: <u>07/20/2014 05:59</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>40.2</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339932</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.1	U	84	4.1
25512-42-9	Dichlorobiphenyl	1.7	U	16	1.7
28655-71-2	Heptachlorobiphenyl	2.5	U	49	2.5
26601-64-9	Hexachlorobiphenyl	26	J	33	1.6
27323-18-8	Monochlorobiphenyl	0.94	U	16	0.94
53742-07-7	Nonachlorobiphenyl	16	U	84	16
55722-26-4	Octachlorobiphenyl	2.6	U	49	2.6
25429-29-2	Pentachlorobiphenyl	36		33	1.7
26914-33-0	Tetrachlorobiphenyl	71		33	1.8
25323-68-6	Trichlorobiphenyl	2.9	J	16	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
STI00281	Decachlorobiphenyl-13C12	56		30-130



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-244-SS</u>	Lab Sample ID: <u>680-102468-26</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1921.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 10:45</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.24(g)</u>	Date Analyzed: <u>07/20/2014 04:33</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>20</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>65.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339932</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	140	U	2900	140
25512-42-9	Dichlorobiphenyl	60	U	570	60
28655-71-2	Heptachlorobiphenyl	15000		1700	86
26601-64-9	Hexachlorobiphenyl	16000		1100	57
27323-18-8	Monochlorobiphenyl	33	U	570	33
53742-07-7	Nonachlorobiphenyl	570	U	2900	570
55722-26-4	Octachlorobiphenyl	270	J	1700	91
25429-29-2	Pentachlorobiphenyl	18000		1100	58
26914-33-0	Tetrachlorobiphenyl	62000		1100	64
25323-68-6	Trichlorobiphenyl	4100		570	29

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-245-01</u>	Lab Sample ID: <u>680-102468-31</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1926.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 11:40</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.22(g)</u>	Date Analyzed: <u>07/20/2014 06:55</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>70.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339932</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	82	U	1700	82
25512-42-9	Dichlorobiphenyl	34	U	320	34
28655-71-2	Heptachlorobiphenyl	4800		980	49
26601-64-9	Hexachlorobiphenyl	1900		660	32
27323-18-8	Monochlorobiphenyl	19	U	320	19
53742-07-7	Nonachlorobiphenyl	320	U	1700	320
55722-26-4	Octachlorobiphenyl	52	U	980	52
25429-29-2	Pentachlorobiphenyl	9800		660	33
26914-33-0	Tetrachlorobiphenyl	58000		660	36
25323-68-6	Trichlorobiphenyl	3300		320	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-245-02 Lab Sample ID: 680-102468-32  
 Matrix: Solid Lab File ID: XG1927.D  
 Analysis Method: 680 Date Collected: 06/17/2014 11:45  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.15(g) Date Analyzed: 07/20/2014 07:24  
 Con. Extract Vol.: 1(mL) Dilution Factor: 2  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 70.9 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	17	U	340	17
25512-42-9	Dichlorobiphenyl	20	J	67	7.1
28655-71-2	Heptachlorobiphenyl	230		200	10
26601-64-9	Hexachlorobiphenyl	240		140	6.7
27323-18-8	Monochlorobiphenyl	4.1	J	67	3.9
53742-07-7	Nonachlorobiphenyl	67	U	340	67
55722-26-4	Octachlorobiphenyl	11	U	200	11
25429-29-2	Pentachlorobiphenyl	1600		140	6.9
26914-33-0	Tetrachlorobiphenyl	12000		140	7.5
25323-68-6	Trichlorobiphenyl	940		67	3.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	17	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-245-03 Lab Sample ID: 680-102468-33  
 Matrix: Solid Lab File ID: XG1928.D  
 Analysis Method: 680 Date Collected: 06/17/2014 11:50  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.04(g) Date Analyzed: 07/20/2014 07:52  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 72.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	9.1	U	190	9.1
25512-42-9	Dichlorobiphenyl	3.8	U	36	3.8
28655-71-2	Heptachlorobiphenyl	5.5	U	110	5.5
26601-64-9	Hexachlorobiphenyl	87		73	3.6
27323-18-8	Monochlorobiphenyl	2.1	U	36	2.1
53742-07-7	Nonachlorobiphenyl	36	U	190	36
55722-26-4	Octachlorobiphenyl	5.8	U	110	5.8
25429-29-2	Pentachlorobiphenyl	210		73	3.7
26914-33-0	Tetrachlorobiphenyl	790		73	4.1
25323-68-6	Trichlorobiphenyl	1.9	U	36	1.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	36		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-245-SS Lab Sample ID: 680-102468-30  
 Matrix: Solid Lab File ID: XG1925.D  
 Analysis Method: 680 Date Collected: 06/17/2014 11:35  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.21(g) Date Analyzed: 07/20/2014 06:27  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 76.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	10	U	210	10
25512-42-9	Dichlorobiphenyl	4.4	U	42	4.4
28655-71-2	Heptachlorobiphenyl	1700		130	6.3
26601-64-9	Hexachlorobiphenyl	890		85	4.2
27323-18-8	Monochlorobiphenyl	2.4	U	42	2.4
53742-07-7	Nonachlorobiphenyl	48	J	210	42
55722-26-4	Octachlorobiphenyl	180		130	6.7
25429-29-2	Pentachlorobiphenyl	1000		85	4.3
26914-33-0	Tetrachlorobiphenyl	4300		85	4.7
25323-68-6	Trichlorobiphenyl	290		42	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	13	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-246-01 Lab Sample ID: 680-102468-35  
 Matrix: Solid Lab File ID: XG2006.D  
 Analysis Method: 680 Date Collected: 06/17/2014 12:10  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.08(g) Date Analyzed: 07/20/2014 17:44  
 Con. Extract Vol.: 1(mL) Dilution Factor: 20  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 63.8 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	140	U	2800	140
25512-42-9	Dichlorobiphenyl	150	J	540	58
28655-71-2	Heptachlorobiphenyl	10000		1600	82
26601-64-9	Hexachlorobiphenyl	11000		1100	54
27323-18-8	Monochlorobiphenyl	31	U	540	31
53742-07-7	Nonachlorobiphenyl	540	U	2800	540
55722-26-4	Octachlorobiphenyl	1400	J	1600	87
25429-29-2	Pentachlorobiphenyl	22000		1100	56
26914-33-0	Tetrachlorobiphenyl	100000		1100	61
25323-68-6	Trichlorobiphenyl	7600		540	28

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-246-02 Lab Sample ID: 680-102468-36  
 Matrix: Solid Lab File ID: XG2007.D  
 Analysis Method: 680 Date Collected: 06/17/2014 12:15  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.12(g) Date Analyzed: 07/20/2014 18:12  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 64.4 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	6.9	U	140	6.9
25512-42-9	Dichlorobiphenyl	11	J	28	2.9
28655-71-2	Heptachlorobiphenyl	110		83	4.2
26601-64-9	Hexachlorobiphenyl	250		56	2.8
27323-18-8	Monochlorobiphenyl	1.6	U	28	1.6
53742-07-7	Nonachlorobiphenyl	28	U	140	28
55722-26-4	Octachlorobiphenyl	32	J	83	4.4
25429-29-2	Pentachlorobiphenyl	810		56	2.8
26914-33-0	Tetrachlorobiphenyl	6000		56	3.1
25323-68-6	Trichlorobiphenyl	450		28	1.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	13	X	30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-246-03 Lab Sample ID: 680-102468-37  
 Matrix: Solid Lab File ID: XG2008.D  
 Analysis Method: 680 Date Collected: 06/17/2014 12:20  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.05(g) Date Analyzed: 07/20/2014 18:41  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 33.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.7	U	76	3.7
25512-42-9	Dichlorobiphenyl	1.6	U	15	1.6
28655-71-2	Heptachlorobiphenyl	2.2	U	45	2.2
26601-64-9	Hexachlorobiphenyl	1.5	U	30	1.5
27323-18-8	Monochlorobiphenyl	0.85	U	15	0.85
53742-07-7	Nonachlorobiphenyl	15	U	76	15
55722-26-4	Octachlorobiphenyl	2.4	U	45	2.4
25429-29-2	Pentachlorobiphenyl	3.2	J	30	1.5
26914-33-0	Tetrachlorobiphenyl	14	J	30	1.7
25323-68-6	Trichlorobiphenyl	2.9	J	15	0.76

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	33		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-246-SS Lab Sample ID: 680-102468-34  
 Matrix: Solid Lab File ID: XG1929.D  
 Analysis Method: 680 Date Collected: 06/17/2014 12:05  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.12(g) Date Analyzed: 07/20/2014 08:21  
 Con. Extract Vol.: 1(mL) Dilution Factor: 50  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 67.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	380	U	7700	380
25512-42-9	Dichlorobiphenyl	160	U	1500	160
28655-71-2	Heptachlorobiphenyl	15000		4500	230
26601-64-9	Hexachlorobiphenyl	17000		3000	150
27323-18-8	Monochlorobiphenyl	86	U	1500	86
53742-07-7	Nonachlorobiphenyl	1500	U	7700	1500
55722-26-4	Octachlorobiphenyl	2700	J	4500	240
25429-29-2	Pentachlorobiphenyl	25000		3000	150
26914-33-0	Tetrachlorobiphenyl	110000		3000	170
25323-68-6	Trichlorobiphenyl	7700		1500	77

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-247-01</u>	Lab Sample ID: <u>680-102468-39</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2010.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 13:10</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.16(g)</u>	Date Analyzed: <u>07/20/2014 19:38</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>5</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>66.6</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339960</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	37	U	750	37
25512-42-9	Dichlorobiphenyl	34	J	150	15
28655-71-2	Heptachlorobiphenyl	620		440	22
26601-64-9	Hexachlorobiphenyl	910		300	15
27323-18-8	Monochlorobiphenyl	8.8	J	150	8.4
53742-07-7	Nonachlorobiphenyl	150	U	750	150
55722-26-4	Octachlorobiphenyl	65	J	440	23
25429-29-2	Pentachlorobiphenyl	3900		300	15
26914-33-0	Tetrachlorobiphenyl	25000		300	16
25323-68-6	Trichlorobiphenyl	2100		150	7.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	21	X	30-130

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Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-247-02</u>	Lab Sample ID: <u>680-102468-40</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1818.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 13:15</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.09(g)</u>	Date Analyzed: <u>07/18/2014 17:44</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>68.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339564</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	7.9	U	160	7.9
25512-42-9	Dichlorobiphenyl	3.3	U	32	3.3
28655-71-2	Heptachlorobiphenyl	52	J	96	4.8
26601-64-9	Hexachlorobiphenyl	220		64	3.2
27323-18-8	Monochlorobiphenyl	1.8	U	32	1.8
53742-07-7	Nonachlorobiphenyl	32	U	160	32
55722-26-4	Octachlorobiphenyl	5.1	U	96	5.1
25429-29-2	Pentachlorobiphenyl	710		64	3.3
26914-33-0	Tetrachlorobiphenyl	3200		64	3.5
25323-68-6	Trichlorobiphenyl	79		32	1.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	43		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-247-03 Lab Sample ID: 680-102468-41  
 Matrix: Solid Lab File ID: XG2915.D  
 Analysis Method: 680 Date Collected: 06/17/2014 13:20  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 29.75(g) Date Analyzed: 07/30/2014 02:41  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 40.7 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 341490 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	14	U	290	14
25512-42-9	Dichlorobiphenyl	6.0	U	56	6.0
28655-71-2	Heptachlorobiphenyl	8.5	U	170	8.5
26601-64-9	Hexachlorobiphenyl	5.6	U	110	5.6
27323-18-8	Monochlorobiphenyl	3.2	U	56	3.2
53742-07-7	Nonachlorobiphenyl	56	U	290	56
55722-26-4	Octachlorobiphenyl	9.0	U	170	9.0
25429-29-2	Pentachlorobiphenyl	5.8	U	110	5.8
26914-33-0	Tetrachlorobiphenyl	94	J	110	6.3
25323-68-6	Trichlorobiphenyl	2.9	U	56	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-247-SS Lab Sample ID: 680-102468-38  
 Matrix: Solid Lab File ID: XG2009.D  
 Analysis Method: 680 Date Collected: 06/17/2014 13:05  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.13(g) Date Analyzed: 07/20/2014 19:09  
 Con. Extract Vol.: 1(mL) Dilution Factor: 10  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 69.3 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	80	U	1600	80
25512-42-9	Dichlorobiphenyl	35	J	320	34
28655-71-2	Heptachlorobiphenyl	8900		960	48
26601-64-9	Hexachlorobiphenyl	11000		650	32
27323-18-8	Monochlorobiphenyl	18	U	320	18
53742-07-7	Nonachlorobiphenyl	320	U	1600	320
55722-26-4	Octachlorobiphenyl	1300		960	51
25429-29-2	Pentachlorobiphenyl	9400		650	33
26914-33-0	Tetrachlorobiphenyl	41000		650	36
25323-68-6	Trichlorobiphenyl	3300		320	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-248-01 Lab Sample ID: 680-102468-43  
 Matrix: Solid Lab File ID: XG2016.D  
 Analysis Method: 680 Date Collected: 06/17/2014 14:05  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.08(g) Date Analyzed: 07/20/2014 22:28  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 67.3 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.5	U	52	2.5
25512-42-9	Dichlorobiphenyl	1.1	U	10	1.1
28655-71-2	Heptachlorobiphenyl	15	J	31	1.5
26601-64-9	Hexachlorobiphenyl	52		20	1.0
27323-18-8	Monochlorobiphenyl	0.58	U	10	0.58
53742-07-7	Nonachlorobiphenyl	10	U	52	10
55722-26-4	Octachlorobiphenyl	1.6	U	31	1.6
25429-29-2	Pentachlorobiphenyl	62		20	1.0
26914-33-0	Tetrachlorobiphenyl	210		20	1.1
25323-68-6	Trichlorobiphenyl	13		10	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	5	X	30-130

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Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-248-02</u>	Lab Sample ID: <u>680-102468-44</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2019.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 14:10</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/12/2014 13:20</u>
Sample wt/vol: <u>30.21(g)</u>	Date Analyzed: <u>07/20/2014 23:54</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>56.3</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339960</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.9	U	39	1.9
25512-42-9	Dichlorobiphenyl	0.80	U	7.5	0.80
28655-71-2	Heptachlorobiphenyl	1.1	U	23	1.1
26601-64-9	Hexachlorobiphenyl	0.75	U	15	0.75
27323-18-8	Monochlorobiphenyl	0.43	U	7.5	0.43
53742-07-7	Nonachlorobiphenyl	7.5	U	39	7.5
55722-26-4	Octachlorobiphenyl	1.2	U	23	1.2
25429-29-2	Pentachlorobiphenyl	1.6	J	15	0.77
26914-33-0	Tetrachlorobiphenyl	19		15	0.84
25323-68-6	Trichlorobiphenyl	1.1	J	7.5	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	47		30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-248-03 Lab Sample ID: 680-102468-45  
 Matrix: Solid Lab File ID: XG2544.D  
 Analysis Method: 680 Date Collected: 06/17/2014 14:15  
 Extract. Method: 680 Date Extracted: 07/23/2014 17:34  
 Sample wt/vol: 10.07(g) Date Analyzed: 07/26/2014 14:35  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 46.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340977 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	4.6	U	95	4.6
25512-42-9	Dichlorobiphenyl	2.0	U	18	2.0
28655-71-2	Heptachlorobiphenyl	2.8	U	56	2.8
26601-64-9	Hexachlorobiphenyl	1.8	U	37	1.8
27323-18-8	Monochlorobiphenyl	1.1	U	18	1.1
53742-07-7	Nonachlorobiphenyl	18	U *	95	18
55722-26-4	Octachlorobiphenyl	3.0	U	56	3.0
25429-29-2	Pentachlorobiphenyl	1.9	U	37	1.9
26914-33-0	Tetrachlorobiphenyl	2.1	U	37	2.1
25323-68-6	Trichlorobiphenyl	0.95	U	18	0.95

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	39		30-130



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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-248-SS Lab Sample ID: 680-102468-42  
 Matrix: Solid Lab File ID: XG2018.D  
 Analysis Method: 680 Date Collected: 06/17/2014 14:00  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.34(g) Date Analyzed: 07/20/2014 23:25  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 74.5 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.2	U	66	3.2
25512-42-9	Dichlorobiphenyl	1.4	U	13	1.4
28655-71-2	Heptachlorobiphenyl	48		39	1.9
26601-64-9	Hexachlorobiphenyl	180		26	1.3
27323-18-8	Monochlorobiphenyl	0.74	U	13	0.74
53742-07-7	Nonachlorobiphenyl	13	U	66	13
55722-26-4	Octachlorobiphenyl	5.9	J	39	2.1
25429-29-2	Pentachlorobiphenyl	230		26	1.3
26914-33-0	Tetrachlorobiphenyl	420		26	1.4
25323-68-6	Trichlorobiphenyl	10	J	13	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	20	X	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-249-01 Lab Sample ID: 680-102468-47  
 Matrix: Solid Lab File ID: XG2123.D  
 Analysis Method: 680 Date Collected: 06/17/2014 14:30  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.09(g) Date Analyzed: 07/22/2014 00:34  
 Con. Extract Vol.: 1(mL) Dilution Factor: 50  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 41.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340118 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	70	U	1400	70
25512-42-9	Dichlorobiphenyl	30	U	280	30
28655-71-2	Heptachlorobiphenyl	15000		850	42
26601-64-9	Hexachlorobiphenyl	17000		570	28
27323-18-8	Monochlorobiphenyl	16	U	280	16
53742-07-7	Nonachlorobiphenyl	280	U	1400	280
55722-26-4	Octachlorobiphenyl	2400		850	45
25429-29-2	Pentachlorobiphenyl	14000		570	29
26914-33-0	Tetrachlorobiphenyl	46000		570	31
25323-68-6	Trichlorobiphenyl	2700		280	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

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Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-249-02 Lab Sample ID: 680-102468-48  
 Matrix: Solid Lab File ID: XG2023.D  
 Analysis Method: 680 Date Collected: 06/17/2014 14:35  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 29.91(g) Date Analyzed: 07/21/2014 01:47  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 27.3 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.1	U	23	1.1
25512-42-9	Dichlorobiphenyl	0.48	U	4.6	0.48
28655-71-2	Heptachlorobiphenyl	270		14	0.69
26601-64-9	Hexachlorobiphenyl	310		9.2	0.46
27323-18-8	Monochlorobiphenyl	0.26	U	4.6	0.26
53742-07-7	Nonachlorobiphenyl	4.6	U	23	4.6
55722-26-4	Octachlorobiphenyl	52		14	0.73
25429-29-2	Pentachlorobiphenyl	150		9.2	0.47
26914-33-0	Tetrachlorobiphenyl	910		9.2	0.51
25323-68-6	Trichlorobiphenyl	63		4.6	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	44		30-130

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Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: <u>SD-249-03</u>	Lab Sample ID: <u>680-102468-49</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG2024.D</u>
Analysis Method: <u>680</u>	Date Collected: <u>06/17/2014 14:40</u>
Extract. Method: <u>680</u>	Date Extracted: <u>07/12/2014 13:20</u>
Sample wt/vol: <u>29.93(g)</u>	Date Analyzed: <u>07/21/2014 02:16</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: <u>29.3</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339960</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	1.2	U	24	1.2
25512-42-9	Dichlorobiphenyl	0.50	U	4.7	0.50
28655-71-2	Heptachlorobiphenyl	230		14	0.71
26601-64-9	Hexachlorobiphenyl	330		9.5	0.47
27323-18-8	Monochlorobiphenyl	0.27	U	4.7	0.27
53742-07-7	Nonachlorobiphenyl	4.7	U	24	4.7
55722-26-4	Octachlorobiphenyl	42		14	0.75
25429-29-2	Pentachlorobiphenyl	250		9.5	0.48
26914-33-0	Tetrachlorobiphenyl	250		9.5	0.52
25323-68-6	Trichlorobiphenyl	23		4.7	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	58		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-249-SS Lab Sample ID: 680-102468-46  
 Matrix: Solid Lab File ID: XG2545.D  
 Analysis Method: 680 Date Collected: 06/17/2014 14:25  
 Extract. Method: 680 Date Extracted: 07/23/2014 17:34  
 Sample wt/vol: 10.01(g) Date Analyzed: 07/26/2014 15:04  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 37.0 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340977 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	3.9	U	81	3.9
25512-42-9	Dichlorobiphenyl	1.7	U	16	1.7
28655-71-2	Heptachlorobiphenyl	310		48	2.4
26601-64-9	Hexachlorobiphenyl	360		32	1.6
27323-18-8	Monochlorobiphenyl	0.90	U	16	0.90
53742-07-7	Nonachlorobiphenyl	16	U *	81	16
55722-26-4	Octachlorobiphenyl	45	J	48	2.5
25429-29-2	Pentachlorobiphenyl	140		32	1.6
26914-33-0	Tetrachlorobiphenyl	550		32	1.8
25323-68-6	Trichlorobiphenyl	29		16	0.81

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	31		30-130

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-Dup-04 Lab Sample ID: 680-102468-17  
 Matrix: Solid Lab File ID: XG1917.D  
 Analysis Method: 680 Date Collected: 06/17/2014 00:00  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 10.19(g) Date Analyzed: 07/20/2014 02:40  
 Con. Extract Vol.: 1(mL) Dilution Factor: 2  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 57.6 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	12	U	240	12
25512-42-9	Dichlorobiphenyl	4.9	U	46	4.9
28655-71-2	Heptachlorobiphenyl	3500		140	6.9
26601-64-9	Hexachlorobiphenyl	3000		93	4.6
27323-18-8	Monochlorobiphenyl	2.6	U	46	2.6
53742-07-7	Nonachlorobiphenyl	46	U *	240	46
55722-26-4	Octachlorobiphenyl	42	J	140	7.4
25429-29-2	Pentachlorobiphenyl	2200		93	4.7
26914-33-0	Tetrachlorobiphenyl	7300		93	5.1
25323-68-6	Trichlorobiphenyl	370		46	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	36		30-130

**APPENDIX C**

**SUPPORT DOCUMENTATION**

## CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Sediments

Report Number: 680-102468-1

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 06/18/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.2 C.

### POLYCHLORINATED BIPHENYLS (PCBS)

Samples SD-239-SS (680-102468-1), SD-239-01 (680-102468-2), SD-239-02 (680-102468-3), SD-239-03 (680-102468-4), SD-238-SS (680-102468-5), SD-238-01 (680-102468-6), SD-238-02 (680-102468-7), SD-238-03 (680-102468-8), SD-240-SS (680-102468-9), SD-240-01 (680-102468-10), SD-240-02 (680-102468-11), SD-240-03 (680-102468-12), SD-241-SS (680-102468-13), SD-241-01 (680-102468-14), SD-241-02 (680-102468-15), SD-241-03 (680-102468-16), SD-Dup-04 (680-102468-17), SD-242-SS (680-102468-18), SD-242-01 (680-102468-19), SD-242-02 (680-102468-20), SD-242-03 (680-102468-21), SD-243-SS (680-102468-22), SD-243-01 (680-102468-23), SD-243-02 (680-102468-24), SD-243-03 (680-102468-25), SD-244-SS (680-102468-26), SD-244-01 (680-102468-27), SD-244-02 (680-102468-28), SD-244-03 (680-102468-29), SD-245-SS (680-102468-30), SD-245-01 (680-102468-31), SD-245-02 (680-102468-32), SD-245-03 (680-102468-33), SD-246-SS (680-102468-34), SD-246-01 (680-102468-35), SD-246-02 (680-102468-36), SD-246-03 (680-102468-37), SD-247-SS (680-102468-38), SD-247-01 (680-102468-39), SD-247-02 (680-102468-40), SD-247-03 (680-102468-41), SD-248-SS (680-102468-42), SD-248-01 (680-102468-43), SD-248-02 (680-102468-44), SD-248-03 (680-102468-45), SD-249-SS (680-102468-46), SD-249-01 (680-102468-47), SD-249-02 (680-102468-48) and SD-249-03 (680-102468-49) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 680. The samples were prepared on 07/11/2014, 07/12/2014 and 07/23/2014 and analyzed on 07/14/2014, 07/17/2014, 07/18/2014, 07/20/2014, 07/21/2014, 07/22/2014, 07/26/2014 and 07/30/2014.

Internal standard (ISTD) response for the following sample(s) was outside of acceptance limits: (LCS 680-340491/22-A). The sample was spiked with twice the usual amount of internal standard. The results were calculated accordingly and reported.

Internal standard (ISTD) response for the following sample(s) was outside of acceptance limits when compared to the area of the CCVIS: SD-242-SS (680-102468-18), SD-243-01 (680-102468-23). The 680 method allows that the sample also be compared to the average internal standard area of the calibration(ICISAV). When compared to the ICISAV the samples are within the area range for the internal standard.

Surrogate recovery for the following sample(s) was outside control limits: SD-239-01 (680-102468-2), SD-238-01 (680-102468-6), SD-238-02 (680-102468-7), SD-240-01 (680-102468-10), SD-240-SS (680-102468-9), SD-241-SS (680-102468-13), SD-242-01 (680-102468-19), SD-242-SS (680-102468-18), SD-244-02 (680-102468-28), SD-245-02 (680-102468-32), SD-245-SS (680-102468-30), SD-246-02 (680-102468-36), SD-247-01 (680-102468-39). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported. Both extracts are 10g and matrix interference is suspected.

Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample(s): (680-102468-20 MS). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Surrogate recovery for the following sample(s) was outside control limits: SD-248-01 (680-102468-43), SD-248-01 (680-102468-43 MS), SD-248-01 (680-102468-43 MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. An MS/MSD was performed on this sample which also had low surrogate recoveries.

Surrogate recovery for the following sample(s) was outside control limits: SD-248-SS (680-102468-42). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported. The original extract is 30g, the reextract is 10g and still experienced matrix interference.

The following sample(s) was diluted due to abundance of target analytes : SD-240-01 (680-102468-10), SD-241-01 (680-102468-14), SD-242-02 (680-102468-20), SD-244-SS (680-102468-26), SD-245-01 (680-102468-31), SD-246-SS (680-102468-34), SD-246-01 (680-102468-35), SD-247-SS (680-102468-38), SD-247-03 (680-102468-41), SD-249-01 (680-102468-47). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample(s): (680-102468-40 MS), (680-102468-40 MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been



qualified and reported.

Surrogate recovery for the following sample(s) was outside control limits: SD-244-01 (680-102468-27). Re-extraction and/or re-analysis was performed with concurring results. The reextract analysis has been reported. The original analysis failed ratio criteria for the surrogate.

Nonachlorobiphenyl exceeded the recovery criteria high for LCS 680-338581/22-A, and LCS 680-340491/22-A. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Refer to the QC report for details.

Several analytes exceeded the recovery criteria low for the MS/MSD of sample SD-247-02 (680-102468-40) in batch 680-339564.

Several analytes exceeded the recovery criteria low for the MS of sample SD-248-01MS (680-102468-43) in batch 680-339960.

For the MSD of sample SD-248-01MSD (680-102468-43) in batch 680-339960, DCB Decachlorobiphenyl, Heptachlorobiphenyl, Monochlorobiphenyl and Octachlorobiphenyl exceeded the recovery criteria low. Tetrachlorobiphenyl exceeded the recovery criteria high. Also, Several analytes exceeded the RPD limit.

Several analytes exceeded the recovery criteria low for the MS of sample 680-102468-20 in batch 680-338831. Hexachlorobiphenyl exceeded the recovery criteria high.

For the MSD of sample 680-102468-20 in batch 680-338831, Trichlorobiphenyl exceeded the recovery criteria low. Heptachlorobiphenyl, Hexachlorobiphenyl and Pentachlorobiphenyl exceeded the recovery criteria high. Also, Several analytes exceeded the RPD limit.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Samples SD-240-01 (680-102468-10)[20X], SD-241-01 (680-102468-14)[10X], SD-Dup-04 (680-102468-17)[2X], SD-242-02 (680-102468-20)[10X], SD-242-03 (680-102468-21)[2X], SD-244-SS (680-102468-26)[20X], SD-244-01 (680-102468-27)[5X], SD-244-02 (680-102468-28)[2X], SD-245-01 (680-102468-31)[10X], SD-245-02 (680-102468-32)[2X], SD-246-SS (680-102468-34)[50X], SD-246-01 (680-102468-35)[20X], SD-247-SS (680-102468-38)[10X], SD-247-01 (680-102468-39)[5X], SD-247-03 (680-102468-41)[10X] and SD-249-01 (680-102468-47)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **PERCENT SOLIDS/MOISTURE**

Samples SD-239-SS (680-102468-1), SD-239-01 (680-102468-2), SD-239-02 (680-102468-3), SD-239-03 (680-102468-4), SD-238-SS (680-102468-5), SD-238-01 (680-102468-6), SD-238-02 (680-102468-7), SD-238-03 (680-102468-8), SD-240-SS (680-102468-9), SD-240-01 (680-102468-10), SD-240-02 (680-102468-11), SD-240-03 (680-102468-12), SD-241-SS (680-102468-13), SD-241-01 (680-102468-14), SD-241-02 (680-102468-15), SD-241-03 (680-102468-16), SD-Dup-04 (680-102468-17), SD-242-SS (680-102468-18), SD-242-01 (680-102468-19), SD-242-02 (680-102468-20), SD-242-03 (680-102468-21), SD-243-SS (680-102468-22), SD-243-01 (680-102468-23), SD-243-02 (680-102468-24), SD-243-03 (680-102468-25), SD-244-SS (680-102468-26), SD-244-01 (680-102468-27), SD-244-02 (680-102468-28), SD-244-03 (680-102468-29), SD-245-SS (680-102468-30), SD-245-01 (680-102468-31), SD-245-02 (680-102468-32), SD-245-03 (680-102468-33), SD-246-SS (680-102468-34), SD-246-01 (680-102468-35), SD-246-02 (680-102468-36), SD-246-03 (680-102468-37), SD-247-SS (680-102468-38), SD-247-01 (680-102468-39), SD-247-02 (680-102468-40), SD-247-03 (680-102468-41), SD-248-SS (680-102468-42), SD-248-01 (680-102468-43), SD-248-02 (680-102468-44), SD-248-03 (680-102468-45), SD-249-SS (680-102468-46), SD-249-01 (680-102468-47), SD-249-02 (680-102468-48) and SD-249-03 (680-102468-49) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 06/19/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## SAMPLE SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102468-1

Sdg Number: 680102468-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-102468-1	SD-239-SS	Solid	06/17/2014 0735	06/18/2014 0921
680-102468-2	SD-239-01	Solid	06/17/2014 0740	06/18/2014 0921
680-102468-3	SD-239-02	Solid	06/17/2014 0745	06/18/2014 0921
680-102468-4	SD-239-03	Solid	06/17/2014 0750	06/18/2014 0921
680-102468-5	SD-238-SS	Solid	06/17/2014 0820	06/18/2014 0921
680-102468-6	SD-238-01	Solid	06/17/2014 0825	06/18/2014 0921
680-102468-7	SD-238-02	Solid	06/17/2014 0830	06/18/2014 0921
680-102468-8	SD-238-03	Solid	06/17/2014 0835	06/18/2014 0921
680-102468-9	SD-240-SS	Solid	06/17/2014 0845	06/18/2014 0921
680-102468-10	SD-240-01	Solid	06/17/2014 0850	06/18/2014 0921
680-102468-11	SD-240-02	Solid	06/17/2014 0855	06/18/2014 0921
680-102468-12	SD-240-03	Solid	06/17/2014 0900	06/18/2014 0921
680-102468-13	SD-241-SS	Solid	06/17/2014 0910	06/18/2014 0921
680-102468-14	SD-241-01	Solid	06/17/2014 0915	06/18/2014 0921
680-102468-15	SD-241-02	Solid	06/17/2014 0920	06/18/2014 0921
680-102468-16	SD-241-03	Solid	06/17/2014 0925	06/18/2014 0921
680-102468-17	SD-Dup-04	Solid	06/17/2014 0000	06/18/2014 0921
680-102468-18	SD-242-SS	Solid	06/17/2014 0940	06/18/2014 0921
680-102468-19	SD-242-01	Solid	06/17/2014 0945	06/18/2014 0921
680-102468-20	SD-242-02	Solid	06/17/2014 0950	06/18/2014 0921
680-102468-21	SD-242-03	Solid	06/17/2014 0955	06/18/2014 0921
680-102468-22	SD-243-SS	Solid	06/17/2014 1010	06/18/2014 0921
680-102468-23	SD-243-01	Solid	06/17/2014 1015	06/18/2014 0921
680-102468-24	SD-243-02	Solid	06/17/2014 1020	06/18/2014 0921
680-102468-25	SD-243-03	Solid	06/17/2014 1025	06/18/2014 0921
680-102468-26	SD-244-SS	Solid	06/17/2014 1045	06/18/2014 0921
680-102468-27	SD-244-01	Solid	06/17/2014 1050	06/18/2014 0921
680-102468-28	SD-244-02	Solid	06/17/2014 1055	06/18/2014 0921
680-102468-29	SD-244-03	Solid	06/17/2014 1100	06/18/2014 0921
680-102468-30	SD-245-SS	Solid	06/17/2014 1135	06/18/2014 0921
680-102468-31	SD-245-01	Solid	06/17/2014 1140	06/18/2014 0921
680-102468-32	SD-245-02	Solid	06/17/2014 1145	06/18/2014 0921
680-102468-33	SD-245-03	Solid	06/17/2014 1150	06/18/2014 0921
680-102468-34	SD-246-SS	Solid	06/17/2014 1205	06/18/2014 0921
680-102468-35	SD-246-01	Solid	06/17/2014 1210	06/18/2014 0921
680-102468-36	SD-246-02	Solid	06/17/2014 1215	06/18/2014 0921
680-102468-37	SD-246-03	Solid	06/17/2014 1220	06/18/2014 0921
680-102468-38	SD-247-SS	Solid	06/17/2014 1305	06/18/2014 0921
680-102468-39	SD-247-01	Solid	06/17/2014 1310	06/18/2014 0921
680-102468-40	SD-247-02	Solid	06/17/2014 1315	06/18/2014 0921
680-102468-41	SD-247-03	Solid	06/17/2014 1320	06/18/2014 0921
680-102468-42	SD-248-SS	Solid	06/17/2014 1400	06/18/2014 0921
680-102468-43	SD-248-01	Solid	06/17/2014 1405	06/18/2014 0921
680-102468-43MS	SD-248-01	Solid	06/17/2014 1405	06/18/2014 0921
680-102468-43MSD	SD-248-01	Solid	06/17/2014 1405	06/18/2014 0921
680-102468-44	SD-248-02	Solid	06/17/2014 1410	06/18/2014 0921
680-102468-45	SD-248-03	Solid	06/17/2014 1415	06/18/2014 0921
680-102468-46	SD-249-SS	Solid	06/17/2014 1425	06/18/2014 0921
680-102468-47	SD-249-01	Solid	06/17/2014 1430	06/18/2014 0921
680-102468-48	SD-249-02	Solid	06/17/2014 1435	06/18/2014 0921
680-102468-49	SD-249-03	Solid	06/17/2014 1440	06/18/2014 0921

## METHOD SUMMARY

Client: Tetra Tech, Inc.

Job Number: 680-102468-1

Sdg Number: 680102468-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Solid</b>			
Polychlorinated Biphenyls (PCBs) (GC/MS)	TAL SAV	EPA 680	
Extraction (Solid PCBs)	TAL SAV		EPA 680
Percent Moisture	TAL SAV	EPA Moisture	

### Lab References:


TAL SAV = TestAmerica Savannah

### Method References:

EPA = US Environmental Protection Agency

PCB

Chain of Custody Record

<b>Client Information</b>		Sampler: <b>STJ Cameron</b>	Lab P/N: <b>Lanter, Jerry A</b>	Carrier Tracking No(s):	COC No: <b>680-56831-24906-32</b>
Client Contact: <b>Mike Martin</b>		Phone: <b>(703) 341-8384</b>	E-Mail: <b>Jerry.Lanter@testamericainc.com</b>		Page: <b>1 of 5</b>
Company: <b>Tetra Tech, Inc.</b>		Due Date Requested:	<b>Analysis Requested</b>		Job #:
Address: <b>20251 Century Blvd Suite 200</b>		TAT Requested (days):			Preservation Codes:
City: <b> Germantown</b>					A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:
State/Zip: <b>MD, 20874</b>		PO #:			M - Hexane N - None O - AsVdO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)
Phone:		Purchase Order not required			
Email: <b>Michael.Martin@tetratech.com</b>		WO #:			
Project Name:		Project #:			
Sediments:		SSOW#:			
Site:					
<b>Sample Identification</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=Grab)</b>	<b>Matrix (Hexane, Acetone, BT-TSP, A-AL)</b>
SD-239-SS		6/17/14	0735	C	Solid
SD-239-01			0740	C	Solid
SD-239-02			0745	C	Solid
SD-239-03			0750	C	Solid
SD-238-SS			0820	C	Solid
SD-238-01			0825	C	Solid
SD-238-02			0830	C	Solid
SD-238-03			0835	C	Solid
SD-240-SS			0845	C	Solid
SD-240-01			0850	C	Solid
SD-240-02			0855	C	Solid
<b>Possible Hazard Identification</b>		<b>Field Filtered Sample (Yes or No)</b>			
<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Perform MSMSD (Yes or No)			
<input type="checkbox"/> Flammable		<input type="checkbox"/> 680 - Local Method			
<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> A01R_Th - Standard Target List			
<input type="checkbox"/> Poison B		<input type="checkbox"/> 6020, 7470A			
<input type="checkbox"/> Unknown		<input type="checkbox"/> GA_01_R_Ra - (MOD) Radium-226/228			
<input type="checkbox"/> Radiological		<input type="checkbox"/> Total Number of containers			
<b>Deliverable Requested: I, II, III, IV, Other (specify)</b>		<b>Special Instructions/Note:</b>			
Empty Kit Relinquished by:		680-102468 Chain of Custody			
Date:					
Relinquished by: <i>[Signature]</i>		680-102468			
Date/Time: 6-17-14 / 1600		Method of Shipment:			
Company: <b>TY</b>		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months			
Relinquished by: <i>[Signature]</i>		Special Instructions/QC Requirements:			
Date/Time: 6/17/14 1720		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Company: <b>Estametric</b>		Cooler Temperature(s) °C and Other Remarks:			
Relinquished by: <i>[Signature]</i>		3.2 °C			
Date/Time: 6/18/14 09131		Company: <b>TestAmerica</b>			
Company: <b>Estametric</b>		Company: <b>TY</b>			

PCBS

# Chain of Custody Record

<b>Client Information</b>		Sampler: <b>Stu Cameron</b>		Lab PM: <b>Lanier, Jerry A</b>		Carrier Tracking No(s):		COC No: <b>680-56831-24906-33</b>	
Client Contact: <b>Mike Martin</b>		Phone: <b>(703) 342-8389</b>		E-Mail: <b>Jerry.Lanier@testamericainc.com</b>				Page: <b>2 of 5</b>	
Company: <b>Tetra Tech, Inc.</b>		Due Date Requested:		Analysis Requested				Job #:	
Address: <b>20251 Century Blvd Suite 200</b>		TAT Requested (days):						Preservation Codes:	
City: <b> Germantown</b>								A - HCL M - Hexane	
State/Zip: <b> MD 20874</b>		PO #:						B - NaOH N - None	
Phone:		Purchase Order not required						C - Zn Acetate O - AsH2O2	
Email: <b>Michael.Martin@tetratech.com</b>		WO #:						D - Nitric Acid P - Na2OxS	
Project Name: <b>Sediments</b>		Project #: <b>68012942</b>						E - NaHSO4 F - MeOH	
Site:		SSOW#:						G - Amorphous S - H2SO4	
								H - Acetic Acid T - TSP Dodecahydrate	
								I - Ice U - Acetone	
								J - DI Water V - MCA	
								K - EDTA W - pH 4-5	
								L - EDA Z - other (specify)	
								Other:	
								Special Instructions/Note:	
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (Inorganic, Organic, Bacteria, Virus, A-W)</b>	
SD-240-63		6/17/14		0900		C		Solid	
SD-241-53				0910		C		Solid	
SD-241-01				0915		C		Solid	
SD-241-01				0920		C		Solid	
SD-241-03				0925		C		Solid	
SD-DJPG4				0900		C		Solid	
SD-241-55				0940		C		Solid	
SD-241-01				0945		C		Solid	
SD-241-02				0950		C		Solid	
SD-241-03				0955		C		Solid	
SD-243-55				1010		C		Solid	
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)		Date:		Time:		Method of Shipment:		Special Instructions/OC Requirements:	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Special Instructions/OC Requirements:	
Relinquished by: <i>[Signature]</i>		Date/Time: <b>6/17/14 - 1006</b>		Company: <b>TE</b>		Received by: <i>[Signature]</i>		Date/Time: <b>6/17/14 1600</b>	
Relinquished by: <i>[Signature]</i>		Date/Time: <b>6/19/1720</b>		Company: <b>TE</b>		Received by: <i>[Signature]</i>		Date/Time: <b>6/18/14 0921</b>	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					

1006 6/17/14 0900

680-102468

3.26

PCBs

Chain of Custody Record

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler: <b>Stu Gaven</b>		Lab P.M.: <b>Lanier, Jerry A</b>		Carrier Tracking No(s):		COC No: <b>680-56831-24906 35</b>	
Client Contact: <b>Mike Martin</b>		Phone: <b>(701) 340-8385</b>		E-Mail: <b>jerry.lanier@testamericainc.com</b>		Job #:		Page: <b>3 of 5</b>	
Company: <b>Tetra Tech, Inc.</b>		Due Date Requested:		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
Address: <b>20251 Century Blvd Suite 200</b>		TAT Requested (days):		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
City: <b> Germantown</b>		TAT Requested (days):		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
State, Zip: <b>MD, 20874</b>		Purchase Order not required		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
Phone:		Purchase Order not required		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
Email: <b>Michael.Martin@tetratech.com</b>		Project #:		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
Project Name: <b>Sediments</b>		SSOV#:		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
Site:		SSOV#:		Analysis Requested		Job #:		Page: <b>3 of 5</b>	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix (W=Water, S=Solid, O=Other)	
SD-243-01		6/17/14		1015		C		Solid	
SD-243-02				1020		C		Solid	
SD-243-03				1025		C		Solid	
SD-244-53				1045		C		Solid	
SD-244-01				1050		C		Solid	
SD-244-02				1055		C		Solid	
SD-244-03				1100		C		Solid	
SD-245-55				1135		C		Solid	
SD-245-61				1140		C		Solid	
SD-245-02				1145		C		Solid	
SD-245-03				1150		C		Solid	
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)		Date:		Time:		Special Instructions/QC Requirements:		Archive For: <b>680-1024168</b> Months	
Empty Kit Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Method of Shipment:		Date/Time:	

PCBS

Chain of Custody Record

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler:	Stu Carron	Lab PIN:	Lanier, Jerry A	Carrier Tracking No(s):	COC No:
Client Contact:		Phone:	(203) 341-8384	E-Mail:	jerry.lanier@testamericainc.com		680-56831-24906-37
Company:		Tetra Tech, Inc.		Due Date Requested:		Page: 4 of 5	
Address:		20251 Century Blvd Suite 200		Analysis Requested:		Job #:	
City:		Germantown		TAT Requested (days):		Preservation Codes:	
State, Zip:		MD, 20874		Standard		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ammonia H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Email:		Michael.Martin@tetratech.com		Purchase Order not required		M - Hexane N - None O - ASN2O2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
Project Name:		Sediments		Project #:		68012942	
Site:		SSOW#:		SSOW#:		Special Instructions/Note:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W-water, S-solid, O-unknown, BT-Tissue, A-air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
SD-246-SS	6/17/14	1205	C	Solid	X	X	680 - Local Method		
SD-246-01		1410	C	Solid	X	X	A01R_Th - Standard Target List		
SD-246-02		1215	C	Solid	X	X	6020, 7470A		
SD-246-03		1220	C	Solid	X	X	GA_01_R_Ra - (MOD) Radium-226/228		
SD-247-SS		1305	C	Solid	X	X			
SD-247-01		1310	C	Solid	X	X			
SD-247-02		1315	C	Solid	X	X			
SD-247-03		1320	C	Solid	X	X			
SD-248-SS		1400	C	Solid	X	X			
SD-248-01		1405	C	Solid	X	X			
SD-248-02		1410	C	Solid	X	X			MS/MSD

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Radiological	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Dispose By Lab
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Archive For _____ Months	
Relinquished by: <i>[Signature]</i>		Date: 6/17/14 - 1600	
Relinquished by: <i>[Signature]</i>		Date: 6/17/14 - 1720	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 3201	

PC85

### Chain of Custody Record

<b>Client Information</b>		Client Contact: Mike Martin	Phone: (703) 342-8384	Lab PM: Lanier, Jerry A	E-Mail: Jerry.lanier@testamericainc.com	Carrier Tracking No(s)	COC No: 680-56831-24906-39
Company: Tetra Tech, Inc.		Address: 20251 Century Blvd Suite 200		City: Germantown		State: MD, Zip: 20874	
Due Date Requested:		TAT Requested (day/s):		Analysis Requested			
Purchase Order not required		PO #:		Field Filtered Sample (Yes or No)			
Project #:		68012942		Perform MS/MSD (Yes or No)			
SSOW#:		68012942		680 - Local Method			
Project Name:		Sediments		A01R_Th - Standard Target List			
Site:		SSOW#:		6020, 7470A			
Email: Michael.Martin@tetratech.com		WO #:		GA_01_R_Ra - (MOD) Radium-226/228			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sediment, etc.)	Total Number of containers	
SD-248-03	1485	1485	C	Solid	X	Special Instructions/Note:	
SD-249-55	1485	1485	C	Solid	X	ATTACHED	
SD-249-01	1485	1485	C	Solid	X		
SD-249-02	1485	1485	C	Solid	X		
SD-249-03	1446	1446	C	Solid	X		
Possible Hazard Identification		Non-Hazard		Flammable		Skin Irritant	
Deliverable Requested: I, II, III, IV, Other (specify)		Unknown		Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Empty Kit Relinquished by:		Date:		Return To Client		Archive For	
Relinquished by:		Date/Time: 6/17/14 ~ 1100		Company: TF		Received by: [Signature]	
Relinquished by:		Date/Time: 6/17/14 1730		Company: TF		Received by: M. [Signature]	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		3.20 °C	
Special Instructions/Note:		680-102468		Months			

- Preservation Codes:**
- A - HCL
  - B - NaOH
  - C - Zn Acetate
  - D - Nitric Acid
  - E - NaHSO4
  - F - MeOH
  - G - Anchoir
  - H - Ascorbic Acid
  - I - Ice
  - J - DI Water
  - K - EDTA
  - L - EDA
  - M - Hexane
  - N - None
  - O - AsHAcO2
  - P - Na2O4S
  - Q - Na2SO3
  - R - Na2S2O3
  - S - H2SO4
  - T - TSP Dodecahydrate
  - U - Acetone
  - V - MCAA
  - W - ph 4-5
  - Z - other (specify)



**HOLD TIME**

**SDG 680-102468-1**

<b>SORT</b>	<b>UNITS</b>	<b>NSAMPLE</b>	<b>LAB ID</b>	<b>QC_TYPE</b>	<b>SAMP_DATE</b>	<b>EXTR_DATE</b>	<b>ANAL_DATE</b>	<b>SMP_EXTR</b>	<b>EXTR_ANL</b>	<b>SMP_ANL</b>
PCB	UG/KG	SD-240-SS	680-102468-9	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-243-03	680-102468-25	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-243-02	680-102468-24	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-243-01	680-102468-23	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-242-SS	680-102468-18	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-242-03	680-102468-21	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-242-02	680-102468-20	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-242-01	680-102468-19	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-241-SS	680-102468-13	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-241-03	680-102468-16	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-238-01	680-102468-6	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-241-01	680-102468-14	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-244-02	680-102468-28	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-240-03	680-102468-12	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-240-02	680-102468-11	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	SD-240-01	680-102468-10	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-239-SS	680-102468-1	NM	06/17/2014	07/11/2014	07/14/2014	24	3	27
PCB	UG/KG	SD-239-03	680-102468-4	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-239-02	680-102468-3	NM	06/17/2014	07/11/2014	07/14/2014	24	3	27
PCB	UG/KG	SD-239-01	680-102468-2	NM	06/17/2014	07/11/2014	07/14/2014	24	3	27
PCB	UG/KG	SD-238-SS	680-102468-5	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-238-03	680-102468-8	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-238-02	680-102468-7	NM	06/17/2014	07/11/2014	07/17/2014	24	6	30
PCB	UG/KG	SD-241-02	680-102468-15	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-246-SS	680-102468-34	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-249-SS	680-102468-46	NM	06/17/2014	07/23/2014	07/26/2014	36	3	39
PCB	UG/KG	SD-249-03	680-102468-49	NM	06/17/2014	07/12/2014	07/21/2014	25	9	34
PCB	UG/KG	SD-249-02	680-102468-48	NM	06/17/2014	07/12/2014	07/21/2014	25	9	34
PCB	UG/KG	SD-249-01	680-102468-47	NM	06/17/2014	07/12/2014	07/22/2014	25	10	35
PCB	UG/KG	SD-248-SS	680-102468-42	NM	06/17/2014	07/12/2014	07/20/2014	25	8	33
PCB	UG/KG	SD-248-03	680-102468-45	NM	06/17/2014	07/23/2014	07/26/2014	36	3	39
PCB	UG/KG	SD-248-02	680-102468-44	NM	06/17/2014	07/12/2014	07/20/2014	25	8	33
PCB	UG/KG	SD-248-01	680-102468-43	NM	06/17/2014	07/12/2014	07/20/2014	25	8	33

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	SD-247-SS	680-102468-38	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-247-03	680-102468-41	NM	06/17/2014	07/12/2014	07/30/2014	25	18	43
PCB	UG/KG	SD-243-SS	680-102468-22	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31
PCB	UG/KG	SD-247-01	680-102468-39	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-244-01	680-102468-27	NM	06/17/2014	07/23/2014	07/26/2014	36	3	39
PCB	UG/KG	SD-246-03	680-102468-37	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-246-02	680-102468-36	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-246-01	680-102468-35	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-245-SS	680-102468-30	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-245-03	680-102468-33	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-245-02	680-102468-32	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-245-01	680-102468-31	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-244-SS	680-102468-26	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-244-03	680-102468-29	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-Dup-04	680-102468-17	NM	06/17/2014	07/11/2014	07/20/2014	24	9	33
PCB	UG/KG	SD-247-02	680-102468-40	NM	06/17/2014	07/11/2014	07/18/2014	24	7	31

**Field Duplicate Precision**

<b>ANALYTE</b>	<b>SD-Dup-04</b>	<b>SD-241-02</b>	<b>RPD</b>	<b>DIFFERENCE</b>
DICHLOROBIPHENYLS	ND	2.5	200.00	2.4
HEPTACHLOROBIPHENYLS	3500	370	161.76	3130
HEXACHLOROBIPHENYL	3000	390	153.98	2610
OCTACHLOROBIPHENYLS	42	66	44.44	24
PENTACHLOROBIPHENYLS	2200	660	107.69	1540
TETRACHLOROBIPHENYLS	7300	3500	70.37	3800
TRICHLOROBIPHENYLS	370	270	31.25	100

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCVIS 680-338831/4 Calibration Date: 07/14/2014 07:52  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1327.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8594		0.932	1.00	-6.8	20.0
Dichlorobiphenyl	Ave	0.6403	0.6515		1.02	1.00	1.8	20.0
Trichlorobiphenyl	Ave	0.4446	0.4746		1.07	1.00	6.7	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3434		2.11	2.00	5.5	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2798		2.24	2.00	12.2	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2677		2.18	2.00	8.9	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2207		3.18	3.00	6.1	20.0
Octachlorobiphenyl	Ave	0.1912	0.2088		3.28	3.00	9.2	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0693		5.15	5.00	3.1	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0776		4.96	5.00	-0.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG1325.D DFTPP Injection Date: 07/14/2014  
 Instrument ID: CMSX DFTPP Injection Time: 06:51  
 Analysis Batch No.: 338831

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.8
275	10 - 30% of mass 198	28.7
365	Greater than 1% of mass 198	4.7
441	Present but less than mass 443	15.5 (84.6)2
442	Greater than 40% of mass 198	96.1
443	17 - 23% of mass 442	18.4 (19.1)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-338831/3	XG1326.D	07/14/2014	07:22
	CCVIS 680-338831/4	XG1327.D	07/14/2014	07:52
	MB 680-338581/21-A	XG1337.D	07/14/2014	13:11
	LCS 680-338581/22-A	XG1338.D	07/14/2014	13:40
	680-102468-A-20-G MS MS	XG1339.D	07/14/2014	14:08
	680-102468-A-20-H MSD MSD	XG1340.D	07/14/2014	14:37
SD-239-SS	680-102468-1	XG1341.D	07/14/2014	15:05
SD-239-01	680-102468-2	XG1342.D	07/14/2014	15:34
SD-239-02	680-102468-3	XG1343.D	07/14/2014	16:03
	CCV 680-338831/21	XG1344.D	07/14/2014	16:31

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-338831/21 Calibration Date: 07/14/2014 16:31  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1344.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8814		0.956	1.00	-4.4	20.0
Dichlorobiphenyl	Ave	0.6403	0.6251		0.976	1.00	-2.4	20.0
Trichlorobiphenyl	Ave	0.4446	0.4693		1.06	1.00	5.5	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3192		1.96	2.00	-2.0	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2688		2.15	2.00	7.7	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2510		2.04	2.00	2.1	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2058		2.97	3.00	-1.1	20.0
Octachlorobiphenyl	Ave	0.1912	0.1892		2.97	3.00	-1.0	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0631		4.69	5.00	-6.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0698		4.45	5.00	-10.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG1628.D DFTPP Injection Date: 07/17/2014  
 Instrument ID: CMSX DFTPP Injection Time: 00:10  
 Analysis Batch No.: 339357

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	56.4
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.2
275	10 - 30% of mass 198	26.5
365	Greater than 1% of mass 198	3.7
441	Present but less than mass 443	11.0 (78.1)2
442	Greater than 40% of mass 198	69.2
443	17 - 23% of mass 442	14.0 (20.3)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-339357/3	XG1629.D	07/17/2014	00:40
	CCVIS 680-339357/4	XG1630.D	07/17/2014	01:10
SD-239-03	680-102468-4	XG1641.D	07/17/2014	06:23
SD-238-SS	680-102468-5	XG1642.D	07/17/2014	06:52
SD-238-01	680-102468-6	XG1643.D	07/17/2014	07:20
SD-238-02	680-102468-7	XG1644.D	07/17/2014	07:49
SD-238-03	680-102468-8	XG1645.D	07/17/2014	08:17
SD-240-SS	680-102468-9	XG1646.D	07/17/2014	08:45
SD-240-02	680-102468-11	XG1648.D	07/17/2014	09:42
SD-240-03	680-102468-12	XG1649.D	07/17/2014	10:11
SD-240-01	680-102468-10	XG1668.D	07/17/2014	10:39
	CCV 680-339357/24	XG1650.D	07/17/2014	11:08



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCVIS 680-339357/4 Calibration Date: 07/17/2014 01:10  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1630.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8595		0.932	1.00	-6.8	20.0
Dichlorobiphenyl	Ave	0.6403	0.6466		1.01	1.00	1.0	20.0
Trichlorobiphenyl	Ave	0.4446	0.4841		1.09	1.00	8.9	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3284		2.02	2.00	0.9	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2733		2.19	2.00	9.5	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2616		2.13	2.00	6.4	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2194		3.16	3.00	5.4	20.0
Octachlorobiphenyl	Ave	0.1912	0.1879		2.95	3.00	-1.7	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0645		4.80	5.00	-4.0	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0709		4.53	5.00	-9.4	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-339357/24 Calibration Date: 07/17/2014 11:08  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1650.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.7934		0.861	1.00	-13.9	20.0
Dichlorobiphenyl	Ave	0.6403	0.6132		0.958	1.00	-4.2	20.0
Trichlorobiphenyl	Ave	0.4446	0.4622		1.04	1.00	3.9	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3190		1.96	2.00	-2.0	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2592		2.08	2.00	3.9	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2507		2.04	2.00	2.0	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2100		3.03	3.00	0.9	20.0
Octachlorobiphenyl	Ave	0.1912	0.1841		2.89	3.00	-3.7	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0639		4.75	5.00	-4.9	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0677		4.32	5.00	-13.6	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG1826.D DFTPP Injection Date: 07/18/2014  
 Instrument ID: CMSX DFTPP Injection Time: 09:36  
 Analysis Batch No.: 339564

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	52.3
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	28.4
365	Greater than 1% of mass 198	5.1
441	Present but less than mass 443	14.2 (86.5)2
442	Greater than 40% of mass 198	87.4
443	17 - 23% of mass 442	16.4 (18.8)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-339564/3	XG1803.D	07/18/2014	10:09
	CCVIS 680-339564/4	XG1804.D	07/18/2014	10:43
SD-241-SS	680-102468-13	XG1806.D	07/18/2014	12:02
SD-241-02	680-102468-15	XG1808.D	07/18/2014	12:59
SD-241-03	680-102468-16	XG1809.D	07/18/2014	13:27
SD-242-SS	680-102468-18	XG1811.D	07/18/2014	14:24
SD-242-01	680-102468-19	XG1812.D	07/18/2014	14:53
	MB 680-338575/21-A	XG1814.D	07/18/2014	15:50
	LCS 680-338575/22-A	XG1815.D	07/18/2014	16:19
SD-247-02 MS	680-102468-40 MS	XG1816.D	07/18/2014	16:47
SD-247-02 MSD	680-102468-40 MSD	XG1817.D	07/18/2014	17:16
SD-247-02	680-102468-40	XG1818.D	07/18/2014	17:44
SD-243-SS	680-102468-22	XG1820.D	07/18/2014	18:41
SD-243-01	680-102468-23	XG1821.D	07/18/2014	19:09
SD-243-02	680-102468-24	XG1822.D	07/18/2014	19:38
	CCV 680-339564/23	XG1823.D	07/18/2014	20:06

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCVIS 680-339564/4 Calibration Date: 07/18/2014 10:43  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1804.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.9556		1.04	1.00	3.7	20.0
Dichlorobiphenyl	Ave	0.6403	0.6670		1.04	1.00	4.2	20.0
Trichlorobiphenyl	Ave	0.4446	0.4876		1.10	1.00	9.7	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3366		2.07	2.00	3.4	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2582		2.07	2.00	3.5	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2417		1.97	2.00	-1.7	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2108		3.04	3.00	1.3	20.0
Octachlorobiphenyl	Ave	0.1912	0.1987		3.12	3.00	3.9	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0628		4.67	5.00	-6.6	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0744		4.75	5.00	-5.0	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-339564/23 Calibration Date: 07/18/2014 20:06  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG1823.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8476		0.920	1.00	-8.0	20.0
Dichlorobiphenyl	Ave	0.6403	0.6318		0.987	1.00	-1.3	20.0
Trichlorobiphenyl	Ave	0.4446	0.4793		1.08	1.00	7.8	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3209		1.97	2.00	-1.5	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2680		2.15	2.00	7.4	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2445		1.99	2.00	-0.5	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2286		3.30	3.00	9.9	20.0
Octachlorobiphenyl	Ave	0.1912	0.2200		3.45	3.00	15.1	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0683		5.08	5.00	1.6	20.0
Decachlorobiphenyl-13C12	Ave	0.0783	0.0826		5.28	5.00	5.6	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG1907.D DFTPP Injection Date: 07/19/2014  
 Instrument ID: CMSX DFTPP Injection Time: 21:51  
 Analysis Batch No.: 339932

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	54.3
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.9
275	10 - 30% of mass 198	30.0
365	Greater than 1% of mass 198	4.8
441	Present but less than mass 443	13.3 (84.6) 2
442	Greater than 40% of mass 198	86.0
443	17 - 23% of mass 442	15.7 (18.3) 1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-339932/3	XG1908.D	07/19/2014	22:21
	ICISAV 680-339932/4	XG1909.D	07/19/2014	22:52
	IC 680-339932/5	XG1910.D	07/19/2014	23:20
	IC 680-339932/6	XG1911.D	07/19/2014	23:49
	IC 680-339932/7	XG1912.D	07/20/2014	00:17
	IC 680-339932/8	XG1913.D	07/20/2014	00:46
	ICV 680-339932/9	XG1914.D	07/20/2014	01:14
SD-241-01	680-102468-14	XG1916.D	07/20/2014	02:11
SD-Dup-04	680-102468-17	XG1917.D	07/20/2014	02:40
SD-242-02	680-102468-20	XG1918.D	07/20/2014	03:08
SD-242-03	680-102468-21	XG1919.D	07/20/2014	03:36
SD-243-03	680-102468-25	XG1920.D	07/20/2014	04:05
SD-244-SS	680-102468-26	XG1921.D	07/20/2014	04:33
SD-244-02	680-102468-28	XG1923.D	07/20/2014	05:30
SD-244-03	680-102468-29	XG1924.D	07/20/2014	05:59
SD-245-SS	680-102468-30	XG1925.D	07/20/2014	06:27
SD-245-01	680-102468-31	XG1926.D	07/20/2014	06:55
SD-245-02	680-102468-32	XG1927.D	07/20/2014	07:24
SD-245-03	680-102468-33	XG1928.D	07/20/2014	07:52
SD-246-SS	680-102468-34	XG1929.D	07/20/2014	08:21
	CCV 680-339932/25	XG1930.D	07/20/2014	08:49

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102468-1 Analy Batch No.: 339932

SDG No.: 680102468-1 GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52 Calibration End Date: 07/20/2014 00:46 Calibration ID: 32129

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-339932/8	XG1913.D
Level 2	IC 680-339932/7	XG1912.D
Level 3	ICISAV 680-339932/4	XG1909.D
Level 4	IC 680-339932/6	XG1911.D
Level 5	IC 680-339932/5	XG1910.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1								
Monochlorobiphenyl	0.8353	0.8456	0.9098	0.8813	0.8734	Ave	0.8691			3.4	20.0					
Dichlorobiphenyl	0.5776	0.5823	0.6122	0.6067	0.5987	Ave	0.5955			2.5	20.0					
Trichlorobiphenyl	0.3996	0.4135	0.4348	0.4389	0.4410	Ave	0.4256			4.3	20.0					
PCB-104			0.3302			Ave	0.3302				30.0					
Tetrachlorobiphenyl	0.2755	0.2817	0.3033	0.2909	0.2951	Ave	0.2893			3.8	20.0					
Pentachlorobiphenyl	0.2123	0.2203	0.2262	0.2270	0.2357	Ave	0.2243			3.9	20.0					
PCB-77			0.4767			Ave	0.4767				30.0					
Hexachlorobiphenyl	0.1966	0.2022	0.2225	0.2132	0.2185	Ave	0.2106			5.2	20.0					
Heptachlorobiphenyl	0.1540	0.1656	0.1696	0.1700	0.1695	Ave	0.1657			4.1	20.0					
Octachlorobiphenyl	0.1373	0.1488	0.1535	0.1521	0.1669	Ave	0.1517			7.0	20.0					
PCB-208			0.0569			Ave	0.0569				30.0					
Nonachlorobiphenyl			0.0443			Ave	0.0363				20.0					
DCB Decachlorobiphenyl	0.0321	0.0328	0.0379	0.0370	0.0414	Ave	0.0363			11.0	20.0					
Decachlorobiphenyl-13C12	0.0407	0.0484	0.0517	0.0504	0.0567	Ave	0.0496			12.0	20.0					

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: ICV 680-339932/9 Calibration Date: 07/20/2014 01:14  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG1914.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8287		0.953	1.00	-4.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5788		0.972	1.00	-2.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.4300		1.01	1.00	1.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2870		1.98	2.00	-0.8	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2168		1.93	2.00	-3.3	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2122		2.02	2.00	0.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1650		2.99	3.00	-0.4	20.0
Octachlorobiphenyl	Ave	0.1517	0.1560		3.08	3.00	2.8	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0351		4.84	5.00	-3.1	20.0



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-339932/25 Calibration Date: 07/20/2014 08:49  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG1930.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8234		0.947	1.00	-5.3	20.0
Dichlorobiphenyl	Ave	0.5955	0.5746		0.965	1.00	-3.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.4157		0.977	1.00	-2.3	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2797		1.93	2.00	-3.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2121		1.89	2.00	-5.5	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2060		1.96	2.00	-2.2	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1590		2.88	3.00	-4.0	20.0
Octachlorobiphenyl	Ave	0.1517	0.1434		2.84	3.00	-5.5	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0293		4.04	5.00	-19.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0415		4.18	5.00	-16.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG2002.D DFTPP Injection Date: 07/20/2014  
 Instrument ID: CMSX DFTPP Injection Time: 15:46  
 Analysis Batch No.: 339960

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	52.2
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.5
275	10 - 30% of mass 198	28.8
365	Greater than 1% of mass 198	4.2
441	Present but less than mass 443	13.4 (84.0)2
442	Greater than 40% of mass 198	84.3
443	17 - 23% of mass 442	16.0 (18.9)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-339960/3	XG2003.D	07/20/2014	16:16
	CCVIS 680-339960/4	XG2004.D	07/20/2014	16:47
SD-246-01	680-102468-35	XG2006.D	07/20/2014	17:44
SD-246-02	680-102468-36	XG2007.D	07/20/2014	18:12
SD-246-03	680-102468-37	XG2008.D	07/20/2014	18:41
SD-247-SS	680-102468-38	XG2009.D	07/20/2014	19:09
SD-247-01	680-102468-39	XG2010.D	07/20/2014	19:38
	MB 680-338712/15-A	XG2012.D	07/20/2014	20:35
	LCS 680-338712/16-A	XG2013.D	07/20/2014	21:03
SD-248-01 MS	680-102468-43 MS	XG2014.D	07/20/2014	21:32
SD-248-01 MSD	680-102468-43 MSD	XG2015.D	07/20/2014	22:00
SD-248-01	680-102468-43	XG2016.D	07/20/2014	22:28
SD-248-SS	680-102468-42	XG2018.D	07/20/2014	23:25
SD-248-02	680-102468-44	XG2019.D	07/20/2014	23:54
SD-249-02	680-102468-48	XG2023.D	07/21/2014	01:47
SD-249-03	680-102468-49	XG2024.D	07/21/2014	02:16
	CCV 680-339960/23	XG2025.D	07/21/2014	02:44

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCVIS 680-339960/4 Calibration Date: 07/20/2014 16:47  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2004.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8723		1.00	1.00	0.4	20.0
Dichlorobiphenyl	Ave	0.5955	0.5927		0.995	1.00	-0.5	20.0
Trichlorobiphenyl	Ave	0.4256	0.4215		0.990	1.00	-1.0	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2855		1.97	2.00	-1.3	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2086		1.86	2.00	-7.0	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2050		1.95	2.00	-2.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1563		2.83	3.00	-5.7	20.0
Octachlorobiphenyl	Ave	0.1517	0.1399		2.77	3.00	-7.8	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0300		4.13	5.00	-17.4	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0402		4.05	5.00	-18.9	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-339960/23 Calibration Date: 07/21/2014 02:44  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2025.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8474		0.975	1.00	-2.5	20.0
Dichlorobiphenyl	Ave	0.5955	0.5905		0.992	1.00	-0.8	20.0
Trichlorobiphenyl	Ave	0.4256	0.4195		0.986	1.00	-1.4	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2829		1.96	2.00	-2.2	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2112		1.88	2.00	-5.8	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2079		1.97	2.00	-1.3	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1593		2.88	3.00	-3.9	20.0
Octachlorobiphenyl	Ave	0.1517	0.1440		2.85	3.00	-5.1	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0310		4.27	5.00	-14.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0434		4.38	5.00	-12.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG2102.D DFTPP Injection Date: 07/21/2014  
 Instrument ID: CMSX DFTPP Injection Time: 14:32  
 Analysis Batch No.: 340118

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	52.7
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.5
275	10 - 30% of mass 198	28.1
365	Greater than 1% of mass 198	4.4
441	Present but less than mass 443	12.4 (81.7)2
442	Greater than 40% of mass 198	80.2
443	17 - 23% of mass 442	15.2 (19.0)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340118/3	XG2103.D	07/21/2014	15:02
	CCVIS 680-340118/4	XG2104.D	07/21/2014	15:33
SD-249-01	680-102468-47	XG2123.D	07/22/2014	00:34
	CCV 680-340118/24	XG2124.D	07/22/2014	01:03

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCVIS 680-340118/4 Calibration Date: 07/21/2014 15:33  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2104.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8954		1.03	1.00	3.0	20.0
Dichlorobiphenyl	Ave	0.5955	0.6077		1.02	1.00	2.0	20.0
Trichlorobiphenyl	Ave	0.4256	0.4221		0.992	1.00	-0.8	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2907		2.01	2.00	0.5	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2026		1.81	2.00	-9.7	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2026		1.92	2.00	-3.8	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1500		2.71	3.00	-9.5	20.0
Octachlorobiphenyl	Ave	0.1517	0.1284		2.54	3.00	-15.4	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0269		3.71	5.00	-25.8*	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0369		3.72	5.00	-25.6*	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-340118/24 Calibration Date: 07/22/2014 01:03  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2124.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8720		1.00	1.00	0.3	20.0
Dichlorobiphenyl	Ave	0.5955	0.6038		1.01	1.00	1.4	20.0
Trichlorobiphenyl	Ave	0.4256	0.4309		1.01	1.00	1.3	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2892		2.00	2.00	-0.0	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2181		1.94	2.00	-2.8	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2127		2.02	2.00	1.0	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1622		2.94	3.00	-2.2	20.0
Octachlorobiphenyl	Ave	0.1517	0.1406		2.78	3.00	-7.3	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0293		4.03	5.00	-19.3	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0400		4.04	5.00	-19.3	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG2502.D DFTPP Injection Date: 07/25/2014  
 Instrument ID: CMSX DFTPP Injection Time: 18:29  
 Analysis Batch No.: 340971

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.2
197	Less than 1 % of mass 198	0.2
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.5
275	10 - 30% of mass 198	29.0
365	Greater than 1% of mass 198	3.9
441	Present but less than mass 443	9.3 (52.2)2
442	Greater than 40% of mass 198	90.8
443	17 - 23% of mass 442	17.9 (19.7)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340971/3	XG2503.D	07/25/2014	18:59
	CCVIS 680-340971/4	XG2504.D	07/25/2014	19:30
	MB 680-340491/21-A	XG2513.D	07/25/2014	23:47
	LCS 680-340491/22-A	XG2514.D	07/26/2014	00:15
	CCV 680-340971/25	XG2525.D	07/26/2014	05:27



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCVIS 680-340971/4 Calibration Date: 07/25/2014 19:30  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2504.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8017		0.923	1.00	-7.7	20.0
Dichlorobiphenyl	Ave	0.5955	0.5563		0.934	1.00	-6.6	20.0
Trichlorobiphenyl	Ave	0.4256	0.3997		0.939	1.00	-6.1	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2602		1.80	2.00	-10.1	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2010		1.79	2.00	-10.4	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1945		1.85	2.00	-7.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1524		2.76	3.00	-8.0	20.0
Octachlorobiphenyl	Ave	0.1517	0.1344		2.66	3.00	-11.4	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0304		4.19	5.00	-16.2	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0442		4.45	5.00	-10.9	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG0802.D DFTPP Injection Date: 07/08/2014  
 Instrument ID: CMSX DFTPP Injection Time: 11:48  
 Analysis Batch No.: 338065

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	50.8
197	Less than 1 % of mass 198	0.3
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.7
275	10 - 30% of mass 198	27.8
365	Greater than 1% of mass 198	4.5
441	Present but less than mass 443	14.0 (80.5)2
442	Greater than 40% of mass 198	92.8
443	17 - 23% of mass 442	17.3 (18.7)1

1-Value is % mass 442

2-Value is % mass 443

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
	ICISAV 680-338065/4	XG0804.D	07/08/2014	14:04
	IC 680-338065/5	XG0805.D	07/08/2014	14:32
	IC 680-338065/6	XG0806.D	07/08/2014	15:01
	IC 680-338065/7	XG0807.D	07/08/2014	15:29
	IC 680-338065/8	XG0808.D	07/08/2014	15:58
	ICV 680-338065/9	XG0809.D	07/08/2014	16:27

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102468-1 Analy Batch No.: 338065

SDG No.: 680102468-1 GC Column: DB-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Instrument ID: CMSX Calibration Start Date: 07/08/2014 14:04 Calibration End Date: 07/08/2014 15:58 Calibration ID: 31919

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-338065/8	XG0808.D
Level 2	IC 680-338065/7	XG0807.D
Level 3	ICISAV 680-338065/4	XG0804.D
Level 4	IC 680-338065/6	XG0806.D
Level 5	IC 680-338065/5	XG0805.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1								
Monochlorobiphenyl	0.9065	0.8925	0.9538	0.9322	0.9238	Ave		0.9218			2.6		20.0			
Dichlorobiphenyl	0.5915	0.6255	0.6459	0.6725	0.6659	Ave		0.6403			5.1		20.0			
Trichlorobiphenyl	0.3952	0.4252	0.4540	0.4764	0.4724	Ave		0.4446			7.7		20.0			
PCB-104			0.3459			Ave		0.3459					30.0			
Tetrachlorobiphenyl	0.2979	0.3138	0.3348	0.3431	0.3385	Ave		0.3256			5.9		20.0			
Pentachlorobiphenyl	0.1953	0.2349	0.2632	0.2716	0.2824	Ave		0.2495			14.0		20.0			
PCB-77			0.4735			Ave		0.4735					30.0			
Hexachlorobiphenyl	0.1989	0.2390	0.2639	0.2669	0.2604	Ave		0.2458			12.0		20.0			
Heptachlorobiphenyl	0.1683	0.1973	0.2134	0.2347	0.2265	Ave		0.2081			13.0		20.0			
Octachlorobiphenyl	0.1458	0.1847	0.1949	0.2143	0.2163	Ave		0.1912			15.0		20.0			
PCB-208			0.0906			Ave		0.0906					30.0			
Nonachlorobiphenyl			0.0725			Ave		0.0672			15.0		20.0			
DCB Decachlorobiphenyl	0.0507	0.0661	0.0711	0.0735	0.0747	Ave		0.0672			15.0		20.0			
Decachlorobiphenyl-13C12	0.0604	0.0799	0.0831	0.0851	0.0829	Ave		0.0783			13.0		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: ICV 680-338065/9 Calibration Date: 07/08/2014 16:27  
 Instrument ID: CMSX Calib Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/08/2014 15:58  
 Lab File ID: XG0809.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.9218	0.8805		0.955	1.00	-4.5	20.0
Dichlorobiphenyl	Ave	0.6403	0.6291		0.983	1.00	-1.7	20.0
Trichlorobiphenyl	Ave	0.4446	0.4497		1.01	1.00	1.1	20.0
Tetrachlorobiphenyl	Ave	0.3256	0.3210		1.97	2.00	-1.4	20.0
Pentachlorobiphenyl	Ave	0.2495	0.2325		1.86	2.00	-6.8	20.0
Hexachlorobiphenyl	Ave	0.2458	0.2501		2.03	2.00	1.7	20.0
Heptachlorobiphenyl	Ave	0.2081	0.2019		2.91	3.00	-3.0	20.0
Octachlorobiphenyl	Ave	0.1912	0.1790		2.81	3.00	-6.4	20.0
DCB Decachlorobiphenyl	Ave	0.0672	0.0596		4.44	5.00	-11.3	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-340971/25 Calibration Date: 07/26/2014 05:27  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2525.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8156		0.938	1.00	-6.2	20.0
Dichlorobiphenyl	Ave	0.5955	0.5691		0.956	1.00	-4.4	20.0
Trichlorobiphenyl	Ave	0.4256	0.4048		0.951	1.00	-4.9	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2686		1.86	2.00	-7.1	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2080		1.85	2.00	-7.3	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1988		1.89	2.00	-5.6	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1617		2.93	3.00	-2.4	20.0
Octachlorobiphenyl	Ave	0.1517	0.1480		2.93	3.00	-2.4	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0360		4.96	5.00	-0.8	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0464		4.68	5.00	-6.4	20.0

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG2528.D DFTPP Injection Date: 07/26/2014  
 Instrument ID: CMSX DFTPP Injection Time: 06:55  
 Analysis Batch No.: 340977

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	58.7
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.9
275	10 - 30% of mass 198	27.4
365	Greater than 1% of mass 198	3.8
441	Present but less than mass 443	11.3 (81.0)2
442	Greater than 40% of mass 198	71.0
443	17 - 23% of mass 442	14.0 (19.7)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-340977/3	XG2529.D	07/26/2014	07:25
	CCVIS 680-340977/4	XG2530.D	07/26/2014	07:55
SD-244-01	680-102468-27	XG2536.D	07/26/2014	10:46
SD-248-03	680-102468-45	XG2544.D	07/26/2014	14:35
SD-249-SS	680-102468-46	XG2545.D	07/26/2014	15:04
	CCV 680-340977/19	XG2547.D	07/26/2014	16:02

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCVIS 680-340977/4 Calibration Date: 07/26/2014 07:55  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2530.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8296		0.955	1.00	-4.5	20.0
Dichlorobiphenyl	Ave	0.5955	0.5831		0.979	1.00	-2.1	20.0
Trichlorobiphenyl	Ave	0.4256	0.4191		0.985	1.00	-1.5	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2788		1.93	2.00	-3.6	20.0
Pentachlorobiphenyl	Ave	0.2243	0.2171		1.94	2.00	-3.2	20.0
Hexachlorobiphenyl	Ave	0.2106	0.2078		1.97	2.00	-1.3	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1661		3.01	3.00	0.2	20.0
Octachlorobiphenyl	Ave	0.1517	0.1504		2.97	3.00	-0.8	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0350		4.83	5.00	-3.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0470		4.74	5.00	-5.2	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-340977/19 Calibration Date: 07/26/2014 16:02  
 Instrument ID: CMSX Calib Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/20/2014 00:46  
 Lab File ID: XG2547.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.8691	0.8014		0.922	1.00	-7.8	20.0
Dichlorobiphenyl	Ave	0.5955	0.5616		0.943	1.00	-5.7	20.0
Trichlorobiphenyl	Ave	0.4256	0.3935		0.925	1.00	-7.5	20.0
Tetrachlorobiphenyl	Ave	0.2893	0.2603		1.80	2.00	-10.0	20.0
Pentachlorobiphenyl	Ave	0.2243	0.1991		1.78	2.00	-11.2	20.0
Hexachlorobiphenyl	Ave	0.2106	0.1897		1.80	2.00	-9.9	20.0
Heptachlorobiphenyl	Ave	0.1657	0.1470		2.66	3.00	-11.3	20.0
Octachlorobiphenyl	Ave	0.1517	0.1339		2.65	3.00	-11.7	20.0
DCB Decachlorobiphenyl	Ave	0.0363	0.0296		4.08	5.00	-18.5	20.0
Decachlorobiphenyl-13C12	Ave	0.0496	0.0424		4.28	5.00	-14.5	20.0



FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG2906.D DFTPP Injection Date: 07/29/2014  
 Instrument ID: CMSX DFTPP Injection Time: 22:19  
 Analysis Batch No.: 341490

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
127	40 - 60 % of mass 198	51.8
197	Less than 1 % of mass 198	0.0
198	Base peak, 100 % Relative abundance	100.0
199	5 - 9 % of mass 198	6.6
275	10 - 30% of mass 198	29.6
365	Greater than 1% of mass 198	4.6
441	Present but less than mass 443	15.1 (81.7)2
442	Greater than 40% of mass 198	93.1
443	17 - 23% of mass 442	18.4 (19.8)1

1-Value is % mass 442

2-Value is % mass 443

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
	WDM 680-341490/2	XG2907.D	07/29/2014	22:49
	ICISAV 680-341490/3	XG2908.D	07/29/2014	23:20
	IC 680-341490/4	XG2909.D	07/29/2014	23:49
	IC 680-341490/5	XG2910.D	07/30/2014	00:17
	IC 680-341490/6	XG2911.D	07/30/2014	00:46
	IC 680-341490/7	XG2912.D	07/30/2014	01:15
	ICV 680-341490/8	XG2913.D	07/30/2014	01:43
SD-247-03	680-102468-41	XG2915.D	07/30/2014	02:41
	CCV 680-341490/22	XG2927.D	07/30/2014	09:58

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102468-1 Analy Batch No.: 341490

SDG No.: 680102468-1

Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/29/2014 23:20 Calibration End Date: 07/30/2014 01:15 Calibration ID: 32707

Calibration Files:

LEVEL:	IAB SAMPLE ID:	IAB FILE ID:
Level 1	IC 680-341490/7	XG2912.D
Level 2	IC 680-341490/6	XG2911.D
Level 3	ICISAV 680-341490/3	XG2908.D
Level 4	IC 680-341490/5	XG2910.D
Level 5	IC 680-341490/4	XG2909.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT		#	MIN RRF	%RSD #	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1							
Monochlorobiphenyl	0.7921	0.7705	0.8099	0.7988	0.7964	Ave	0.7935			1.8	20.0				
Dichlorobiphenyl	0.5284	0.5186	0.5209	0.5416	0.5248	Ave	0.5269			1.7	20.0				
Trichlorobiphenyl	0.3754	0.3671	0.3622	0.3850	0.3830	Ave	0.3745			2.6	20.0				
PCB-104			0.2799			Ave	0.2799			0.8	20.0				
Tetrachlorobiphenyl	0.2501	0.2513	0.2524	0.2552	0.2537	Ave	0.2526			0.8	20.0				
Pentachlorobiphenyl	0.1969	0.1993	0.1832	0.2038	0.2132	Ave	0.1993			5.5	20.0				
PCB-77			0.3725			Ave	0.3725			3.7	20.0				
Hexachlorobiphenyl	0.1822	0.1911	0.1904	0.1957	0.2013	Ave	0.1922			6.0	20.0				
Heptachlorobiphenyl	0.1478	0.1500	0.1425	0.1568	0.1664	Ave	0.1527			8.6	20.0				
Octachlorobiphenyl	0.1288	0.1424	0.1289	0.1458	0.1571	Ave	0.1406			9.9	20.0				
PCB-208			0.0459			Ave	0.0459			9.9	20.0				
Nonachlorobiphenyl			0.0367			Ave	0.0349			9.9	20.0				
DCB Decachlorobiphenyl	0.0323	0.0337	0.0316	0.0368	0.0399	Ave	0.0349			9.9	20.0				
Decachlorobiphenyl-13C12	0.0428	0.0516	0.0426	0.0504	0.0560	Ave	0.0487			12.0	20.0				

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: ICV 680-341490/8 Calibration Date: 07/30/2014 01:43  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2913.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7728		0.974	1.00	-2.6	20.0
Dichlorobiphenyl	Ave	0.5269	0.5308		1.01	1.00	0.7	20.0
Trichlorobiphenyl	Ave	0.3745	0.3902		1.04	1.00	4.2	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2598		2.06	2.00	2.9	20.0
Pentachlorobiphenyl	Ave	0.1993	0.2014		2.02	2.00	1.1	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1898		1.98	2.00	-1.2	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1595		3.13	3.00	4.4	20.0
Octachlorobiphenyl	Ave	0.1406	0.1416		3.02	3.00	0.7	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0347		4.98	5.00	-0.5	20.0

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab Sample ID: CCV 680-341490/22 Calibration Date: 07/30/2014 09:58  
 Instrument ID: CMSX Calib Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calib End Date: 07/30/2014 01:15  
 Lab File ID: XG2927.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Monochlorobiphenyl	Ave	0.7935	0.7280		0.917	1.00	-8.3	20.0
Dichlorobiphenyl	Ave	0.5269	0.4890		0.928	1.00	-7.2	20.0
Trichlorobiphenyl	Ave	0.3745	0.3465		0.925	1.00	-7.5	20.0
Tetrachlorobiphenyl	Ave	0.2526	0.2372		1.88	2.00	-6.1	20.0
Pentachlorobiphenyl	Ave	0.1993	0.1861		1.87	2.00	-6.6	20.0
Hexachlorobiphenyl	Ave	0.1922	0.1841		1.92	2.00	-4.2	20.0
Heptachlorobiphenyl	Ave	0.1527	0.1448		2.85	3.00	-5.2	20.0
Octachlorobiphenyl	Ave	0.1406	0.1332		2.84	3.00	-5.3	20.0
DCB Decachlorobiphenyl	Ave	0.0349	0.0303		4.34	5.00	-13.1	20.0
Decachlorobiphenyl-13C12	Ave	0.0487	0.0429		4.41	5.00	-11.8	20.0

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102468-1

SDG No.: 680102468-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #	
SD-239-SS	680-102468-1	56	
SD-239-01	680-102468-2	25	X
SD-239-02	680-102468-3	68	
SD-239-03	680-102468-4	59	
SD-238-SS	680-102468-5	109	
SD-238-01	680-102468-6	10	X
SD-238-02	680-102468-7	27	X
SD-238-03	680-102468-8	89	
SD-240-SS	680-102468-9	21	X
SD-240-01	680-102468-10	0	D 20X
SD-240-02	680-102468-11	30	
SD-240-03	680-102468-12	79	
SD-241-SS	680-102468-13	27	X
SD-241-01	680-102468-14	0	D 10X
SD-241-02	680-102468-15	57	
SD-241-03	680-102468-16	84	
SD-Dup-04	680-102468-17	36	
SD-242-SS	680-102468-18	16	X
SD-242-01	680-102468-19	28	X
SD-242-02	680-102468-20	0	D 10X
SD-242-03	680-102468-21	31	
SD-243-SS	680-102468-22	44	
SD-243-01	680-102468-23	72	*
SD-243-02	680-102468-24	62	
SD-243-03	680-102468-25	57	
SD-244-SS	680-102468-26	0	D 20X
SD-244-01	680-102468-27	15	X 5X
SD-244-02	680-102468-28	19	X 2X
SD-244-03	680-102468-29	56	
SD-245-SS	680-102468-30	13	X
SD-245-01	680-102468-31	0	D 10X
SD-245-02	680-102468-32	17	X 2X
SD-245-03	680-102468-33	36	
SD-246-SS	680-102468-34	0	D 50X
SD-246-01	680-102468-35	0	D 20X

QC LIMITS  
30-130

13DCB = Decachlorobiphenyl-13C12

# Column to be used to flag recovery values

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102468-1

SDG No.: 680102468-1

Matrix: Solid

Level: Low

GC Column (1): DB-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	13DCB #	
SD-246-02	680-102468-36	13	X
SD-246-03	680-102468-37	33	
SD-247-SS	680-102468-38	0	D 10X
SD-247-01	680-102468-39	21	X 5X
SD-247-02	680-102468-40	43	
SD-247-03	680-102468-41	0	D 10X
SD-248-SS	680-102468-42	20	X
SD-248-01	680-102468-43	5	X
SD-248-02	680-102468-44	47	
SD-248-03	680-102468-45	39	
SD-249-SS	680-102468-46	31	
SD-249-01	680-102468-47	0	D 5X
SD-249-02	680-102468-48	44	
SD-249-03	680-102468-49	58	
	MB 680-338575/21-A	64	
	MB 680-338581/21-A	77	
	MB 680-338712/15-A	51	
	MB 680-340491/21-A	64	
	LCS 680-338575/22-A	66	
	LCS 680-338581/22-A	98	
	LCS 680-338712/16-A	69	
	LCS 680-340491/22-A	81	
	680-102468-A-20-G MS	17	X
SD-247-02 MS	680-102468-40 MS	13	X
SD-248-01 MS	680-102468-43 MS	14	X
	680-102468-A-20-H MSD	36	
SD-247-02 MSD	680-102468-40 MSD	19	X
SD-248-01 MSD	680-102468-43 MSD	23	X

13DCB = Decachlorobiphenyl-13C12

QC LIMITS  
30-130

# Column to be used to flag recovery values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Matrix: Solid Level: Low Lab File ID: XG1339.D  
 Lab ID: 680-102468-A-20-G MS Client ID: SD-242-02 - Done on batch

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	3380	84 U	617	18	30-130	F1
Dichlorobiphenyl	677	35 U	135	20	30-130	F1
Heptachlorobiphenyl	2030	1300	3120	91	40-140	
Hexachlorobiphenyl	1350	1300	3250	141	40-140	F1
Monochlorobiphenyl	677	19 U	127	19	30-130	F1
Nonachlorobiphenyl	3380	330 U	1050	31	30-130	
Octachlorobiphenyl	2030	54 U	740	36	40-140	F1
Pentachlorobiphenyl	1350	5900	3450	178	40-140	4
Tetrachlorobiphenyl	1350	39000	14300	1833	40-140	E 4
Trichlorobiphenyl	677	2800	1090	247	30-130	4

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102468-1

SDG No.: 680102468-1

Matrix: Solid Level: Low

Lab File ID: XG1340.D

Lab ID: 680-102468-A-20-H MSD

Client ID: \_\_\_\_\_

*Done on batch not sample*

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	3370	1280	38	(70)	50	30-130	F2
Dichlorobiphenyl	674	299	40	(76)	50	30-130	F2
Heptachlorobiphenyl	2020	11400	(495)	(114)	50	40-140	F1 F2
Hexachlorobiphenyl	1350	7630	(460)	(81)	50	40-140	F1 F2
Monochlorobiphenyl	674	253	37	(66)	50	30-130	F2
Nonachlorobiphenyl	3370	2150	64	(68)	50	30-130	F2
Octachlorobiphenyl	2020	3010	125	(121)	50	40-140	F2
Pentachlorobiphenyl	1350	7550	(158)	(75)	50	40-140	4 F2
Tetrachlorobiphenyl	1350	36500	136	(87)	50	40-140	E 4 F2
Trichlorobiphenyl	674	2710	(19)	(85)	50	30-130	F1 F2

# Column to be used to flag recovery and RPD values



FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Matrix: Solid Level: Low Lab File ID: XG1816.D  
 Lab ID: 680-102468-40 MS Client ID: SD-247-02 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	3180	7.9 U	399	13	30-130	F1
Dichlorobiphenyl	635	3.3 U	94.3	15	30-130	F1
Heptachlorobiphenyl	1910	52 J	317	14	40-140	F1
Hexachlorobiphenyl	1270	220	265	3	40-140	F1
Monochlorobiphenyl	635	1.8 U	80.8	13	30-130	F1
Nonachlorobiphenyl	3180	32 U	607	19	30-130	F1
Octachlorobiphenyl	1910	5.1 U	303	16	40-140	F1
Pentachlorobiphenyl	1270	710	329	-30	40-140	F1
Tetrachlorobiphenyl	1270	3200	949	-174	40-140	F1
Trichlorobiphenyl	635	79	200	19	30-130	F1

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102468-1

SDG No.: 680102468-1

Matrix: Solid Level: Low

Lab File ID: XG1817.D

Lab ID: 680-102468-40 MSD

Client ID: SD-247-02 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	3200	628	20	45	50	30-130	F1
Dichlorobiphenyl	640	125	20	28	50	30-130	F1
Heptachlorobiphenyl	1920	483	22	41	50	40-140	F1
Hexachlorobiphenyl	1280	367	11	32	50	40-140	F1
Monochlorobiphenyl	640	102	16	23	50	30-130	F1
Nonachlorobiphenyl	3200	919	29	41	50	30-130	F1
Octachlorobiphenyl	1920	449	23	39	50	40-140	F1
Pentachlorobiphenyl	1280	460	-19	33	50	40-140	F1
Tetrachlorobiphenyl	1280	981	-170	3	50	40-140	F1
Trichlorobiphenyl	640	241	25	18	50	30-130	F1

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Matrix: Solid Level: Low Lab File ID: XG2014.D  
 Lab ID: 680-102468-43 MS Client ID: SD-248-01 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	1130	2.5 U	81.6	7	30-130	F1
Dichlorobiphenyl	226	1.1 U	20.8	9	30-130	F1
Heptachlorobiphenyl	678	15 J	87.5	11	40-140	F1
Hexachlorobiphenyl	452	52	116	14	40-140	F1
Monochlorobiphenyl	226	0.58 U	19.9	9	30-130	F1
Nonachlorobiphenyl	1130	10 U	139	12	30-130	F1
Octachlorobiphenyl	678	1.6 U	57.2	8	40-140	F1
Pentachlorobiphenyl	452	62	154	20	40-140	F1
Tetrachlorobiphenyl	452	210	321	25	40-140	F1
Trichlorobiphenyl	226	13	49.5	16	30-130	F1

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-102468-1

SDG No.: 680102468-1

Matrix: Solid Level: Low

Lab File ID: XG2015.D

Lab ID: 680-102468-43 MSD

Client ID: SD-248-01 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	MSD % RPD	QC LIMITS		#
					RPD	REC	
DCB Decachlorobiphenyl	1100	264	21	166	50	30-130	F1 F2
Dichlorobiphenyl	221	69.4	31	108	50	30-130	F2
Heptachlorobiphenyl	663	235	33	91	50	40-140	F1 F2
Hexachlorobiphenyl	442	264	ck 48	78	50	40-140	F2
Monochlorobiphenyl	221	64.8	29	106	50	30-130	F1 F2
Nonachlorobiphenyl	1100	466	42	108	50	30-130	F2
Octachlorobiphenyl	663	191	29	108	50	40-140	F1 F2
Pentachlorobiphenyl	442	276	48	56	50	40-140	F2
Tetrachlorobiphenyl	442	997	178	103	50	40-140	F1 F2
Trichlorobiphenyl	221	118	48	82	50	30-130	F2

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG1337.D Lab Sample ID: MB 680-338581/21-A  
 Matrix: Solid Date Extracted: 07/11/2014 14:11  
 Instrument ID: CMSX Date Analyzed: 07/14/2014 13:11  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-338581/22-A	XG1338.D	07/14/2014 13:40
	680-102468-A-20-G MS	XG1339.D	07/14/2014 14:08
	680-102468-A-20-H MSD	XG1340.D	07/14/2014 14:37
SD-239-SS	680-102468-1	XG1341.D	07/14/2014 15:05
SD-239-01	680-102468-2	XG1342.D	07/14/2014 15:34
SD-239-02	680-102468-3	XG1343.D	07/14/2014 16:03
SD-239-03	680-102468-4	XG1641.D	07/17/2014 06:23
SD-238-SS	680-102468-5	XG1642.D	07/17/2014 06:52
SD-238-01	680-102468-6	XG1643.D	07/17/2014 07:20
SD-238-02	680-102468-7	XG1644.D	07/17/2014 07:49
SD-238-03	680-102468-8	XG1645.D	07/17/2014 08:17
SD-240-SS	680-102468-9	XG1646.D	07/17/2014 08:45
SD-240-02	680-102468-11	XG1648.D	07/17/2014 09:42
SD-240-03	680-102468-12	XG1649.D	07/17/2014 10:11
SD-240-01	680-102468-10	XG1668.D	07/17/2014 10:39
SD-241-SS	680-102468-13	XG1806.D	07/18/2014 12:02
SD-241-02	680-102468-15	XG1808.D	07/18/2014 12:59
SD-241-03	680-102468-16	XG1809.D	07/18/2014 13:27
SD-242-SS	680-102468-18	XG1811.D	07/18/2014 14:24
SD-242-01	680-102468-19	XG1812.D	07/18/2014 14:53
SD-241-01	680-102468-14	XG1916.D	07/20/2014 02:11
SD-Dup-04	680-102468-17	XG1917.D	07/20/2014 02:40
SD-242-02	680-102468-20	XG1918.D	07/20/2014 03:08

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-338581/21-A  
 Matrix: Solid Lab File ID: XG1337.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:11  
 Sample wt/vol: 30.05(g) Date Analyzed: 07/14/2014 13:11  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 338831 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	77		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Matrix: Solid Level: Low Lab File ID: XG1338.D  
 Lab ID: LCS 680-338581/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	332	325	98	30-130	
Dichlorobiphenyl	66.4	53.5	81	30-130	
Heptachlorobiphenyl	199	191	96	40-140	
Hexachlorobiphenyl	133	124	94	40-140	
Monochlorobiphenyl	66.4	53.9	81	30-130	
Nonachlorobiphenyl	332	443	134	30-130	*
Octachlorobiphenyl	199	197	99	40-140	
Pentachlorobiphenyl	133	128	97	40-140	
Tetrachlorobiphenyl	133	112	84	40-140	
Trichlorobiphenyl	66.4	56.7	85	30-130	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG1814.D Lab Sample ID: MB 680-338575/21-A  
 Matrix: Solid Date Extracted: 07/11/2014 14:44  
 Instrument ID: CMSX Date Analyzed: 07/18/2014 15:50  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-338575/22-A	XG1815.D	07/18/2014 16:19
SD-247-02 MS	680-102468-40 MS	XG1816.D	07/18/2014 16:47
SD-247-02 MSD	680-102468-40 MSD	XG1817.D	07/18/2014 17:16
SD-247-02	680-102468-40	XG1818.D	07/18/2014 17:44
SD-243-SS	680-102468-22	XG1820.D	07/18/2014 18:41
SD-243-01	680-102468-23	XG1821.D	07/18/2014 19:09
SD-243-02	680-102468-24	XG1822.D	07/18/2014 19:38
SD-242-03	680-102468-21	XG1919.D	07/20/2014 03:36
SD-243-03	680-102468-25	XG1920.D	07/20/2014 04:05
SD-244-SS	680-102468-26	XG1921.D	07/20/2014 04:33
SD-244-02	680-102468-28	XG1923.D	07/20/2014 05:30
SD-244-03	680-102468-29	XG1924.D	07/20/2014 05:59
SD-245-SS	680-102468-30	XG1925.D	07/20/2014 06:27
SD-245-01	680-102468-31	XG1926.D	07/20/2014 06:55
SD-245-02	680-102468-32	XG1927.D	07/20/2014 07:24
SD-245-03	680-102468-33	XG1928.D	07/20/2014 07:52
SD-246-SS	680-102468-34	XG1929.D	07/20/2014 08:21
SD-246-01	680-102468-35	XG2006.D	07/20/2014 17:44
SD-246-02	680-102468-36	XG2007.D	07/20/2014 18:12
SD-246-03	680-102468-37	XG2008.D	07/20/2014 18:41
SD-247-SS	680-102468-38	XG2009.D	07/20/2014 19:09
SD-247-01	680-102468-39	XG2010.D	07/20/2014 19:38



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-102468-1</u>
SDG No.: <u>680102468-1</u>	
Client Sample ID: _____	Lab Sample ID: <u>MB 680-338575/21-A</u>
Matrix: <u>Solid</u>	Lab File ID: <u>XG1814.D</u>
Analysis Method: <u>680</u>	Date Collected: _____
Extract. Method: <u>680</u>	Date Extracted: <u>07/11/2014 14:44</u>
Sample wt/vol: <u>10.12(g)</u>	Date Analyzed: <u>07/18/2014 15:50</u>
Con. Extract Vol.: <u>1(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	Level: (low/med) <u>Low</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>339564</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	2.5	U	50	2.5
25512-42-9	Dichlorobiphenyl	1.0	U	9.8	1.0
28655-71-2	Heptachlorobiphenyl	1.5	U	30	1.5
26601-64-9	Hexachlorobiphenyl	0.98	U	20	0.98
27323-18-8	Monochlorobiphenyl	0.56	U	9.8	0.56
53742-07-7	Nonachlorobiphenyl	9.8	U	50	9.8
55722-26-4	Octachlorobiphenyl	1.6	U	30	1.6
25429-29-2	Pentachlorobiphenyl	1.0	U	20	1.0
26914-33-0	Tetrachlorobiphenyl	1.1	U	20	1.1
25323-68-6	Trichlorobiphenyl	0.50	U	9.8	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	64		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Matrix: Solid Level: Low Lab File ID: XG1815.D  
 Lab ID: LCS 680-338575/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	223	67	30-130	
Dichlorobiphenyl	66.6	38.1	57	30-130	
Heptachlorobiphenyl	200	145	73	40-140	
Hexachlorobiphenyl	133	89.2	67	40-140	
Monochlorobiphenyl	66.6	33.7	51	30-130	
Nonachlorobiphenyl	333	316	95	30-130	
Octachlorobiphenyl	200	158	79	40-140	
Pentachlorobiphenyl	133	97.2	73	40-140	
Tetrachlorobiphenyl	133	79.6	60	40-140	
Trichlorobiphenyl	66.6	43.0	65	30-130	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Lab File ID: XG2012.D Lab Sample ID: MB 680-338712/15-A  
 Matrix: Solid Date Extracted: 07/12/2014 13:20  
 Instrument ID: CMSX Date Analyzed: 07/20/2014 20:35  
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-338712/16-A	XG2013.D	07/20/2014 21:03
SD-248-01 MS	680-102468-43 MS	XG2014.D	07/20/2014 21:32
SD-248-01 MSD	680-102468-43 MSD	XG2015.D	07/20/2014 22:00
SD-248-01	680-102468-43	XG2016.D	07/20/2014 22:28
SD-248-SS	680-102468-42	XG2018.D	07/20/2014 23:25
SD-248-02	680-102468-44	XG2019.D	07/20/2014 23:54
SD-249-02	680-102468-48	XG2023.D	07/21/2014 01:47
SD-249-03	680-102468-49	XG2024.D	07/21/2014 02:16
SD-249-01	680-102468-47	XG2123.D	07/22/2014 00:34
SD-247-03	680-102468-41	XG2915.D	07/30/2014 02:41

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-338712/15-A  
 Matrix: Solid Lab File ID: XG2012.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/12/2014 13:20  
 Sample wt/vol: 30.10(g) Date Analyzed: 07/20/2014 20:35  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339960 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	51		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Matrix: Solid Level: Low Lab File ID: XG2013.D  
 Lab ID: LCS 680-338712/16-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	332	243	73	30-130	
Dichlorobiphenyl	66.3	47.5	72	30-130	
Heptachlorobiphenyl	199	153	77	40-140	
Hexachlorobiphenyl	133	100	75	40-140	
Monochlorobiphenyl	66.3	45.5	69	30-130	
Nonachlorobiphenyl	332	385	116	30-130	
Octachlorobiphenyl	199	157	79	40-140	
Pentachlorobiphenyl	133	101	76	40-140	
Tetrachlorobiphenyl	133	95.3	72	40-140	
Trichlorobiphenyl	66.3	47.7	72	30-130	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
SDG No.: 680102468-1  
Lab File ID: XG2513.D Lab Sample ID: MB 680-340491/21-A  
Matrix: Solid Date Extracted: 07/23/2014 17:34  
Instrument ID: CMSX Date Analyzed: 07/25/2014 23:47  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-340491/22-A	XG2514.D	07/26/2014 00:15
SD-244-01	680-102468-27	XG2536.D	07/26/2014 10:46
SD-248-03	680-102468-45	XG2544.D	07/26/2014 14:35
SD-249-SS	680-102468-46	XG2545.D	07/26/2014 15:04

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 680-340491/21-A  
 Matrix: Solid Lab File ID: XG2513.D  
 Analysis Method: 680 Date Collected: \_\_\_\_\_  
 Extract. Method: 680 Date Extracted: 07/23/2014 17:34  
 Sample wt/vol: 30.03(g) Date Analyzed: 07/25/2014 23:47  
 Con. Extract Vol.: 1(mL) Dilution Factor: 1  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 340971 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	0.83	U	17	0.83
25512-42-9	Dichlorobiphenyl	0.35	U	3.3	0.35
28655-71-2	Heptachlorobiphenyl	0.50	U	10	0.50
26601-64-9	Hexachlorobiphenyl	0.33	U	6.7	0.33
27323-18-8	Monochlorobiphenyl	0.19	U	3.3	0.19
53742-07-7	Nonachlorobiphenyl	3.3	U	17	3.3
55722-26-4	Octachlorobiphenyl	0.53	U	10	0.53
25429-29-2	Pentachlorobiphenyl	0.34	U	6.7	0.34
26914-33-0	Tetrachlorobiphenyl	0.37	U	6.7	0.37
25323-68-6	Trichlorobiphenyl	0.17	U	3.3	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	64		30-130

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Matrix: Solid Level: Low Lab File ID: XG2514.D  
 Lab ID: LCS 680-340491/22-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
DCB Decachlorobiphenyl	333	279	84	30-130	
Dichlorobiphenyl	66.6	53.6	80	30-130	
Heptachlorobiphenyl	200	179	89	40-140	
Hexachlorobiphenyl	133	118	89	40-140	
Monochlorobiphenyl	66.6	50.5	76	30-130	
Nonachlorobiphenyl	333	466	140	30-130	*
Octachlorobiphenyl	200	182	91	40-140	
Pentachlorobiphenyl	133	112	84	40-140	
Tetrachlorobiphenyl	133	109	82	40-140	
Trichlorobiphenyl	66.6	55.8	84	30-130	

# Column to be used to flag recovery and RPD values



FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Instrument ID: CMSX Calibration Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/08/2014 15:58  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	82146	10.37	111835	16.51		
UPPER LIMIT	123219	10.87	167753	17.01		
LOWER LIMIT	41073	9.87	55918	16.01		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-338065/9	84988	10.37	88856	16.51		
CCVIS 680-338831/4	78618	10.29	119625	16.41		
MB 680-338581/21-A	60107	10.29	72051	16.41		
LCS 680-338581/22-A	59008	10.29	71987	16.41		
680-102468-A-20-G MS	65236	10.29	81501	16.42		
680-102468-A-20-H MSD	76087	10.29	110759	16.42		
680-102468-1	SD-239-SS	63701	83247	16.41		
680-102468-2	SD-239-01	73581	87475	16.41		
680-102468-3	SD-239-02	61525	76732	16.41		
CCV 680-338831/21		86965	129566	16.41		
CCVIS 680-339357/4		86759	127559	16.36		
680-102468-4	SD-239-03	65012	73423	16.36		
680-102468-5	SD-238-SS	72882	93312	16.36		
680-102468-6	SD-238-01	75006	91524	16.36		
680-102468-7	SD-238-02	74846	94474	16.36		
680-102468-8	SD-238-03	72728	85177	16.36		
680-102468-9	SD-240-SS	74220	90663	16.36		
680-102468-11	SD-240-02	78428	93815	16.36		
680-102468-12	SD-240-03	86782	100206	16.36		
680-102468-10	SD-240-01	95194	109523	16.36		
CCV 680-339357/24		100233	141450	16.36		
CCVIS 680-339564/4		104828	154939	16.30		
680-102468-13	SD-241-SS	81176	100623*	16.30		OK
680-102468-15	SD-241-02	105277	135396	16.32		
680-102468-16	SD-241-03	79770	106754*	16.30		
680-102468-18	SD-242-SS	71457*	83218*	16.30		
680-102468-19	SD-242-01	74379	97209*	16.30		
MB 680-338575/21-A		81268	98412*	16.30		
LCS 680-338575/22-A		73623	89998*	16.30		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Instrument ID: CMSX Calibration Start Date: 07/08/2014 14:04  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/08/2014 15:58  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	82146	10.37	111835	16.51		
UPPER LIMIT	123219	10.87	167753	17.01		
LOWER LIMIT	41073	9.87	55918	16.01		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102468-40 MS	SD-247-02 MS	123254	10.19	156001	16.30	
680-102468-40 MSD	SD-247-02 MSD	79594	10.19	106728*	16.30	
680-102468-40	SD-247-02	82376	10.19	97738*	16.32	
680-102468-22	SD-243-SS	83509	10.19	95431*	16.30	
680-102468-23	SD-243-01	66472*	10.19	80577*	16.30	
680-102468-24	SD-243-02	84173	10.19	94444*	16.30	
CCV 680-339564/23		100880	10.19	166662	16.30	

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Sample No.: CCVIS 680-338831/4 Date Analyzed: 07/14/2014 07:52  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1327.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		78618	10.29	119625	16.41		
UPPER LIMIT		102203	10.79	155513	16.91		
LOWER LIMIT		55033	9.79	83738	15.91		
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 680-338581/21-A		60107	10.29	72051	16.41		
LCS 680-338581/22-A		59008	10.29	71987	16.41		
680-102468-A-20-G MS		65236	10.29	81501	16.42		
680-102468-A-20-H MSD		76087	10.29	110759	16.42		
680-102468-1	SD-239-SS ✓	63701	10.29	83247	16.41		
680-102468-2	SD-239-01 ✓	73581	10.29	87475	16.41		
680-102468-3	SD-239-02 ✓	61525	10.29	76732	16.41		
CCV 680-338831/21		86965	10.29	129566	16.41		

4501- 64783

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Sample No.: CCVIS 680-339357/4 Date Analyzed: 07/17/2014 01:10  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG1630.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	86759	10.23	127559	16.36		
UPPER LIMIT	112787	10.73	165827	16.86		
LOWER LIMIT	60731	9.73	89291	15.86		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102468-4	SD-239-03	✓	65012	10.23	73423	16.36
680-102468-5	SD-238-SS		72882	10.23	93312	16.36
680-102468-6	SD-238-01		75006	10.23	91524	16.36
680-102468-7	SD-238-02		74846	10.23	94474	16.36
680-102468-8	SD-238-03	✓	72728	10.23	85177	16.36
680-102468-9	SD-240-SS		74220	10.23	90663	16.36
680-102468-11	SD-240-02		78428	10.25	93815	16.36
680-102468-12	SD-240-03		86782	10.25	100206	16.36
680-102468-10	SD-240-01		95194	10.23	109523	16.36
CCV 680-339357/24			100233	10.23	141450	16.36

50%  
708725

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Sample No.: CCVIS 680-339564/4 Date Analyzed: 07/18/2014 10:43  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25(mm)  
 Lab File ID (Standard): XG1804.D Heated Purge: (Y/N) N  
 Calibration ID: 31919

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	104828	10.19	154939	16.30		
UPPER LIMIT	136276	10.69	201421	16.80		
LOWER LIMIT	73380	9.69	108457	15.80		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102468-13	SD-241-SS	✓	81176	10.19	100623*	16.30
680-102468-15	SD-241-02		105277	10.19	135396	16.32
680-102468-16	SD-241-03	✓	79770	10.19	106754*	16.30
680-102468-18	SD-242-SS	✓	71457*	10.19	83218*	16.30
680-102468-19	SD-242-01	✓	74379	10.19	97209*	16.30
MB 680-338575/21-A			81268	10.19	98412*	16.30
LCS 680-338575/22-A			73623	10.19	89998*	16.30
680-102468-40 MS	SD-247-02 MS		123254	10.19	156001	16.30
680-102468-40 MSD	SD-247-02 MSD		79594	10.19	106728*	16.30
680-102468-40	SD-247-02	✓	82376	10.19	97738*	16.32
680-102468-22	SD-243-SS	✓	83509	10.19	95431*	16.30
680-102468-23	SD-243-01	✓	66472*	10.19	80577*	16.30
680-102468-24	SD-243-02	✓	84173	10.19	94444*	16.30
CCV 680-339564/23			100880	10.19	166662	16.30

SET.  
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SET.  
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PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

TestAmerica Savannah  
Target Compound Quantitation Report

Data File: \\SAVCHROM\ChromData\CMSX\20140717-11092.b\XG1804.D  
 Lims ID: ccvis  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 18-Jul-2014 10:43:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Injection Vol: 1.0 ul Dil. Factor: 1.0000  
 Sample Info: CCVIS  
 Misc. Info.: 680-0011092-004  
 Operator ID: nmd Instrument ID: CMSX  
 Sublist: chrom-680\CMSX\*sub1  
 Method: \\SAVCHROM\ChromData\CMSX\20140717-11092.b\680\CMSX.m  
 Limit Group: 680  
 Last Update: 29-Jul-2014 22:36:58 Calib Date: 08-Jul-2014 15:58:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\SAVCHROM\ChromData\CMSX\20140708-10816.b\XG0808.D  
 Column 1 : Det: MS SCAN  
 Process Host: XAWRK047

First Level Reviewer: davisn Date: 18-Jul-2014 11:32:06

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/ml	Flags
A 23 Chlorobiphenyl	188	7.730	7.264 - 8.196		0	133560	1.04	
A 24 Dichlorobiphenyl	222	9.437	8.507 - 10.366		0	93222	1.04	
* 5 Phenanthrene-d10	188	10.186	10.186 0.0		98	104828	0.7500	
A 25 Trichlorobiphenyl	256	11.064	9.751 - 12.378		0	68150	1.10	
9 PCB-104	326	12.174	12.174 0.0		91	98416	2.04	
A 26 Tetrachlorobiphenyl	292	12.543	10.846 -14.240		0	94103	2.07	
A 27 Pentachlorobiphenyl	326	13.948	12.114 -15.781		0	72175	2.07	
12 PCB-77	292	14.180	14.180 0.0		95	127757	1.93	
A 28 1,1'-Biphenyl, hexachloro-	360	15.231	13.280 -17.182		0	67557	1.97	
* 15 Chrysene-d12	240	16.298	16.298 0.0		100	154939	0.7500	
A 29 1,1'-Biphenyl, heptachloro-	394	16.364	14.903 -17.825		0	88399	3.04	
A 30 1,1'-Biphenyl, octachloro-	430	17.444	16.377 -18.510		0	83314	3.12	
19 PCB-208	464	18.007	18.007 0.0		96	46204	3.65	
A 31 1,1'-Biphenyl, nonachloro-	464	18.497	17.947 -19.047		0	46204	4.92	
32 DCB Decachlorobiphenyl	498	19.496	19.496 0.0		94	43864	4.67	
\$ 22 Decachlorobiphenyl-13C12	510	19.496	19.496 0.0		94	51964	4.75	

Reagents:  
 680isomerCal3\_00008 Amount Added: 1.00 Units: mL

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25(mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	160628	10.11	229918	16.23		
UPPER LIMIT	240942	10.61	344877	16.73		
LOWER LIMIT	80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-339932/9	166018	10.11	232985	16.22		
680-102468-14	SD-241-01.	164315	10.11	214151	16.22	
680-102468-17	SD-Dup-04	171862	10.13	224815	16.24	
680-102468-20	SD-242-02	177039	10.11	226868	16.22	
680-102468-21	SD-242-03	199841	10.13	251847	16.24	
680-102468-25	SD-243-03	170078	10.11	203944	16.22	
680-102468-26	SD-244-SS	178788	10.11	221734	16.24	
680-102468-28	SD-244-02	167931	10.11	213992	16.24	
680-102468-29	SD-244-03	169182	10.13	208938	16.24	
680-102468-30	SD-245-SS	182516	10.13	208125	16.24	
680-102468-31	SD-245-01	164838	10.13	187403	16.24	
680-102468-32	SD-245-02	176203	10.13	221776	16.24	
680-102468-33	SD-245-03	216802	10.14	280852	16.29	
680-102468-34	SD-246-SS	170986	10.13	193279	16.24	
CCV 680-339932/25		151460	10.13	163045	16.24	
CCVIS 680-339960/4		156930	10.13	160983	16.24	
680-102468-35	SD-246-01	160668	10.13	176990	16.24	
680-102468-36	SD-246-02	175097	10.13	208564	16.24	
680-102468-37	SD-246-03	152112	10.13	174211	16.24	
680-102468-38	SD-247-SS	163456	10.13	182903	16.24	
680-102468-39	SD-247-01	166643	10.13	194024	16.24	
MB 680-338712/15-A		147280	10.13	155989	16.24	
LCS 680-338712/16-A		139972	10.13	145084	16.24	
680-102468-43 MS	SD-248-01 MS	142037	10.13	164616	16.24	
680-102468-43 MSD	SD-248-01 MSD	159058	10.13	181215	16.24	
680-102468-43	SD-248-01	167752	10.13	178384	16.24	
680-102468-42	SD-248-SS	142951	10.13	157215	16.24	
680-102468-44	SD-248-02	138288	10.13	147732	16.24	
680-102468-48	SD-249-02	155536	10.13	170462	16.24	
680-102468-49	SD-249-03	138768	10.13	152173	16.24	

PHN = Phenanthrene-d10  
CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Instrument ID: CMSX Calibration Start Date: 07/19/2014 22:52  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/20/2014 00:46  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	160628	10.11	229918	16.23		
UPPER LIMIT	240942	10.61	344877	16.73		
LOWER LIMIT	80314	9.61	114959	15.73		
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCV 680-339960/23			146361	10.13	150656	16.24
CCVIS 680-340118/4			152714	10.13	135608	16.24
680-102468-47	SD-249-01		166157	10.13	159257	16.24
CCV 680-340118/24			152797	10.13	138511	16.24
CCVIS 680-340971/4			126429	9.98	126053	16.09
MB 680-340491/21-A			126557	9.98	119839	16.09
LCS 680-340491/22-A			232677	9.98	229551	16.09
CCV 680-340971/25			127070	9.98	135551	16.09
CCVIS 680-340977/4			124896	9.98	130014	16.09
680-102468-27	SD-244-01		135727	9.98	141853	16.09
680-102468-45	SD-248-03		109641	9.98	<u>106063</u>	16.09
680-102468-46	SD-249-SS		122776	9.98	134272	16.09
CCV 680-340977/19			139321	9.98	145026	16.09

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PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits



FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Sample No.: CCVIS 680-339960/4 Date Analyzed: 07/20/2014 16:47  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2004.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		156930	10.13	160983	16.24		
UPPER LIMIT		204009	10.63	209278	16.74		
LOWER LIMIT		109851	9.63	112688	15.74		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102468-35	SD-246-01	160668	10.13	176990	16.24		
680-102468-36	SD-246-02	175097	10.13	208564	16.24		
680-102468-37	SD-246-03	152112	10.13	174211	16.24		
680-102468-38	SD-247-SS	163456	10.13	182903	16.24		
680-102468-39	SD-247-01	166643	10.13	194024	16.24		
MB 680-338712/15-A		147280	10.13	155989	16.24		
LCS 680-338712/16-A		139972	10.13	145084	16.24		
680-102468-43 MS	SD-248-01 MS	142037	10.13	164616	16.24		
680-102468-43 MSD	SD-248-01 MSD	159058	10.13	181215	16.24		
680-102468-43	SD-248-01	167752	10.13	178384	16.24		
680-102468-42	SD-248-SS	142951	10.13	157215	16.24		
680-102468-44	SD-248-02	138288	10.13	147732	16.24		
680-102468-48	SD-249-02	155536	10.13	170462	16.24		
680-102468-49	SD-249-03	138768	10.13	152173	16.24		
CCV 680-339960/23		146361	10.13	150656	16.24		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Sample No.: CCVIS 680-340118/4 Date Analyzed: 07/21/2014 15:33  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2104.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	152714	10.13	135608	16.24		
UPPER LIMIT	198528	10.63	176290	16.74		
LOWER LIMIT	106900	9.63	94926	15.74		
LAB SAMPLE ID	CLIENT SAMPLE ID					
680-102468-47	SD-249-01		166157	10.13	159257	16.24
CCV 680-340118/24			152797	10.13	138511	16.24

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Sample No.: CCVIS 680-340971/4 Date Analyzed: 07/25/2014 19:30  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2504.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	126429	9.98	126053	16.09		
UPPER LIMIT	164358	10.48	163869	16.59		
LOWER LIMIT	88500	9.48	88237	15.59		
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 680-340491/21-A	126557	9.98	119839	16.09		
LCS 680-340491/22-A	232677	9.98	229551	16.09		
CCV 680-340971/25	127070	9.98	135551	16.09		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Sample No.: CCVIS 680-340977/4 Date Analyzed: 07/26/2014 07:55  
 Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm)  
 Lab File ID (Standard): XG2530.D Heated Purge: (Y/N) N  
 Calibration ID: 32129

		PHN		CRY			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		124896	9.98	130014	16.09		
UPPER LIMIT		162365	10.48	169018	16.59		
LOWER LIMIT		87427	9.48	91010	15.59		
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-102468-27	SD-244-01	135727	9.98	141853	16.09		
680-102468-45	SD-248-03	109641	9.98	106063	16.09		
680-102468-46	SD-249-SS	122776	9.98	134272	16.09		
CCV 680-340977/19		139321	9.98	145026	16.09		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 70%-130% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Instrument ID: CMSX Calibration Start Date: 07/29/2014 23:20  
 GC Column: DB-5MS ID: 0.25 (mm) Calibration End Date: 07/30/2014 01:15  
 Calibration ID: 32707

	PHN		CRY		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
INITIAL CALIBRATION MEAN AREA AND MEAN RT	146426	9.77	207821	15.85		
UPPER LIMIT	219639	10.27	311732	16.35		
LOWER LIMIT	73213	9.27	103911	15.35		
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-341490/8	132962	9.77	182303	15.85		
680-102468-41	SD-247-03	148357	9.77	172954	15.86	
CCV 680-341490/22	161910	9.78	198715	15.86		

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12

Area Limit = 50%-150% of internal standard area  
 RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

SAMPLE ID SD-246-SS

SAMPLE CALC for tetrachlorobiphenyl

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/mL)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION PPB
170986	50	462956	0.75	1	0.2893	105732.29
				Sample Weight (g)		
				10.12		
				Percent Solids		
				32.8		

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-102468-1  
 SDG No.: 680102468-1  
 Client Sample ID: SD-246-SS Lab Sample ID: 680-102468-34  
 Matrix: Solid Lab File ID: XG1929.D  
 Analysis Method: 680 Date Collected: 06/17/2014 12:05  
 Extract. Method: 680 Date Extracted: 07/11/2014 14:44  
 Sample wt/vol: 10.12(g) Date Analyzed: 07/20/2014 08:21  
 Con. Extract Vol.: 1(mL) Dilution Factor: 50  
 Injection Volume: 1(uL) Level: (low/med) Low  
 % Moisture: 67.2 GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 339932 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
2051-24-3	DCB Decachlorobiphenyl	380	U	7700	380
25512-42-9	Dichlorobiphenyl	160	U	1500	160
28655-71-2	Heptachlorobiphenyl	15000		4500	230
26601-64-9	Hexachlorobiphenyl	17000		3000	150
27323-18-8	Monochlorobiphenyl	86	U	1500	86
53742-07-7	Nonachlorobiphenyl	1500	U	7700	1500
55722-26-4	Octachlorobiphenyl	2700	J	4500	240
25429-29-2	Pentachlorobiphenyl	25000		3000	150
26914-33-0	Tetrachlorobiphenyl	110000		3000	170
25323-68-6	Trichlorobiphenyl	7700		1500	77

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00281	Decachlorobiphenyl-13C12	0	D	30-130

TestAmerica Savannah  
Target Compound Quantitation Report

*Sample Calc.*

Data File: \\SAVCHROM\ChromData\CMSX\20140719-11146.b\XG1929.D  
 Lims ID: 680-102468-A-34-A Lab Sample ID: 680-102468-34  
 Client ID: SD-246-SS  
 Sample Type: Client  
 Inject. Date: 20-Jul-2014 08:21:30 ALS Bottle#: 23 Worklist Smp#: 24  
 Injection Vol: 1.0 ul Dil. Factor: 50.0000  
 Sample Info: 102468-A-34 DL=50  
 Misc. Info.: 680-0011146-024  
 Operator ID: nmd Instrument ID: CMSX  
 Method: \\SAVCHROM\ChromData\CMSX\20140719-11146.b\680\CMSX.m  
 Limit Group: 680  
 Last Update: 27-Jul-2014 16:33:31 Calib Date: 20-Jul-2014 00:46:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\SAVCHROM\ChromData\CMSX\20140719-11146.b\XG1913.D

Column 1 : Det: MS SCAN  
 Process Host: XAWRK053

First Level Reviewer: davisn Date: 24-Jul-2014 12:04:12

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/ml	Flags
A 24 Dichlorobiphenyl	222	9.373	8.444 - 10.303		0	807	0.005944	
* 5 Phenanthrene-d10	188	10.127	10.112 0.015		99	170986	0.7500	
A 25 Trichlorobiphenyl	256	11.001	9.687 - 12.315		0	49608	0.5113	
A 26 <u>Tetrachlorobiphenyl</u>	292	12.482	10.783 -14.181		0	<u>462956</u>	7.02	
A 27 Pentachlorobiphenyl	326	13.887	12.056 -15.718		0	85856	1.68	
A 28 1,1'-Biphenyl, hexachloro-	360	15.168	13.217 -17.119		0	53284	1.11	
* 15 Chrysene-d12	240	16.241	16.224 0.017		100	193279	0.7500	
A 29 1,1'-Biphenyl, heptachloro-	394	16.295	14.829 -17.762		0	38110	1.01	
A 30 1,1'-Biphenyl, octachloro-	430	17.380	16.314 -18.447		0	6107	0.1766	

Reagents:

SM-680istd\_00028 Amount Added: 30.00 Units: uL Run Reagent



Sample Calc.

FORM VI  
GC/MS SEMI VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-102468-1 Analy Batch No.: 339932

SDG No.: 680102468-1

Instrument ID: CMSX GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2014 22:52 Calibration End Date: 07/20/2014 00:46 Calibration ID: 32129

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-339932/8	XG1913.D
Level 2	IC 680-339932/7	XG1912.D
Level 3	ICISAV 680-339932/4	XG1909.D
Level 4	IC 680-339932/6	XG1911.D
Level 5	IC 680-339932/5	XG1910.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2							
Monochlorobiphenyl	0.8353	0.8456	0.9098	0.8813	0.8734	Ave	0.8691			3.4		20.0				
Dichlorobiphenyl	0.5776	0.5823	0.6122	0.6067	0.5987	Ave	0.5955			2.5		20.0				
Trichlorobiphenyl	0.3996	0.4135	0.4348	0.4389	0.4410	Ave	0.4256			4.3		20.0				
PCB-104			0.3302			Ave	0.3302					30.0				
Tetrachlorobiphenyl	0.2755	0.2817	0.3033	0.2909	0.2951	Ave	0.2893			3.8		20.0				
Pentachlorobiphenyl	0.2123	0.2203	0.2262	0.2270	0.2357	Ave	0.2243			3.9		20.0				
PCB-77			0.4767			Ave	0.4767					30.0				
Hexachlorobiphenyl	0.1966	0.2022	0.2225	0.2132	0.2185	Ave	0.2106			5.2		20.0				
Heptachlorobiphenyl	0.1540	0.1656	0.1696	0.1700	0.1695	Ave	0.1657			4.1		20.0				
Octachlorobiphenyl	0.1373	0.1488	0.1535	0.1521	0.1669	Ave	0.1517			7.0		20.0				
PCB-208			0.0569			Ave	0.0569					30.0				
Nonachlorobiphenyl			0.0443			Ave	0.0363			11.0		20.0				
DCB Decachlorobiphenyl	0.0321	0.0328	0.0379	0.0370	0.0414	Ave	0.0363			11.0		20.0				
Decachlorobiphenyl-13C12	0.0407	0.0484	0.0517	0.0504	0.0567	Ave	0.0496			12.0		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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## APPENDIX C—STATISTICAL AND DATA TABLES

Table C-1

**Statistical Summary of PCB Sediment Sample Results-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland**

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Minimum Qualifier	Maximum Non-Detect	Maximum Qualifier	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Location of Maximum Detect	Sample of Maximum Detect	Average Of Positive Results	Average Of All Results	Standard Deviation
<b>PCB HOMOLOGS (MG/KG)</b>															
DECACHLOROBIPHENYL	0/41	0	0.00099	U	0.03	UJ								0.0035	0.0030
DICHLOROBIPHENYLS	0/41	0	0.00042	U	0.013	U								0.0015	0.0013
HEPTACHLOROBIPHENYLS	19/41	46	0.00059	U	0.054	U	0.0096	J	0.73	J	SD-214	SD-214-SS	0.2465	0.1157	0.2035
HEXACHLOROBIPHENYL	21/41	51	0.00039	U	0.1	U	0.021	J	0.81		SD-214	SD-214-01	0.2863	0.1496	0.2199
MONOCHLOROBIPHENYLS	1/41	2	0.00023	U	0.0069	U	0.0047	J	0.0047	J	SD-232	SD-232-02	0.0047	0.0009	0.0009
NONACHLOROBIPHENYLS	0/41	0	0.0039	U	0.12	U								0.0141	0.0121
OCTACHLOROBIPHENYLS	8/41	20	0.00063	U	0.019	U	0.0061	J	0.072	J	SD-217	SD-217-01	0.0316	0.0079	0.0153
PENTACHLOROBIPHENYLS	24/41	59	0.00041	U	0.02	U	0.0047	J	0.54		SD-212	SD-212-01	0.1778	0.1047	0.1421
TETRACHLOROBIPHENYLS	23/41	56	0.00044	U	0.013	U	0.0023	J	0.65		SD-212	SD-212-01	0.1847	0.1040	0.1664
TRICHLOROBIPHENYLS	13/41	32	0.0002	U	0.0061	U	0.0028	J	0.034		SD-217	SD-217-01	0.0139	0.0048	0.0084
TOTAL PCB HOMOLOGS	25/41	61	--		--		0.0023		2.406		SD-214	SD-214-01	0.7858	0.4792	0.7157

Associated Locations:

- SD-211                   SD-217
- SD-212                   SD-229
- SD-213                   SD-230
- SD-214                   SD-231
- SD-215                   SD-232
- SD-216                   SD-233

MG/KG - milligrams per kilogram (i.e., parts per million)

PCB - polychlorinated biphenyl

U - not detected at the concentration shown left of the letter.

J - estimated concentration

SD - sediment matrix

SS - 0-0.5 foot below mudline sample depth interval

Table C-2

**Chemical Results for Sediment Samples-2014**  
**Dark Head Cove-Outfall 008**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
 Page 1 of 7

SAMPLE ID	SD-211-01	SD-211-02	SD-211-SS	SD-212-01	SD-212-02	SD-212-03
SAMPLE DATE	20140612	20140612	20140612	20140612	20140612	20140612
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	1.5	2.5	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.001 U	0.0011 U	0.001 U	0.013 U	0.012 U	0.0013 U
DICHLOROBIPHENYLS	0.00044 U	0.00045 U	0.00044 U	0.0053 U	0.0051 U	0.00053 U
HEPTACHLOROBIPHENYLS	0.00062 U	0.00064 U	0.00063 U	0.31	0.0072 U	0.00076 U
HEXACHLOROBIPHENYL	0.00041 U	0.00042 U	0.00042 U	0.59	0.051 U	0.0005 U
MONOCHLOROBIPHENYLS	0.00024 U	0.00024 U	0.00024 U	0.0029 U	0.0027 U	0.00029 U
NONACHLOROBIPHENYLS	0.0041 U	0.0042 U	0.0042 U	0.05 U	0.048 U	0.005 U
OCTACHLOROBIPHENYLS	0.00066 U	0.00068 U	0.00067 U	0.008 U	0.0076 U	0.0008 U
PENTACHLOROBIPHENYLS	0.00042 U	0.00044 U	0.00043 U	0.54	0.11	0.00051 U
TETRACHLOROBIPHENYLS	0.00046 U	0.00047 U	0.00047 U	0.65	0.026 J	0.00056 U
TRICHLOROBIPHENYLS	0.00021 U	0.00022 U	0.00021 U	0.025 J	0.0025 U	0.00026 U
TOTAL PCB HOMOLOGS	0 U	0 U	0 U	2.115	0.136	0 U

Table C-2

**Chemical Results for Sediment Samples-2014**  
**Dark Head Cove-Outfall 008**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
 Page 2 of 7

SAMPLE ID	SD-212-SS	SD-213-01	SD-213-02	SD-213-02-D	SD-213-03	SD-213-SS
SAMPLE DATE	20140612	20140612	20140612	20140612	20140612	20140612
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.016 UJ	0.008 U	0.0077 U	0.0025 U	0.0012 U	0.016 UJ
DICHLOROBIPHENYLS	0.007 UJ	0.0034 U	0.0032 U	0.0011 U	0.00052 U	0.0069 UJ
HEPTACHLOROBIPHENYLS	0.34 J	0.076 J	0.0046 U	0.048	0.00074 U	0.23 J
HEXACHLOROBIPHENYL	0.22 J	0.17	0.003 U	0.099	0.00049 U	0.35 J
MONOCHLOROBIPHENYLS	0.0038 UJ	0.0018 U	0.0018 U	0.00058 U	0.00028 U	0.0037 UJ
NONACHLOROBIPHENYLS	0.066 UJ	0.032 U	0.03 U	0.01 U	0.0049 U	0.065 UJ
OCTACHLOROBIPHENYLS	0.011 UJ	0.0051 U	0.0049 U	0.0016 U	0.00078 U	0.01 UJ
PENTACHLOROBIPHENYLS	0.16 J	0.13	0.028 J	0.087 J	0.0005 U	0.21 J
TETRACHLOROBIPHENYLS	0.29 J	0.11	0.0034 U	0.037	0.0023 J	0.31 J
TRICHLOROBIPHENYLS	0.0061 J	0.0016 U	0.0016 U	0.00051 U	0.00025 U	0.011 J
TOTAL PCB HOMOLOGS	1.0161	0.486	0.028	0.271	0.0023	1.111

Table C-2

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfall 008  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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SAMPLE ID	SD-214-01	SD-214-02	SD-214-03	SD-214-SS	SD-215-SS	SD-216-01
SAMPLE DATE	20140612	20140612	20140612	20140612	20140612	20140612
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	2.5	0	0	0.5
BOTTOM DEPTH (FEET)	1.5	2.5	4.33	0.5	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.011 U	0.012 U	0.0013 U	0.017 UJ	0.001 U	0.0011 U
DICHLOROBIPHENYLS	0.0048 U	0.0051 U	0.00054 U	0.0071 UJ	0.00043 U	0.00045 U
HEPTACHLOROBIPHENYLS	0.6	0.054 U	0.00078 U	0.73 J	0.00061 U	0.00065 U
HEXACHLOROBIPHENYL	0.81	0.14	0.00051 U	0.66 J	0.00089 U	0.00043 U
MONOCHLOROBIPHENYLS	0.0026 U	0.0028 U	0.0003 U	0.0039 UJ	0.00023 U	0.00025 U
NONACHLOROBIPHENYLS	0.045 U	0.048 U	0.0051 U	0.067 UJ	0.004 U	0.0043 U
OCTACHLOROBIPHENYLS	0.049 J	0.0077 U	0.00082 U	0.031 J	0.00065 U	0.00069 U
PENTACHLOROBIPHENYLS	0.45	0.13	0.00053 U	0.32 J	0.00042 U	0.00044 U
TETRACHLOROBIPHENYLS	0.48	0.071 J	0.00057 U	0.38 J	0.00045 U	0.00048 U
TRICHLOROBIPHENYLS	0.017 J	0.0025 U	0.00026 U	0.0067 J	0.00021 U	0.00022 U
TOTAL PCB HOMOLOGS	2.406	0.341	0 U	2.1277	0 U	0 U

Table C-2

**Chemical Results for Sediment Samples-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 4 of 7**

SAMPLE ID	SD-216-02	SD-216-SS	SD-217-01	SD-217-02	SD-217-03	SD-217-SS
SAMPLE DATE	20140612	20140612	20140612	20140612	20140612	20140612
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	2.5	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.001 U	0.001 U	0.0067 U	0.0078 U	0.001 U	0.0087 U
DICHLOROBIPHENYLS	0.00042 U	0.00043 U	0.0028 U	0.0033 U	0.00043 U	0.0037 U
HEPTACHLOROBIPHENYLS	0.0006 U	0.00062 U	0.64	0.015 U	0.00061 U	0.59
HEXACHLOROBIPHENYL	0.0004 U	0.00041 U	0.59	0.048 U	0.00041 U	0.46
MONOCHLOROBIPHENYLS	0.00023 U	0.00024 U	0.0015 U	0.0018 U	0.00023 U	0.002 U
NONACHLOROBIPHENYLS	0.004 U	0.0041 U	0.027 U	0.031 U	0.0041 U	0.035 U
OCTACHLOROBIPHENYLS	0.00064 U	0.00066 U	0.072 J	0.005 U	0.00065 U	0.046 J
PENTACHLOROBIPHENYLS	0.00041 U	0.00042 U	0.37	0.089	0.00042 U	0.16
TETRACHLOROBIPHENYLS	0.00045 U	0.00046 U	0.36	0.0035 U	0.00045 U	0.19
TRICHLOROBIPHENYLS	0.00021 U	0.00021 U	0.034	0.0016 U	0.00021 U	0.003 J
TOTAL PCB HOMOLOGS	0 U	0 U	2.066	0.089	0 U	1.449

Table C-2

**Chemical Results for Sediment Samples-2014**  
**Dark Head Cove-Outfall 008**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
**Page 5 of 7**

SAMPLE ID	SD-229-01	SD-229-SS	SD-230-01	SD-230-02	SD-230-03	SD-230-SS
SAMPLE DATE	20140616	20140616	20140616	20140616	20140616	20140616
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	1.5	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.00099 U	0.0012 U	0.004 UJ	0.03 UJ	0.0064 U	0.0056 U
DICHLOROBIPHENYLS	0.00042 U	0.00049 U	0.0017 U	0.013 U	0.0027 U	0.0024 U
HEPTACHLOROBIPHENYLS	0.00059 U	0.0007 U	0.21 J	0.018 U	0.047 J	0.32
HEXACHLOROBIPHENYL	0.00039 U	0.00046 U	0.34	0.1 U	0.096	0.51
MONOCHLOROBIPHENYLS	0.00023 U	0.00026 U	0.00091 U	0.0069 U	0.0015 U	0.0013 U
NONACHLOROBIPHENYLS	0.0039 U	0.0046 U	0.016 UJ	0.12 U	0.025 U	0.022 U
OCTACHLOROBIPHENYLS	0.00063 U	0.00074 U	0.0061 J	0.019 U	0.0041 U	0.012 J
PENTACHLOROBIPHENYLS	0.0012 U	0.00047 U	0.27	0.018 U	0.063	0.2
TETRACHLOROBIPHENYLS	0.00044 U	0.00052 U	0.013 J	0.013 U	0.0028 U	0.11
TRICHLOROBIPHENYLS	0.0002 U	0.00024 U	0.00081 U	0.0061 U	0.0013 U	0.0028 J
TOTAL PCB HOMOLOGS	0 U	0 U	0.8391	0 U	0.206	1.1548



Table C-2

**Chemical Results for Sediment Samples-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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SAMPLE ID	SD-231-01	SD-231-02	SD-231-03	SD-231-SS	SD-232-01	SD-232-02
SAMPLE DATE	20140616	20140616	20140616	20140616	20140616	20140616
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	2.5	0	0.5	1.5
BOTTOM DEPTH (FEET)	1.5	2.5	4.33	0.5	1.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.0083 UJ	0.0071 UJ	0.007 U	0.0079 UJ	0.014 UJ	0.0063 UJ
DICHLOROBIPHENYLS	0.0035 UJ	0.003 U	0.003 U	0.0033 UJ	0.0059 UJ	0.0026 UJ
HEPTACHLOROBIPHENYLS	0.018 J	0.13 J	0.0042 U	0.0048 UJ	0.34 J	0.0038 UJ
HEXACHLOROBIPHENYL	0.1 J	0.19	0.03 U	0.021 J	0.41 J	0.0025 UJ
MONOCHLOROBIPHENYLS	0.0019 UJ	0.0016 U	0.0016 U	0.0018 UJ	0.0032 UJ	0.0047 J
NONACHLOROBIPHENYLS	0.033 UJ	0.028 UJ	0.028 U	0.032 UJ	0.056 UJ	0.025 UJ
OCTACHLOROBIPHENYLS	0.0053 UJ	0.012 J	0.0045 U	0.0051 UJ	0.025 J	0.004 UJ
PENTACHLOROBIPHENYLS	0.077 J	0.12	0.02 U	0.0047 J	0.44 J	0.024 J
TETRACHLOROBIPHENYLS	0.17 J	0.12	0.0031 U	0.041 J	0.54 J	0.0068 J
TRICHLOROBIPHENYLS	0.0065 J	0.017 J	0.0014 U	0.0016 UJ	0.016 J	0.0013 UJ
TOTAL PCB HOMOLOGS	0.3715	0.589	0 U	0.0667	1.771	0.0355

Table C-2

**Chemical Results for Sediment Samples-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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SAMPLE ID	SD-232-03	SD-232-SS	SD-233-01	SD-233-02	SD-233-03	SD-233-SS
SAMPLE DATE	20140616	20140616	20140616	20140616	20140616	20140616
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	2.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	4.33	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.0038 UJ	0.011 UJ	0.0081 UJ	0.0077 U	0.0045 UJ	0.01 UJ
DICHLOROBIPHENYLS	0.0016 U	0.0048 UJ	0.0034 UJ	0.0032 U	0.0019 U	0.0044 UJ
HEPTACHLOROBIPHENYLS	0.0023 UJ	0.016 J	0.034 J	0.0096 J	0.0027 UJ	0.017 J
HEXACHLOROBIPHENYL	0.0015 U	0.064 J	0.12 J	0.053 J	0.0018 U	0.067 J
MONOCHLOROBIPHENYLS	0.00087 U	0.0026 UJ	0.0019 UJ	0.0018 U	0.001 U	0.0024 UJ
NONACHLOROBIPHENYLS	0.015 UJ	0.045 UJ	0.032 UJ	0.031 U	0.018 UJ	0.041 UJ
OCTACHLOROBIPHENYLS	0.0024 UJ	0.0073 UJ	0.0052 UJ	0.0049 U	0.0029 UJ	0.0067 UJ
PENTACHLOROBIPHENYLS	0.0015 U	0.046 J	0.17 J	0.051 J	0.0018 U	0.076 J
TETRACHLOROBIPHENYLS	0.0017 U	0.13 J	0.11 J	0.008 J	0.002 U	0.11 J
TRICHLOROBIPHENYLS	0.00077 U	0.0023 UJ	0.028 J	0.0016 U	0.00091 U	0.008 J
TOTAL PCB HOMOLOGS	0 U	0.256	0.462	0.1216	0 U	0.278

U - analyte not detected at the concentration left of the letter  
 J - estimated concentration  
 UJ - analyte not detected. Detection limit may be imprecise.  
 MG/KG - milligrams per kilogram  
 PCB - polychlorinated biphenyl  
 SD - sediment matrix  
 SS - 0-0.5 foot below mudline sample depth interval

Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014**  
**Dark Head Cove-Outfall 008**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
**Page 1 of 8**

LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-211			SD-212		
					SD-211-01 20140612 0.5 1.5	SD-211-02 20140612 1.5 2.5	SD-211-SS 20140612 0 0.5	SD-212-01 20140612 0.5 1.5	SD-212-02 20140612 1.5 2.5	SD-212-03 20140612 2.5 4.33
<b>PCB HOMOLOGS (MG/KG)</b>										
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.31	--	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	--	0.59	--	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.54	0.11	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.65	0.026 J	--
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.025 J	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	--	--	2.115	0.136	--

Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 2 of 8**

LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-213						
					SD-212-SS 20140612	SD-213-01 20140612	SD-213-02 20140612	SD-213-02-AVG 20140612	SD-213-02-D 20140612	SD-213-03 20140612	
					0	0.5	1.5	1.5	1.5	2.5	
PCB HOMOLOGS (MG/KG)											
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.34 J	0.076 J	--	0.02515	0.048	--	
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.22 J	0.17	--	0.05025	0.099	--	
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--	
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--	
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.16 J	0.13	0.028 J	0.0575	0.087 J	--	
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.29 J	0.11	--	0.01935	0.037	0.0023 J	
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0061 J	--	--	--	--	--	
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.0161	0.486	0.028	0.1495	0.271	0.0023	

Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014**  
**Dark Head Cove-Outfall 008**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>3)</sup> (mg/kg)	SD-214					SD-215	
					SD-213-SS 20140612	SD-214-01 20140612	SD-214-02 20140612	SD-214-03 20140612	SD-214-SS 20140612	SD-215-SS 20140612	
					0	0.5	1.5	2.5	0	0	
					0.5	1.5	2.5	4.33	0.5	0.5	
<b>PCB HOMOLOGS (MG/KG)</b>											
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.23 J	0.6	--	--	0.73 J	--	
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.35 J	0.81	0.14	--	0.66 J	--	
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--	
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.049 J	--	--	0.031 J	--	
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.21 J	0.45	0.13	--	0.32 J	--	
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.31 J	0.48	0.071 J	--	0.38 J	--	
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.011 J	0.017 J	--	--	0.0067 J	--	
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.111	2.406	0.341	--	2.1277	--	

Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>3)</sup> (mg/kg)	SD-216			SD-217		
					SD-216-01 20140612 0.5 1.5	SD-216-02 20140612 1.5 2.5	SD-216-SS 20140612 0 0.5	SD-217-01 20140612 0.5 1.5	SD-217-02 20140612 1.5 2.5	SD-217-03 20140612 2.5 4.33
<b>PCB HOMOLOGS (MG/KG)</b>										
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.64	--	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	--	0.59	--	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.072 J	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.37	0.089	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.36	--	--
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.034	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	--	--	2.066	0.089	--

Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>3)</sup> (mg/kg)	SD-229			SD-230		
					SD-217-SS 20140612 0 0.5	SD-229-01 20140616 0.5 1.5	SD-229-SS 20140616 0 0.5	SD-230-01 20140616 0.5 1.5	SD-230-02 20140616 1.5 2.5	SD-230-03 20140616 2.5 4.33
<b>PCB HOMOLOGS (MG/KG)</b>										
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.59	--	--	0.21 J	--	0.047 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.46	--	--	0.34	--	0.096
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.046 J	--	--	0.0061 J	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.16	--	--	0.27	--	0.063
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.19	--	--	0.013 J	--	--
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.003 J	--	--	--	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.449	--	--	0.8391	--	0.206

Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014**  
**Dark Head Cove-Outfall 008**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-231						
					SD-230-SS 20140616	SD-231-01 20140616	SD-231-02 20140616	SD-231-03 20140616	SD-231-SS 20140616	SD-232-01 20140616	
					0	0.5	1.5	2.5	0	0.5	
PCB HOMOLOGS (MG/KG)											
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.32	0.018 J	0.13 J	--	--	0.34 J	
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.51	0.1 J	0.19	--	0.021 J	0.41 J	
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--	
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.012 J	--	0.012 J	--	--	0.025 J	
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.2	0.077 J	0.12	--	0.0047 J	0.44 J	
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.11	0.17 J	0.12	--	0.041 J	0.54 J	
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0028 J	0.0065 J	0.017 J	--	--	0.016 J	
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.1548	0.3715	0.589	--	0.0667	1.771	



Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014**  
**Dark Head Cove-Outfall 008**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-232			SD-233			
					SD-232-02 20140616	SD-232-03 20140616	SD-232-SS 20140616	SD-233-01 20140616	SD-233-02 20140616	SD-233-03 20140616	
					1.5	2.5	0	0.5	1.5	2.5	
PCB HOMOLOGS (MG/KG)											
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.016 J	0.034 J	0.0096 J	--	
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	0.064 J	0.12 J	0.053 J	--	
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0047 J	--	--	--	--	--	
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	--	
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.024 J	--	0.046 J	0.17 J	0.051 J	--	
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0068 J	--	0.13 J	0.11 J	0.008 J	--	
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.028 J	--	--	
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.0355	--	0.256	0.462	0.1216	--	

Table C-3

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfall 008  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-233-SS 20140616 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>					
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.017 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.067 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.076 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.11 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.008 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.278

- 1 Value from Middle River Complex sediment feasibility study (Tetra Tech, 2012)
- 2 See Tetra Tech (2012).
- 3 TSCA - Toxic Substances Control Act, Code of Federal Regulations (CFR), Title 40, Part 761.
- = analyte not detected
- J - estimated concentration
- MG/KG - milligrams per kilogram
- PCB - polychlorinated biphenyl
- SD - sediment matrix
- SS - 0-0.5 foot below mudline sample depth interval

Table C-4

**Statistical Summary of PCB Sediment Sample Results-2014  
Dark Head Cove-Main Channel Area  
Lockheed Martin Middle River Complex, Middle River, Maryland**

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Minimum Qualifier	Maximum Non-Detect	Maximum Qualifier	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Location of Maximum Detect	Sample of Maximum Detect	Average Of Positive Results	Average Of All Results	Standard Deviation
<b>PCB HOMOLOGS (MG/KG)</b>															
DECACHLOROBIPHENYL	0/10	0	0.0069	UJ	0.12	UJ								0.0225	0.0200
DICHLOROBIPHENYLS	0/10	0	0.0029	UJ	0.05	UJ								0.0095	0.0084
HEPTACHLOROBIPHENYLS	6/10	60	0.0041	UJ	0.071	UJ	0.02	J	0.32		SD-276	SD-276-SS	0.143	0.0938	0.0991
HEXACHLOROBIPHENYL	9/10	90	0.0027	UJ	0.0027	UJ	0.053	J	0.54	J	SD-276	SD-276-SS	0.195	0.1755	0.1879
MONOCHLOROBIPHENYLS	0/10	0	0.0016	UJ	0.027	UJ								0.0052	0.0046
NONACHLOROBIPHENYLS	0/10	0	0.027	UJ	0.47	UJ								0.0895	0.0794
OCTACHLOROBIPHENYLS	0/10	0	0.0044	UJ	0.075	UJ								0.0143	0.0127
PENTACHLOROBIPHENYLS	5/10	50	0.0028	UJ	0.048	UJ	0.029	J	0.45	J	SD-276	SD-276-SS	0.1738	0.0940	0.1383
TETRACHLOROBIPHENYLS	10/10	100	0.0031	UJ	0.0031	UJ	0.002975		1	J	SD-254	SD-254-SS	0.2932	0.2932	0.3013
TRICHLOROBIPHENYLS	2/10	20	0.0014	UJ	0.024	UJ	0.02	J	0.027	J	SD-254	SD-254-SS	0.0235	0.0084	0.0089
TOTAL PCB HOMOLOGS	10/10	100	0		0		0.0022		1.88		SD-276	SD-276-SS	0.6434	0.6434	0.6558
<b>PCB AROCLORS (MG/KG)</b>															
AROCLOR-1016	0/10	0	0.044	UJ	0.077	UJ								0.0288	0.0054
AROCLOR-1221	0/10	0	0.061	UJ	0.11	UJ								0.0395	0.0075
AROCLOR-1232	0/10	0	0.021	UJ	0.036	UJ								0.0136	0.0026
AROCLOR-1242	0/10	0	0.02	UJ	0.035	UJ								0.0131	0.0026
AROCLOR-1248	0/10	0	0.033	UJ	0.057	UJ								0.0216	0.0041
AROCLOR-1254	0/10	0	0.04	UJ	0.07	UJ								0.0263	0.0050
AROCLOR-1260	10/10	100					0.84		1.7	J	SD-257	SD-257-SS	1.067	1.0670	0.2160
TOTAL AROCLOR	10/10	100					0.84		1.7		SD-257	SD-257-SS	1.067	1.0670	0.2160

Associated Locations:

SD-252                   SD-257  
SD-253                   SD-258  
SD-254                   SD-259  
SD-255                   SD-275  
SD-256                   SD-276

UJ - not detected at the concentration shown left of the letter. Detection limit not precise.

MG/KG - milligrams per kilogram (i.e., parts per million)

PCB - polychlorinated biphenyl

U - not detected at the concentration shown left of the letter.

J - estimated concentration

SD - sediment matrix

SS - 0-0.5 foot below mudline sample depth interval

Table C-5

**Chemical Results for Sediment Samples-2014**  
**Dark Head Cove-Main Channel Area**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
**Page 1 of 2**

SAMPLE ID	SD-252-SS	SD-253-SS	SD-254-SS	SD-255-SS	SD-255-SS-D	SD-256-SS
SAMPLE DATE	20140619	20140619	20140619	20140619	20140619	20140620
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0	0	0	0	0
BOTTOM DEPTH (FEET)	0.5	0.5	0.5	0.5	0.5	0.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.0077 U	0.069 U	0.083 UJ	0.0069 UJ	0.0069 U	0.011 UJ
DICHLOROBIPHENYLS	0.0033 U	0.029 U	0.035 UJ	0.0029 UJ	0.0029 U	0.0046 UJ
HEPTACHLOROBIPHENYLS	0.097	0.042 U	0.1 J	0.0041 UJ	0.0041 U	0.14 J
HEXACHLOROBIPHENYL	0.11	0.053 J	0.48 J	0.0027 UJ	0.0027 U	0.098 J
MONOCHLOROBIPHENYLS	0.0018 U	0.016 U	0.019 UJ	0.0016 UJ	0.0016 U	0.0025 UJ
NONACHLOROBIPHENYLS	0.031 U	0.28 U	0.33 UJ	0.027 UJ	0.027 U	0.043 UJ
OCTACHLOROBIPHENYLS	0.0049 U	0.044 U	0.053 UJ	0.0044 UJ	0.0044 U	0.007 UJ
PENTACHLOROBIPHENYLS	0.16	0.028 U	0.034 UJ	0.0028 UJ	0.0028 UJ	0.07 J
TETRACHLOROBIPHENYLS	0.23	0.067 J	1 J	0.0044 J	0.0031 U	0.24 J
TRICHLOROBIPHENYLS	0.0016 U	0.014 U	0.027 J	0.0014 UJ	0.0014 U	0.0022 UJ
TOTAL PCB HOMOLOGS	0.597	0.12	1.607	0.0044	0 U	0.548
<b>PCB AROCLORS (MG/KG)</b>						
AROCLOR-1016	0.051 U	0.047 U	0.056 UJ	0.044 U	NA	0.072 UJ
AROCLOR-1221	0.07 U	0.064 U	0.076 UJ	0.061 U	NA	0.098 UJ
AROCLOR-1232	0.024 U	0.022 U	0.026 UJ	0.021 U	NA	0.034 UJ
AROCLOR-1242	0.023 U	0.021 U	0.025 UJ	0.02 U	NA	0.033 UJ
AROCLOR-1248	0.038 U	0.035 U	0.042 UJ	0.033 U	NA	0.054 UJ
AROCLOR-1254	0.046 U	0.043 U	0.051 UJ	0.04 U	NA	0.066 UJ
AROCLOR-1260	0.99	0.89	0.96 J	0.84	NA	0.92 J
TOTAL AROCLOR	0.99	0.89	0.96	0.84	NA	0.92

Table C-5

**Chemical Results for Sediment Samples-2014  
Dark Head Cove-Main Channel Area  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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SAMPLE ID	SD-257-SS	SD-257-SS-D	SD-258-SS	SD-259-SS	SD-275-SS	SD-276-SS
SAMPLE DATE	20140620	20140620	20140620	20140620	20140619	20140619
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0	0	0	0	0
BOTTOM DEPTH (FEET)	0.5	0.5	0.5	0.5	0.5	0.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.011 UJ	0.12 UJ	0.096 UJ	0.096 UJ	0.0075 U	0.008 U
DICHLOROBIPHENYLS	0.0045 UJ	0.05 UJ	0.041 UJ	0.04 UJ	0.0031 U	0.0034 U
HEPTACHLOROBIPHENYLS	0.02 J	0.071 UJ	0.058 UJ	0.058 UJ	0.18	0.32
HEXACHLOROBIPHENYL	0.058 J	0.073 J	0.08 J	0.077 J	0.25	0.54 J
MONOCHLOROBIPHENYLS	0.0024 UJ	0.027 UJ	0.022 UJ	0.022 UJ	0.0017 U	0.0018 U
NONACHLOROBIPHENYLS	0.042 UJ	0.47 UJ	0.38 UJ	0.38 UJ	0.03 U	0.032 U
OCTACHLOROBIPHENYLS	0.0068 UJ	0.075 UJ	0.061 UJ	0.061 UJ	0.0048 U	0.0051 U
PENTACHLOROBIPHENYLS	0.029 J	0.048 UJ	0.039 UJ	0.039 UJ	0.16	0.45 J
TETRACHLOROBIPHENYLS	0.055 J	0.13 J	0.11 J	0.19 J	0.45	0.55 J
TRICHLOROBIPHENYLS	0.0022 UJ	0.024 UJ	0.02 UJ	0.02 UJ	0.0015 U	0.02 J
TOTAL PCB HOMOLOGS	0.162	0.203	0.19	0.267	1.04	1.88
<b>PCB AROCLORS (MG/KG)</b>						
AROCLOR-1016	0.072 UJ	0.077 UJ	0.065 UJ	0.065 UJ	0.049 U	0.053 U
AROCLOR-1221	0.099 UJ	0.11 UJ	0.089 UJ	0.089 UJ	0.067 U	0.072 U
AROCLOR-1232	0.034 UJ	0.036 UJ	0.031 UJ	0.031 UJ	0.023 U	0.025 U
AROCLOR-1242	0.033 UJ	0.035 UJ	0.03 UJ	0.03 UJ	0.022 U	0.024 U
AROCLOR-1248	0.054 UJ	0.057 UJ	0.049 UJ	0.049 UJ	0.037 U	0.039 U
AROCLOR-1254	0.066 UJ	0.07 UJ	0.059 UJ	0.06 UJ	0.045 U	0.048 U
AROCLOR-1260	1.7 J	1.2 J	1.4 J	1.1 J	0.92	1.2
TOTAL AROCLOR	1.7	1.2	1.4	1.1	0.92	1.2

U - analyte not detected at the concentration left of the letter

J - estimated concentration

UJ - analyte not detected. Detection limit may be imprecise.

MG/KG - milligrams per kilogram

PCBs - polychlorinated biphenyls

SD - sediment matrix

SS - 0-0.5 foot below mudline sample depth interval

Table C-6

Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
 Dark Head Cove-Main Channel Area  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-252	SD-253	SD-254	SD-255		
					SD-252-SS 20140619 0 0.5	SD-253-SS 20140619 0 0.5	SD-254-SS 20140619 0 0.5	SD-255-SS 20140619 0 0.5	SD-255-SS-AVG 20140619 0 0.5	
<b>PCB HOMOLOGS (MG/KG)</b>										
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.097	--	0.1 J	--	--	
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.11	0.053 J	0.48 J	--	--	
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.16	--	--	--	--	
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.23	0.067 J	1 J	0.0044 J	0.00298	
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.027 J	--	--	
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.597	0.12	1.607	0.0044	0.0022	
<b>PCB AROCLORS (MG/KG)</b>										
AROCLOR-1260	0.195	0.676	6.76	50	0.99	0.89	0.96 J	0.84	0.84	
TOTAL AROCLOR	0.195	0.676	6.76	50	0.99	0.89	0.96	0.84	0.84	

Table C-6

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Main Channel Area  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-256		SD-257			
					SD-255-SS-D 20140619 0 0.5	SD-256-SS 20140620 0 0.5	SD-257-SS 20140620 0 0.5	SD-257-SS-AVG 20140620 0 0.5	SD-257-SS-D 20140620 0 0.5	
<b>PCB HOMOLOGS (MG/KG)</b>										
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.14 J	0.02 J	0.02 J	--	
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	0.098 J	0.058 J	0.0655	0.073 J	
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.07 J	0.029 J	0.029 J	--	
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.24 J	0.055 J	0.0925	0.13 J	
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--	
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	0.548	0.162	0.1825	0.203	
<b>PCB AROCLORS (MG/KG)</b>										
AROCLOR-1260	0.195	0.676	6.76	50	NA	0.92 J	1.7 J	1.45	1.2 J	
TOTAL AROCLOR	0.195	0.676	6.76	50	NA	0.92	1.7	1.45	1.2	

**Table C-6**

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Main Channel Area  
Lockheed Martin Middle River Complex, Middle River, Maryland  
Page 3 of 3**

LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-258	SD-259	SD-275	SD-276
					SD-258-SS 20140620 0 0.5	SD-259-SS 20140620 0 0.5	SD-275-SS 20140619 0 0.5	SD-276-SS 20140619 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>								
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.18	0.32
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.08 J	0.077 J	0.25	0.54 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.16	0.45 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.11 J	0.19 J	0.45	0.55 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.02 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.19	0.267	1.04	1.88
<b>PCB AROCLORS (MG/KG)</b>								
AROCLOR-1260	0.195	0.676	6.76	50	1.4 J	1.1 J	0.92	1.2
TOTAL AROCLOR	0.195	0.676	6.76	50	1.4	1.1	0.92	1.2

- 1 Value from Middle River Complex sediment feasibility study (Tetra Tech, 2012)
- 2 See Tetra Tech (2012).
- 3 TSCA - Toxic Substances Control Act, Code of Federal Regulations (CFR), Title 40, Part 761.
- = analyte not detected
- J - estimated concentration
- MG/KG - milligrams per kilogram
- PCBs - polychlorinated biphenyls
- SD - sediment matrix
- SS - 0-0.5 foot below mudline sample depth interval



Table C-7

**Statistical Summary of PCB Sediment Sample Results-2014  
Dark Head Cove-Outfalls 005 East and 005 West  
Lockheed Martin Middle River Complex, Middle River, Maryland**

Parameter	Frequency of Detection	Percent	Minimum Non-Detect	Minimum Qualifier	Maximum Non-Detect	Maximum Qualifier	Minimum Result	Minimum Qualifier	Maximum Result	Maximum Qualifier	Location of Maximum Detect	Sample of Maximum Detect	Average Of Positive Results	Average Of All Results	Standard Deviation
<b>PCB HOMOLOGS (MG/KG)</b>															
DECACHLOROBIPHENYL	0/171	0	0.001	U	0.38	U								0.0142	0.0252
DICHLOROBIPHENYLS	18/171	11	0.00042	U	0.16	U	0.0025	J	0.15	J	SD-246	SD-246-01	0.025	0.0079	0.0160
HEPTACHLOROBIPHENYLS	111/175	63	0.0006	U	0.068	UJ	0.0018	J	53		SD-235	SD-235-SS	3.480	2.209	6.862
HEXACHLOROBIPHENYL	132/175	75	0.0004	U	0.075	U	0.00088	J	78		SD-235	SD-235-SS	3.528	2.662	8.985
MONOCHLOROBIPHENYLS	3/171	2	0.00023	U	0.086	U	0.0041	J	0.016	J	SD-274	SD-274-03	0.010	0.0034	0.0058
NONACHLOROBIPHENYLS	5/171	3	0.004	U	1.5	U	0.048	J	0.4	J	SD-202	SD-202-SS	0.236	0.0607	0.1064
OCTACHLOROBIPHENYLS	70/172	41	0.00064	U	0.072	UJ	0.0038	J	9.1		SD-235	SD-235-SS	0.815	0.3349	1.1360
PENTACHLOROBIPHENYLS	141/175	81	0.00041	U	0.046	UJ	0.00065	J	39		SD-207	SD-207-SS	2.74	2.21	5.52
TETRACHLOROBIPHENYLS	157/175	90	0.00045	U	0.05	UJ	0.00054	J	150		SD-207	SD-207-SS	9.77	8.77	21.72
TRICHLOROBIPHENYLS	119/173	69	0.0002	U	0.023	UJ	0.00049	J	8.9		SD-207	SD-207-SS	0.838	0.5767	1.4248
TOTAL PCB HOMOLOGS	159/175	91	0		0		0.00054		278.2		SD-207	SD-207-SS	18.43	16.75	42.24

Associated Locations:

SD-195	SD-227	SD-243	SD-263
SD-197	SD-228	SD-244	SD-264
SD-199	SD-234	SD-245	SD-265
SD-200	SD-235	SD-246	SD-266
SD-202	SD-236	SD-247	SD-267
SD-204	SD-237	SD-248	SD-268
SD-207	SD-238	SD-249	SD-269
SD-209	SD-239	SD-250	SD-270
SD-223	SD-240	SD-251	SD-271
SD-224	SD-241	SD-260	SD-272
SD-225	SD-242	SD-261	SD-273
SD-226		SD-262	SD-274

UJ - not detected at the concentration shown left of the letter. Detection limit not precise.

U - not detected at the concentration shown left of the letter.

J - estimated concentration

MG/KG - milligrams per kilogram

PCB - polychlorinated biphenyl

SD - sediment matrix

SS - 0-0.5 foot below mudline sample depth interval

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-195	SD-197					
	SD-195-SS	SD-197-01	SD-197-02	SD-197-03	SD-197-SS	SD-199-01	SD-199-02
SAMPLE ID	20140610	20140611	20140611	20140611	20140611	20140611	20140611
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	2.5	0	0.5	1.5
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	4.33	0.5	1.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.001 U	0.017 UJ	0.0014 U	0.0018 U	0.023 UJ	0.026 U	0.0017 U
DICHLOROBIPHENYLS	0.00042 U	0.0073 UJ	0.0006 U	0.00076 U	0.0096 UJ	0.018 J	0.00073 U
HEPTACHLOROBIPHENYLS	0.00061 U	0.89 J	0.0025 J	0.0011 U	0.17 J	3.9	0.001 U
HEXACHLOROBIPHENYL	0.0004 U	1.5 J	0.019	0.00071 U	0.31 J	5.1	0.0057 J
MONOCHLOROBIPHENYLS	0.00023 U	0.004 UJ	0.00032 U	0.00041 U	0.0052 UJ	0.0061 U	0.0004 U
NONACHLOROBIPHENYLS	0.004 U	0.069 UJ	0.0056 U	0.0071 U	0.09 UJ	0.11 U	0.0069 U
OCTACHLOROBIPHENYLS	0.00064 U	0.052 J	0.0009 U	0.0011 U	0.014 UJ	0.69	0.0011 U
PENTACHLOROBIPHENYLS	0.00041 U	1.3 J	0.031	0.0081 J	0.077 J	4.6	0.017 J
TETRACHLOROBIPHENYLS	0.00045 U	2.7 J	0.06	0.021	0.3 J	20	0.15 J
TRICHLOROBIPHENYLS	0.00021 U	0.073 J	0.0073	0.00037 U	0.0046 UJ	1.2	0.012 J
TOTAL PCB HOMOLOGS	0 U	6.515	0.1198	0.0291	0.857	35.508	0.1847

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-199				SD-200		
	SD-199-02-AVG	SD-199-02-D	SD-199-03	SD-199-SS	SD-200-01	SD-200-02	SD-200-03
SAMPLE ID	20140611	20140611	20140611	20140611	20140610	20140610	20140610
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	1.5	2.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	2.5	2.5	4.33	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.00485 U	0.008 U	0.0012 U	0.0048 UJ	0.029 UJ	0.0098 U	0.0012 U
DICHLOROBIPHENYLS	0.002065 U	0.0034 U	0.00052 U	0.002 UJ	0.012 UJ	0.0042 U	0.0005 U
HEPTACHLOROBIPHENYLS	0.0029 U	0.0048 U	0.00074 U	0.19 J	4.2 J	0.0059 U	0.0018 J
HEXACHLOROBIPHENYL	0.00365	0.0032 U	0.00049 U	0.32 J	4.3 J	0.022 J	0.0071 J
MONOCHLOROBIPHENYLS	0.0011 U	0.0018 U	0.00028 U	0.0011 UJ	0.0066 UJ	0.0023 U	0.00027 U
NONACHLOROBIPHENYLS	0.01945 U	0.032 U	0.0049 U	0.019 UJ	0.11 UJ	0.039 U	0.0047 U
OCTACHLOROBIPHENYLS	0.0031 U	0.0051 U	0.00078 U	0.024 J	0.52 J	0.0063 U	0.00075 U
PENTACHLOROBIPHENYLS	0.0131	0.0092 J	0.0005 U	0.11 J	4.5 J	0.016 J	0.0015 J
TETRACHLOROBIPHENYLS	0.17	0.19 J	0.00055 U	0.35 J	16 J	0.19	0.0052 J
TRICHLOROBIPHENYLS	0.012	0.012 J	0.00025 U	0.0069 J	0.69 J	0.012 J	0.00024 U
TOTAL PCB HOMOLOGS	0.19795	0.2112	0 U	1.0009	30.21	0.24	0.0156

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-202				SD-204		
	SD-200-SS	SD-202-01	SD-202-02	SD-202-SS	SD-204-01	SD-204-02	SD-204-SS
SAMPLE ID	20140610	20140610	20140610	20140610	20140611	20140611	20140611
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	0	0.5	1.5	0
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	0.5	1.5	2.5	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.041 UJ	0.0059 U	0.0011 U	0.079 U	0.0071 U	0.001 U	0.0079 U
DICHLOROBIPHENYLS	0.017 UJ	0.0025 U	0.00046 U	0.033 U	0.003 U	0.00043 U	0.0061 J
HEPTACHLOROBIPHENYLS	1.1 J	0.059 J	0.011 J	44	0.0043 U	0.1 J	6.5
HEXACHLOROBIPHENYL	1.5 J	0.095	0.018	59	0.0028 U	0.075 U	7.1
MONOCHLOROBIPHENYLS	0.0094 UJ	0.0013 U	0.00025 U	0.018 U	0.0016 U	0.00024 U	0.0018 U
NONACHLOROBIPHENYLS	0.16 UJ	0.023 UJ	0.0044 UJ	0.4 J	0.028 U	0.0041 U	0.073 J
OCTACHLOROBIPHENYLS	0.067 J	0.0037 U	0.0007 U	5.2	0.0045 U	0.0089 J	1.2
PENTACHLOROBIPHENYLS	0.91 J	0.019 J	0.0039 J	18	0.0065 J	0.0091 J	2.8
TETRACHLOROBIPHENYLS	1.9 J	0.092	0.025	10	0.079	0.022 J	6.3
TRICHLOROBIPHENYLS	0.047 J	0.0029 J	0.00074 J	0.53	0.0015 U	0.00091 J	0.36
TOTAL PCB HOMOLOGS	5.524	0.2679	0.05864	137.13	0.0855	0.14091	24.3391

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-207				SD-209		
	SD-207-01	SD-207-02	SD-207-03	SD-207-SS	SD-209-01	SD-209-02	SD-209-03
SAMPLE ID	20140611	20140611	20140611	20140611	20140611	20140611	20140611
SAMPLE DATE	20140611	20140611	20140611	20140611	20140611	20140611	20140611
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	2.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	1.5	2.5	4.33	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.12 U	0.01 U	0.0071 U	0.26 U	0.0011 U	0.0011 U	0.001 UJ
DICHLOROBIPHENYLS	0.051 U	0.0044 U	0.003 U	0.11 U	0.00045 U	0.00046 U	0.00043 U
HEPTACHLOROBIPHENYLS	6.8	0.29	0.013 J	30	0.00065 U	0.023	0.00061 UJ
HEXACHLOROBIPHENYL	7.4	0.51	0.039 J	43	0.00043 U	0.037	0.0023 J
MONOCHLOROBIPHENYLS	0.028 U	0.0024 U	0.0016 U	0.06 U	0.00025 U	0.00025 U	0.00023 U
NONACHLOROBIPHENYLS	0.48 U	0.042 U	0.028 U	1 U	0.0043 U	0.0043 U	0.004 U
OCTACHLOROBIPHENYLS	1.8	0.052 J	0.0045 U	7.3	0.00069 U	0.0038 J	0.00065 UJ
PENTACHLOROBIPHENYLS	17	0.88	0.036 J	39	0.00044 U	0.012	0.0048 J
TETRACHLOROBIPHENYLS	95	5.3	0.35	150	0.00099 J	0.025	0.00059 J
TRICHLOROBIPHENYLS	6.4	0.34	0.005 J	8.9	0.00022 U	0.00049 J	0.00021 U
TOTAL PCB HOMOLOGS	134.4	7.372	0.443	278.2	0.00099	0.10129	0.00769

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
 Page 5 of 28

LOCATION	SD-223			SD-224			
	SD-223-01	SD-223-02	SD-223-SS	SD-224-01	SD-224-02	SD-224-03	SD-224-SS
SAMPLE ID	20140613	20140613	20140613	20140613	20140613	20140613	20140613
SAMPLE DATE	20140613	20140613	20140613	20140613	20140613	20140613	20140613
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	1.5	2.5	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.016 UJ	0.0011 U	0.012 UJ	0.017 UJ	0.012 U	0.0065 U	0.019 UJ
DICHLOROBIPHENYLS	0.0069 UJ	0.00047 U	0.0049 UJ	0.007 UJ	0.0049 U	0.0027 U	0.008 UJ
HEPTACHLOROBIPHENYLS	0.25 J	0.006 J	0.34 J	0.31 J	0.0069 U	0.0039 U	0.49 J
HEXACHLOROBIPHENYL	0.65 J	0.0045 J	0.34 J	0.67 J	0.045 J	0.0026 U	0.47 J
MONOCHLOROBIPHENYLS	0.0037 UJ	0.00025 U	0.0026 UJ	0.0038 UJ	0.0026 U	0.0015 U	0.0044 UJ
NONACHLOROBIPHENYLS	0.065 UJ	0.0044 U	0.046 UJ	0.066 UJ	0.046 U	0.026 U	0.076 UJ
OCTACHLOROBIPHENYLS	0.028 J	0.0007 U	0.021 J	0.039 J	0.0074 U	0.0041 U	0.061 J
PENTACHLOROBIPHENYLS	1.3 J	0.013	0.19 J	0.75 J	0.21	0.0027 U	0.43 J
TETRACHLOROBIPHENYLS	6.1 J	0.1	0.32 J	10 J	0.56	0.0029 U	0.71 J
TRICHLOROBIPHENYLS	0.31 J	0.007	0.0024 UJ	0.62 J	0.2	0.0013 U	0.02 J
TOTAL PCB HOMOLOGS	8.638	0.1305	1.211	12.389	1.015	0 U	2.181

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-225				SD-226		
	SD-225-01	SD-225-02	SD-225-03	SD-225-SS	SD-226-01	SD-226-02	SD-226-03
SAMPLE ID	20140613	20140613	20140613	20140613	20140613	20140613	20140613
SAMPLE DATE	20140613	20140613	20140613	20140613	20140613	20140613	20140613
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	2.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	1.5	2.5	4.33	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.047 UJ	0.0061 U	0.0073 U	0.012 UJ	0.017 UJ	0.01 U	0.0071 U
DICHLOROBIPHENYLS	0.02 UJ	0.0026 U	0.0031 U	0.0049 UJ	0.0071 UJ	0.0044 U	0.003 U
HEPTACHLOROBIPHENYLS	0.38 J	0.026 J	0.0044 U	0.89 J	0.47 J	1.7	0.0043 U
HEXACHLOROBIPHENYL	1 J	0.14	0.0029 U	1.2 J	0.42 J	2.1	0.0028 U
MONOCHLOROBIPHENYLS	0.011 UJ	0.0014 U	0.0017 U	0.0027 UJ	0.0038 UJ	0.0024 U	0.0016 U
NONACHLOROBIPHENYLS	0.19 UJ	0.024 U	0.029 U	0.046 UJ	0.067 UJ	0.041 U	0.028 U
OCTACHLOROBIPHENYLS	0.03 UJ	0.0039 U	0.0046 U	0.19 J	0.089 J	0.33	0.0046 U
PENTACHLOROBIPHENYLS	3.2 J	0.45	0.003 U	1.9 J	0.73 J	2	0.0029 U
TETRACHLOROBIPHENYLS	18 J	0.26	0.0032 U	6.5 J	1.8 J	5	0.0053 J
TRICHLOROBIPHENYLS	1.1 J	0.0012 U	0.0015 U	0.22 J	0.077 J	0.42	0.0015 U
TOTAL PCB HOMOLOGS	23.68	0.876	0 U	10.9	3.586	11.55	0.0053

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-227				SD-228		
	SD-226-SS	SD-227-01	SD-227-02	SD-227-SS	SD-228-01	SD-228-02	SD-228-03
SAMPLE ID	20140613	20140613	20140613	20140613	20140613	20140613	20140613
SAMPLE DATE	20140613	20140613	20140613	20140613	20140613	20140613	20140613
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.0043 UR	0.01 UJ	0.0045 UJ	0.013 UJ	0.014 UJ	0.011 UJ	0.0087 U
DICHLOROBIPHENYLS	0.0018 UR	0.0042 UJ	0.0019 U	0.0053 UJ	0.0083 J	0.0048 UJ	0.0037 U
HEPTACHLOROBIPHENYLS	0.021 J	0.046 J	0.0027 UJ	0.02 J	0.48 J	0.0069 UJ	0.0053 U
HEXACHLOROBIPHENYL	0.036 J	0.22 J	0.0018 U	0.049 J	0.7 J	0.02 J	0.0035 U
MONOCHLOROBIPHENYLS	0.001 UR	0.0023 UJ	0.001 U	0.0029 UJ	0.0032 UJ	0.0026 UJ	0.002 U
NONACHLOROBIPHENYLS	0.017 UR	0.04 UJ	0.018 UJ	0.05 UJ	0.055 UJ	0.045 UJ	0.035 U
OCTACHLOROBIPHENYLS	0.0028 UR	0.0064 UJ	0.0029 UJ	0.0081 UJ	0.0088 UJ	0.0073 UJ	0.0056 U
PENTACHLOROBIPHENYLS	0.02 J	0.34 J	0.0019 U	0.068 J	0.79 J	0.066 J	0.0036 U
TETRACHLOROBIPHENYLS	0.046 J	0.85 J	0.0082 J	0.18 J	3.2 J	0.041 J	0.0039 U
TRICHLOROBIPHENYLS	0.00089 UR	0.037 J	0.0013 J	0.0064 J	0.22 J	0.0023 UJ	0.0018 U
TOTAL PCB HOMOLOGS	0.123	1.493	0.0095	0.3234	5.3983	0.127	0 U



Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-234			SD-235			
	SD-228-SS	SD-234-01	SD-234-SS	SD-235-01	SD-235-02	SD-235-03	SD-235-SS
SAMPLE ID	20140613	20140613	20140613	20140613	20140613	20140613	20140613
SAMPLE DATE	20140613	20140613	20140613	20140613	20140613	20140613	20140613
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	0.5	1.5	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.011 UJ	0.0051 U	0.06 U	0.044 U	0.012 U	0.0014 U	0.33 U
DICHLOROBIPHENYLS	0.0047 UJ	0.0021 U	0.032 J	0.043 J	0.018 J	0.00059 U	0.14 U
HEPTACHLOROBIPHENYLS	0.49 J	0.094	17	4.5	0.14	0.0054 J	53
HEXACHLOROBIPHENYL	0.51 J	0.13	25	4.5 J	0.35	0.015	78
MONOCHLOROBIPHENYLS	0.0025 UJ	0.0012 U	0.014 U	0.01 U	0.0027 U	0.00032 U	0.075 U
NONACHLOROBIPHENYLS	0.044 UJ	0.02 U	0.3 J	0.17 U	0.047 U	0.0056 U	1.3 U
OCTACHLOROBIPHENYLS	0.057 J	0.0088 J	3.2	0.92	0.0076 U	0.00089 U	9.1
PENTACHLOROBIPHENYLS	0.35 J	0.073	9.1	6.6	0.81	0.042	29
TETRACHLOROBIPHENYLS	0.8 J	0.21	37	29 J	4.6	0.047	97
TRICHLOROBIPHENYLS	0.0023 UJ	0.0086 J	2.2	2.1 J	0.44	0.00029 U	5.4
TOTAL PCB HOMOLOGS	2.207	0.5244	93.832	47.663	6.358	0.1094	271.5

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-236			SD-237			
	SD-236-01	SD-236-02	SD-236-SS	SD-237-01	SD-237-02	SD-237-02-AVG	SD-237-02-D
SAMPLE ID	20140613	20140613	20140613	20140613	20140613	20140613	20140613
SAMPLE DATE	20140613	20140613	20140613	20140613	20140613	20140613	20140613
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	0	0.5	1.5	1.5	2.5
BOTTOM DEPTH (FEET)	1.5	2.5	0.5	1.5	2.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.0032 U	0.001 U	0.001 U	0.069 U	0.0081 U	0.0081 U	0.0081 UJ
DICHLOROBIPHENYLS	0.0014 U	0.00042 U	0.00044 U	0.029 U	0.0034 U	0.0034 U	0.0034 U
HEPTACHLOROBIPHENYLS	0.002 U	0.0006 U	0.00063 U	2.7	0.16	0.081225	0.0049 UJ
HEXACHLOROBIPHENYL	0.0052 J	0.0004 U	0.00041 U	4	0.23 J	0.123	0.016 J
MONOCHLOROBIPHENYLS	0.00074 U	0.00023 U	0.00024 U	0.016 U	0.0018 U	0.00185 U	0.0019 U
NONACHLOROBIPHENYLS	0.013 U	0.004 U	0.0041 U	0.28 U	0.032 U	0.032 U	0.032 UJ
OCTACHLOROBIPHENYLS	0.0021 U	0.00064 U	0.00067 U	0.25 J	0.013 J	0.0078	0.0052 UJ
PENTACHLOROBIPHENYLS	0.0088 J	0.00041 U	0.00043 U	4.7	0.68 J	0.3625	0.045 J
TETRACHLOROBIPHENYLS	0.0014 U	0.00054 J	0.00046 U	32	1.3 J	0.765	0.23 J
TRICHLOROBIPHENYLS	0.00067 U	0.0002 U	0.00021 U	2.5	0.16 J	0.1135	0.067 J
TOTAL PCB HOMOLOGS	0.014	0.00054	0 U	46.15	2.543	1.4505	0.358

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-238						
	SD-237-03	SD-237-SS	SD-238-01	SD-238-02	SD-238-03	SD-238-SS	SD-239-01
SAMPLE ID	20140613	20140613	20140617	20140617	20140617	20140617	20140617
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	2.5	0	0.5	1.5	2.5	0	0.5
BOTTOM DEPTH (FEET)	4.33	0.5	1.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.0011 U	0.12 U	0.011 UJ	0.007 UJ	0.004 UJ	0.012 UJ	0.0079 UJ
DICHLOROBIPHENYLS	0.00046 U	0.051 U	0.0044 UJ	0.003 UJ	0.0017 U	0.0051 UJ	0.005 J
HEPTACHLOROBIPHENYLS	0.00066 U	21	0.013 J	0.18 J	0.0024 UJ	0.0073 UJ	0.15 J
HEXACHLOROBIPHENYL	0.00088 J	19	0.04 J	0.25 J	0.0016 U	0.0048 UJ	0.073 J
MONOCHLOROBIPHENYLS	0.00025 U	0.027 U	0.0024 UJ	0.0016 UJ	0.00092 U	0.0028 UJ	0.0018 UJ
NONACHLOROBIPHENYLS	0.0044 U	0.48 U	0.042 UJ	0.028 UJ	0.016 UJ	0.048 UJ	0.032 UJ
OCTACHLOROBIPHENYLS	0.0007 U	4.9	0.0067 UJ	0.041 J	0.0026 UJ	0.0078 UJ	0.016 J
PENTACHLOROBIPHENYLS	0.0027 J	16	0.0064 J	0.28 J	0.0016 U	0.0072 J	0.17 J
TETRACHLOROBIPHENYLS	0.028	40	0.0086 J	0.66 J	0.033	0.043 J	2 J
TRICHLOROBIPHENYLS	0.0021 J	2.4	0.0022 UJ	0.029 J	0.003 J	0.0061 J	0.19 J
TOTAL PCB HOMOLOGS	0.03368	103.3	0.068	1.44	0.036	0.0563	2.604

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-239			SD-240			
	SD-239-02	SD-239-03	SD-239-SS	SD-240-01	SD-240-02	SD-240-03	SD-240-SS
SAMPLE ID	20140617	20140617	20140617	20140617	20140617	20140617	20140617
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.0065 UJ	0.0046 UJ	0.011 UJ	0.14 U	0.0074 U	0.0045 U	0.0095 UJ
DICHLOROBIPHENYLS	0.0027 U	0.0019 U	0.0045 UJ	0.058 U	0.0039 J	0.0019 U	0.004 UJ
HEPTACHLOROBIPHENYLS	0.0039 UJ	0.0028 UJ	0.31 J	8.9	0.29	0.026 J	0.42 J
HEXACHLOROBIPHENYL	0.004 J	0.0018 U	0.27 J	12	0.34	0.061	0.59 J
MONOCHLOROBIPHENYLS	0.0015 U	0.0011 U	0.0024 UJ	0.032 U	0.0017 U	0.001 U	0.0022 UJ
NONACHLOROBIPHENYLS	0.026 UJ	0.018 UJ	0.042 UJ	0.55 U	0.03 U	0.018 U	0.038 UJ
OCTACHLOROBIPHENYLS	0.0041 UJ	0.0029 UJ	0.052 J	1.4 J	0.063 J	0.0029 U	0.11 J
PENTACHLOROBIPHENYLS	0.015 J	0.0019 U	0.4 J	15	0.75	0.11	0.89 J
TETRACHLOROBIPHENYLS	0.0091 J	0.018 J	1.7 J	59	3	0.39	2.7 J
TRICHLOROBIPHENYLS	0.0013 U	0.0013 J	0.14 J	4.3	0.2	0.021	0.13 J
TOTAL PCB HOMOLOGS	0.0281	0.0193	2.872	100.6	4.6469	0.608	4.84

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-241						
	SD-241-01	SD-241-02	SD-241-02-AVG	SD-241-02-D	SD-241-03	SD-241-55	SD-242-01
SAMPLE ID	20140617	20140617	20140617	20140617	20140617	20140617	20140617
SAMPLE DATE	20140617	20140617	20140617	20140617	20140617	20140617	20140617
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	1.5	1.5	2.5	0	0.5
BOTTOM DEPTH (FEET)	1.5	2.5	2.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.077 U	0.0057 U	0.00885 U	0.012 U	0.0052 UJ	0.01 UJ	0.011 UJ
DICHLOROBIPHENYLS	0.033 U	0.0025 J	0.0025 J	0.0049 U	0.0022 U	0.0043 UJ	0.0045 UJ
HEPTACHLOROBIPHENYLS	26	0.37 J	1.935	3.5 J	0.0031 UJ	0.92 J	0.28 J
HEXACHLOROBIPHENYL	25	0.39 J	1.695	3 J	0.0097 J	0.91 J	0.34 J
MONOCHLOROBIPHENYLS	0.018 U	0.0013 U	0.00195 U	0.0026 U	0.0012 U	0.0023 UJ	0.0025 UJ
NONACHLOROBIPHENYLS	0.31 U	0.023 U	0.0345 U	0.046 U	0.021 UJ	0.04 UJ	0.043 UJ
OCTACHLOROBIPHENYLS	1.1	0.066 J	0.054	0.042 J	0.0033 UJ	0.23 J	0.017 J
PENTACHLOROBIPHENYLS	11	0.66 J	1.43	2.2 J	0.033 J	1.1 J	0.24 J
TETRACHLOROBIPHENYLS	56	3.5 J	5.4	7.3 J	0.25	2.8 J	0.29 J
TRICHLOROBIPHENYLS	3	0.27	0.32	0.37	0.019 J	0.12 J	0.021 J
TOTAL PCB HOMOLOGS	122.1	5.2585	10.83525	16.412	0.3117	6.08	1.188

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-242			SD-243			
	SD-242-02	SD-242-03	SD-242-SS	SD-243-01	SD-243-02	SD-243-03	SD-243-SS
SAMPLE ID	20140617	20140617	20140617	20140617	20140617	20140617	20140617
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.084 UJ	0.013 U	0.012 UJ	0.0039 UJ	0.0037 UJ	0.0038 U	0.0044 UJ
DICHLOROBIPHENYLS	0.035 UJ	0.0054 U	0.0049 UJ	0.0016 UJ	0.0015 U	0.0016 U	0.0019 U
HEPTACHLOROBIPHENYLS	1.3 J	1.4	0.052 J	0.0023 UJ	0.0022 UJ	0.0023 U	0.31 J
HEXACHLOROBIPHENYL	1.3 J	1.7	0.091 J	0.0015 UJ	0.0015 U	0.0015 U	0.39
MONOCHLOROBIPHENYLS	0.019 UJ	0.0029 U	0.0027 UJ	0.00089 UJ	0.00084 U	0.00088 U	0.001 U
NONACHLOROBIPHENYLS	0.33 UJ	0.05 U	0.046 UJ	0.015 UJ	0.015 UJ	0.015 U	0.018 UJ
OCTACHLOROBIPHENYLS	0.054 UJ	0.18	0.0075 UJ	0.0025 UJ	0.0023 UJ	0.0024 U	0.013 J
PENTACHLOROBIPHENYLS	5.9 J	1.9	0.047 J	0.0055 J	0.0015 U	0.0016 U	0.2
TETRACHLOROBIPHENYLS	39 J	6.9	0.035 J	0.027 J	0.029	0.0035 J	0.44
TRICHLOROBIPHENYLS	2.8 J	0.35	0.0033 J	0.0015 J	0.0017 J	0.00078 U	0.032
TOTAL PCB HOMOLOGS	50.3	12.43	0.2283	0.034	0.0307	0.0035	1.385

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-244				SD-245		
	SD-244-01	SD-244-02	SD-244-03	SD-244-SS	SD-245-01	SD-245-02	SD-245-03
SAMPLE ID	20140617	20140617	20140617	20140617	20140617	20140617	20140617
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	2.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	1.5	2.5	4.33	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.034 UJ	0.014 UJ	0.0041 U	0.14 U	0.082 UJ	0.017 UJ	0.0091 UJ
DICHLOROBIPHENYLS	0.014 UJ	0.013 J	0.0017 U	0.06 U	0.034 UJ	0.02 J	0.0038 UJ
HEPTACHLOROBIPHENYLS	3.9 J	0.28 J	0.0025 U	15	4.8 J	0.23 J	0.0055 UJ
HEXACHLOROBIPHENYL	4.8 J	0.39 J	0.026 J	16	1.9 J	0.24 J	0.087 J
MONOCHLOROBIPHENYLS	0.0079 UJ	0.0032 UJ	0.00094 U	0.033 U	0.019 UJ	0.0041 J	0.0021 UJ
NONACHLOROBIPHENYLS	0.14 UJ	0.056 UJ	0.016 U	0.57 U	0.32 UJ	0.067 UJ	0.036 UJ
OCTACHLOROBIPHENYLS	0.49 J	0.0091 UJ	0.0026 U	0.27 J	0.052 UJ	0.011 UJ	0.0058 UJ
PENTACHLOROBIPHENYLS	3.7 J	1.2 J	0.036	18	9.8 J	1.6 J	0.21 J
TETRACHLOROBIPHENYLS	15 J	4.5 J	0.071	62	58 J	12 J	0.79 J
TRICHLOROBIPHENYLS	1.1 J	0.56 J	0.0029 J	4.1	3.3 J	0.94 J	0.0019 UJ
TOTAL PCB HOMOLOGS	28.99	6.943	0.1359	115.37	77.8	15.0341	1.087

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-246					
	SD-245-SS	SD-246-01	SD-246-02	SD-246-03	SD-246-SS	SD-247-01
SAMPLE ID	20140617	20140617	20140617	20140617	20140617	20140617
SAMPLE DATE	20140617	20140617	20140617	20140617	20140617	20140617
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	2.5	0	0.5
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.01 UJ	0.14 U	0.0069 UJ	0.0037 U	0.38 U	0.037 UJ
DICHLOROBIPHENYLS	0.0044 UJ	0.15 J	0.011 J	0.0016 U	0.16 U	0.034 J
HEPTACHLOROBIPHENYLS	1.7 J	10	0.11 J	0.0022 U	15	0.62 J
HEXACHLOROBIPHENYL	0.89 J	11	0.25 J	0.0015 U	17	0.91 J
MONOCHLOROBIPHENYLS	0.0024 UJ	0.031 U	0.0016 UJ	0.00085 U	0.086 U	0.0088 J
NONACHLOROBIPHENYLS	0.048 J	0.54 U	0.028 UJ	0.015 U	1.5 U	0.15 UJ
OCTACHLOROBIPHENYLS	0.18 J	1.4 J	0.032 J	0.0024 U	2.7 J	0.065 J
PENTACHLOROBIPHENYLS	1 J	22	0.81 J	0.0032 J	25	3.9 J
TETRACHLOROBIPHENYLS	4.3 J	100	6 J	0.014 J	110	25 J
TRICHLOROBIPHENYLS	0.29 J	7.6	0.45 J	0.0029 J	7.7	2.1 J
TOTAL PCB HOMOLOGS	8.408	152.15	7.663	0.0201	177.4	32.6378



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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-247			SD-248		
	SD-247-02	SD-247-03	SD-247-SS	SD-248-01	SD-248-02	SD-248-03
SAMPLE ID	20140617	20140617	20140617	20140617	20140617	20140617
SAMPLE DATE						
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.0079 UJ	0.014 U	0.08 U	0.0025 UR	0.0019 U	0.0046 UJ
DICHLOROBIPHENYLS	0.0033 UJ	0.006 U	0.035 J	0.0011 UR	0.0008 U	0.002 U
HEPTACHLOROBIPHENYLS	0.052 J	0.0085 U	8.9	0.015 J	0.0011 U	0.0028 UJ
HEXACHLOROBIPHENYL	0.22 J	0.0056 U	11	0.052 J	0.00075 U	0.0018 U
MONOCHLOROBIPHENYLS	0.0018 UJ	0.0032 U	0.018 U	0.00058 UR	0.00043 U	0.0011 U
NONACHLOROBIPHENYLS	0.032 UJ	0.056 U	0.32 U	0.01 UR	0.0075 U	0.018 UJ
OCTACHLOROBIPHENYLS	0.0051 UJ	0.009 U	1.3	0.0016 UR	0.0012 U	0.003 UJ
PENTACHLOROBIPHENYLS	0.71 J	0.0058 U	9.4	0.062 J	0.0016 J	0.0019 U
TETRACHLOROBIPHENYLS	3.2 J	0.094 J	41	0.21 J	0.019	0.0021 U
TRICHLOROBIPHENYLS	0.079 J	0.0029 U	3.3	0.013 J	0.0011 J	0.00095 U
TOTAL PCB HOMOLOGS	4.261	0.094	74.935	0.352	0.0217	0 U

**Table C-8**

**Chemical Results for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 East and 005 West  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-249					
	SD-248-SS	SD-249-01	SD-249-02	SD-249-03	SD-249-SS	SD-250-01
SAMPLE ID	20140617	20140617	20140617	20140617	20140617	20140618
SAMPLE DATE						
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	2.5	0	0.5
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.0032 UJ	0.07 U	0.0011 U	0.0012 U	0.0039 U	0.04 UJ
DICHLOROBIPHENYLS	0.0014 UJ	0.03 U	0.00048 U	0.0005 U	0.0017 U	0.017 UJ
HEPTACHLOROBIPHENYLS	0.048 J	15	0.27	0.23	0.31	0.34 J
HEXACHLOROBIPHENYL	0.18 J	17	0.31	0.33	0.36	0.67 J
MONOCHLOROBIPHENYLS	0.00074 UJ	0.016 U	0.00026 U	0.00027 U	0.0009 U	0.0093 UJ
NONACHLOROBIPHENYLS	0.013 UJ	0.28 UJ	0.0046 U	0.0047 U	0.016 U	0.16 UJ
OCTACHLOROBIPHENYLS	0.0059 J	2.4	0.052	0.042	0.045 J	0.026 UJ
PENTACHLOROBIPHENYLS	0.23 J	14	0.15	0.25	0.14	0.94 J
TETRACHLOROBIPHENYLS	0.42 J	46	0.91	0.25	0.55	2.2 J
TRICHLOROBIPHENYLS	0.01 J	2.7	0.063	0.023	0.029	0.068 J
TOTAL PCB HOMOLOGS	0.8939	97.1	1.755	1.125	1.434	4.218

**Table C-8**

**Chemical Results for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 East and 005 West  
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LOCATION	SD-250			SD-251		
	SD-250-02	SD-250-03	SD-250-SS	SD-251-01	SD-251-02	SD-251-03
SAMPLE ID	20140618	20140618	20140618	20140618	20140618	20140618
SAMPLE DATE						
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.061 U	0.027 UJ	0.048 UJ	0.0058 UJ	0.0051 UJ	0.0044 UJ
DICHLOROBIPHENYLS	0.026 U	0.011 U	0.02 UJ	0.0024 U	0.0021 U	0.0019 U
HEPTACHLOROBIPHENYLS	2.4 J	3.6	0.19 J	0.0035 U	0.0031 U	0.0027 U
HEXACHLOROBIPHENYL	2.5	4	0.34 J	0.0023 U	0.002 U	0.0018 U
MONOCHLOROBIPHENYLS	0.014 U	0.0061 U	0.011 UJ	0.0013 U	0.0012 U	0.001 U
NONACHLOROBIPHENYLS	0.24 U	0.11 UJ	0.19 UJ	0.023 UJ	0.02 UJ	0.018 UJ
OCTACHLOROBIPHENYLS	0.54 J	0.41	0.031 UJ	0.0037 U	0.0032 U	0.0028 U
PENTACHLOROBIPHENYLS	5.1	4	0.14 J	0.0024 U	0.0052 J	0.0018 U
TETRACHLOROBIPHENYLS	37	18	0.41 J	0.06	0.0082 J	0.0026 J
TRICHLOROBIPHENYLS	2.5	1.3	0.0099 UJ	0.0031 J	0.001 U	0.0009 U
TOTAL PCB HOMOLOGS	50.04	31.31	1.08	0.0631	0.0134	0.0026

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-260					
	SD-251-SS	SD-260-01	SD-260-02	SD-260-03	SD-260-SS	SD-261-01
SAMPLE ID	20140618	20140619	20140619	20140619	20140619	20140619
SAMPLE DATE						
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	2.5	0	0.5
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.01 UJ	0.078 U	0.0046 U	0.0062 U	0.085 UJ	0.081 U
DICHLOROBIPHENYLS	0.0044 UJ	0.033 U	0.0019 U	0.0026 U	0.036 UJ	0.034 U
HEPTACHLOROBIPHENYLS	1.7 J	0.047 U	0.0028 U	0.0037 U	0.11 J	0.049 U
HEXACHLOROBIPHENYL	1.1 J	0.18 J	0.0018 U	0.0024 U	0.52 J	0.37 J
MONOCHLOROBIPHENYLS	0.0024 UJ	0.018 U	0.0011 U	0.0014 U	0.019 UJ	0.019 U
NONACHLOROBIPHENYLS	0.041 UJ	0.31 U	0.018 U	0.024 U	0.34 UJ	0.32 U
OCTACHLOROBIPHENYLS	0.14 J	0.05 U	0.0029 U	0.0039 U	0.054 UJ	0.052 U
PENTACHLOROBIPHENYLS	0.58 J	0.17 J	0.0019 U	0.0025 U	0.39 J	0.7
TETRACHLOROBIPHENYLS	0.74 J	0.58 J	0.002 U	0.0027 U	1.3 J	3.1
TRICHLOROBIPHENYLS	0.019 J	0.058 J	0.00094 U	0.0013 U	0.052 J	0.19 J
TOTAL PCB HOMOLOGS	4.279	0.988	0 U	0 U	2.372	4.36

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-261			SD-262			
	SD-261-02	SD-261-03	SD-261-SS	SD-262-01	SD-262-02	SD-262-03	SD-262-SS
SAMPLE ID	20140619	20140619	20140619	20140618	20140618	20140618	20140618
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.064 U	0.0058 UJ	0.11 UJ	0.036 UJ	0.0061 UJ	0.005 UJ	0.011 UJ
DICHLOROBIPHENYLS	0.027 U	0.0025 UJ	0.048 UJ	0.015 U	0.0026 U	0.0021 U	0.0045 UJ
HEPTACHLOROBIPHENYLS	0.039 U	0.0035 UJ	0.068 UJ	0.022 U	0.0037 U	0.003 U	0.098 J
HEXACHLOROBIPHENYL	0.026 U	0.0023 UJ	0.045 UJ	0.14 J	0.0024 U	0.002 U	0.15 J
MONOCHLOROBIPHENYLS	0.015 U	0.0013 UJ	0.026 UJ	0.0083 U	0.0014 U	0.0011 U	0.0025 UJ
NONACHLOROBIPHENYLS	0.26 U	0.023 UJ	0.45 UJ	0.14 UJ	0.024 UJ	0.02 UJ	0.043 UJ
OCTACHLOROBIPHENYLS	0.041 U	0.0037 UJ	0.072 UJ	0.023 U	0.0039 U	0.0032 U	0.0068 UJ
PENTACHLOROBIPHENYLS	0.026 U	0.0024 UJ	0.046 UJ	0.091 J	0.0025 U	0.0021 U	0.2 J
TETRACHLOROBIPHENYLS	0.029 U	0.0026 UJ	0.05 UJ	0.15 J	0.0027 U	0.0022 U	0.33 J
TRICHLOROBIPHENYLS	0.013 U	0.0012 UJ	0.023 UJ	0.012 J	0.0013 U	0.001 U	0.0022 UJ
TOTAL PCB HOMOLOGS	0 U	0 U	0 U	0.393	0 U	0 U	0.778

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-263						
	SD-262-SS-AVG	SD-262-SS-D	SD-263-01	SD-263-02	SD-263-03	SD-263-SS	SD-264-01
SAMPLE ID	20140618	20140618	20140618	20140618	20140618	20140618	20140618
SAMPLE DATE	20140618	20140618	20140618	20140618	20140618	20140618	20140618
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0	0.5	1.5	2.5	0	0.5
BOTTOM DEPTH (FEET)	0.5	0.5	1.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.0605 U	0.11 UJ	0.0095 UJ	0.014 UJ	0.0042 U	0.061 UJ	0.0085 UJ
DICHLOROBIPHENYLS	0.02625 U	0.048 UJ	0.004 UJ	0.0058 U	0.0018 U	0.026 UJ	0.0036 UJ
HEPTACHLOROBIPHENYLS	0.066	0.068 UJ	0.47 J	0.58	0.0025 U	0.083 J	0.87 J
HEXACHLOROBIPHENYL	0.08625	0.045 UJ	0.67 J	0.27	0.0017 U	0.24 J	1.2 J
MONOCHLOROBIPHENYLS	0.01425 U	0.026 UJ	0.0022 UJ	0.0031 U	0.00096 U	0.014 UJ	0.002 UJ
NONACHLOROBIPHENYLS	0.2465 U	0.45 UJ	0.038 UJ	0.055 UJ	0.017 U	0.24 UJ	0.034 UJ
OCTACHLOROBIPHENYLS	0.0394 U	0.072 UJ	0.0061 UJ	0.13 J	0.0027 U	0.039 UJ	0.035 J
PENTACHLOROBIPHENYLS	0.1115	0.046 UJ	0.92 J	0.93	0.0048 J	0.038 J	1.3 J
TETRACHLOROBIPHENYLS	0.1775	0.05 UJ	3.3 J	6.2	0.03 J	0.18 J	2.7 J
TRICHLOROBIPHENYLS	0.0126 U	0.023 UJ	0.2 J	0.47	0.0043 J	0.012 UJ	0.0017 UJ
TOTAL PCB HOMOLOGS	0.389	0 U	5.56	8.58	0.0391	0.541	6.105

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-264			SD-265			
	SD-264-02	SD-264-03	SD-264-SS	SD-265-01	SD-265-02	SD-265-03	SD-265-SS
SAMPLE ID	20140618	20140618	20140618	20140618	20140618	20140618	20140618
SAMPLE DATE	20140618	20140618	20140618	20140618	20140618	20140618	20140618
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.074 U	0.0031 U	0.0092 UJ	0.0063 UJ	0.0054 UR	0.024 U	0.039 UJ
DICHLOROBIPHENYLS	0.031 U	0.0013 U	0.0039 UJ	0.0027 UJ	0.0023 UR	0.01 U	0.017 UJ
HEPTACHLOROBIPHENYLS	0.61 J	0.0019 U	0.095 J	0.13 J	0.069 J	0.24 J	0.14 J
HEXACHLOROBIPHENYL	0.65	0.0012 U	0.098 J	0.17 J	0.097 J	0.36	0.2 J
MONOCHLOROBIPHENYLS	0.017 U	0.00072 U	0.0021 UJ	0.0014 UJ	0.0012 UR	0.0054 U	0.009 UJ
NONACHLOROBIPHENYLS	0.3 U	0.012 U	0.037 UJ	0.025 UJ	0.021 UR	0.094 U	0.16 UJ
OCTACHLOROBIPHENYLS	0.047 U	0.002 U	0.0059 UJ	0.017 J	0.0099 J	0.057 J	0.025 UJ
PENTACHLOROBIPHENYLS	2.3	0.0013 U	0.07 J	0.12 J	0.079 J	0.79	0.097 J
TETRACHLOROBIPHENYLS	12	0.056	0.092 J	0.25 J	0.17 J	4.5	0.3 J
TRICHLOROBIPHENYLS	0.85	0.00064 U	0.0019 UJ	0.0013 UJ	0.0028 J	0.3	0.008 UJ
TOTAL PCB HOMOLOGS	16.41	0.056	0.355	0.687	0.4277	6.247	0.737

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-266				SD-267		
	SD-266-01	SD-266-02	SD-266-03	SD-266-SS	SD-267-01	SD-267-02	SD-267-03
SAMPLE ID	20140619	20140619	20140619	20140619	20140619	20140619	20140619
SAMPLE DATE	20140619	20140619	20140619	20140619	20140619	20140619	20140619
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	1.5	2.5	0	0.5	1.5	2.5
BOTTOM DEPTH (FEET)	1.5	2.5	4.33	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.011 UJ	0.089 UJ	0.0057 UJ	0.012 UJ	0.075 U	0.0079 UJ	0.0054 U
DICHLOROBIPHENYLS	0.0045 UJ	0.038 UJ	0.0024 UJ	0.0049 UJ	0.031 U	0.0052 J	0.0023 U
HEPTACHLOROBIPHENYLS	0.45 J	0.054 UJ	0.0035 UJ	0.041 J	5.2	0.013 J	0.0033 U
HEXACHLOROBIPHENYL	0.58 J	0.3 J	0.014 J	0.057 J	8.2	0.096 J	0.035 J
MONOCHLOROBIPHENYLS	0.0024 UJ	0.02 UJ	0.0013 UJ	0.0027 UJ	0.017 U	0.0018 UJ	0.0012 U
NONACHLOROBIPHENYLS	0.042 UJ	0.36 UJ	0.023 UJ	0.046 UJ	0.3 U	0.031 UJ	0.022 U
OCTACHLOROBIPHENYLS	0.0068 UJ	0.057 UJ	0.0037 UJ	0.0075 UJ	1.1	0.005 UJ	0.0035 U
PENTACHLOROBIPHENYLS	0.36 J	0.46 J	0.015 J	0.015 J	9	0.27 J	0.12 J
TETRACHLOROBIPHENYLS	0.72 J	0.97 J	0.073 J	0.044 J	31	0.93 J	0.057
TRICHLOROBIPHENYLS	0.0022 UJ	0.026 J	0.0031 J	0.0024 UJ	1.6	0.12 J	0.0011 U
TOTAL PCB HOMOLOGS	2.11	1.756	0.1051	0.157	56.1	1.4342	0.212



Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-268					
	SD-267-SS	SD-268-01	SD-268-02	SD-268-03	SD-268-SS	SD-269-01
SAMPLE ID	20140619	20140618	20140618	20140618	20140618	20140618
SAMPLE DATE						
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0	0.5	1.5	2.5	0	0.5
BOTTOM DEPTH (FEET)	0.5	1.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.012 UR	0.048 U	0.017 U	0.0033 U	0.041 UJ	0.051 U
DICHLOROBIPHENYLS	0.0051 UR	0.02 U	0.0072 U	0.0014 U	0.017 U	0.021 U
HEPTACHLOROBIPHENYLS	0.047 J	3.4	0.01 U	0.002 U	9.1	0.031 U
HEXACHLOROBIPHENYL	0.071 J	3.6	0.075 J	0.0013 U	5.4	0.02 U
MONOCHLOROBIPHENYLS	0.0027 UR	0.011 U	0.0039 U	0.00075 U	0.0094 U	0.012 U
NONACHLOROBIPHENYLS	0.048 UR	0.19 U	0.068 U	0.013 U	0.16 UJ	0.2 U
OCTACHLOROBIPHENYLS	0.0077 UR	0.41 J	0.011 U	0.0021 U	1.3	0.032 U
PENTACHLOROBIPHENYLS	0.016 J	2.8	0.099 J	0.0013 U	5.1	0.021 U
TETRACHLOROBIPHENYLS	0.13 J	11	0.15	0.0056 J	20	0.22 J
TRICHLOROBIPHENYLS	0.0025 UR	0.67	0.069	0.00067 U	1.3	0.01 U
TOTAL PCB HOMOLOGS	0.264	21.88	0.393	0.0056	42.2	0.22

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-269			SD-270			
	SD-269-02	SD-269-03	SD-269-SS	SD-270-01	SD-270-02	SD-270-02-AVG	SD-270-02-D
SAMPLE ID	20140618	20140618	20140618	20140618	20140618	20140618	20140618
SAMPLE DATE	20140618	20140618	20140618	20140618	20140618	20140618	20140618
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	1.5	1.5
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	2.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.0059 UJ	0.0023 U	0.076 U	0.035 UJ	0.0044 UJ	0.0042 U	0.004 UJ
DICHLOROBIPHENYLS	0.0025 U	0.00099 U	0.036 J	0.015 U	0.0019 U	0.0018 U	0.0017 U
HEPTACHLOROBIPHENYLS	0.0036 U	0.0014 U	5.6	1.1	0.0027 U	0.00255 U	0.0024 U
HEXACHLOROBIPHENYL	0.02 J	0.00093 U	6.3	0.89	0.013 J	0.0069	0.0016 U
MONOCHLOROBIPHENYLS	0.0014 U	0.00054 U	0.017 U	0.0079 U	0.001 U	0.000955 U	0.00091 U
NONACHLOROBIPHENYLS	0.024 UJ	0.0093 U	0.3 U	0.14 UJ	0.018 UJ	0.017 U	0.016 UJ
OCTACHLOROBIPHENYLS	0.0038 U	0.0015 U	0.75 J	0.079 J	0.0028 U	0.00265 U	0.0025 U
PENTACHLOROBIPHENYLS	0.026 J	0.00096 U	5.7	1.3	0.013 J	0.0098	0.0066 J
TETRACHLOROBIPHENYLS	0.0077 J	0.001 U	35	5.5	0.049	0.02495	0.0018 U
TRICHLOROBIPHENYLS	0.0024 J	0.00048 U	2.8	0.49	0.0033 J	0.00225	0.0012 J
TOTAL PCB HOMOLOGS	0.0561	0 U	56.186	9.359	0.0783	0.04305	0.0078

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Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION			SD-271			
	SD-270-03	SD-270-SS	SD-271-01	SD-271-02	SD-271-SS	SD-272-01
SAMPLE ID	20140618	20140618	20140618	20140618	20140618	20140619
SAMPLE DATE						
MATRIX	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	2.5	0	0.5	1.5	0	0.5
BOTTOM DEPTH (FEET)	4.33	0.5	1.5	2.5	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>						
DECACHLOROBIPHENYL	0.0023 U	0.075 UJ	0.0044 UJ	0.0011 U	0.0081 UJ	0.0032 U
DICHLOROBIPHENYLS	0.00095 U	0.032 U	0.0018 UJ	0.00048 U	0.0066 J	0.0013 U
HEPTACHLOROBIPHENYLS	0.0047 J	26	0.21 J	0.00069 U	0.37	0.0019 U
HEXACHLOROBIPHENYL	0.0068 J	25	0.25 J	0.00045 U	0.57	0.0013 U
MONOCHLOROBIPHENYLS	0.00052 U	0.017 U	0.001 UJ	0.00026 U	0.0019 U	0.00073 U
NONACHLOROBIPHENYLS	0.0089 U	0.36 J	0.017 UJ	0.0045 U	0.032 UJ	0.013 U
OCTACHLOROBIPHENYLS	0.0014 U	3.4	0.038 J	0.00073 U	0.034 J	0.002 U
PENTACHLOROBIPHENYLS	0.0052 J	16	0.25 J	0.00065 J	0.98	0.0013 U
TETRACHLOROBIPHENYLS	0.034	34	1.4 J	0.0036 J	6.2	0.0019 J
TRICHLOROBIPHENYLS	0.0022 J	1.8	0.1 J	0.00054 J	0.42	0.00065 U
TOTAL PCB HOMOLOGS	0.0529	106.56	2.248	0.00479	8.5806	0.0019

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-272				
	SD-272-01-AVG	SD-272-01-D	SD-272-02	SD-272-SS	SD-273-01
SAMPLE ID	20140619	20140619	20140619	20140619	20140618
SAMPLE DATE					
MATRIX	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	0.5	0.5	1.5	0	0.5
BOTTOM DEPTH (FEET)	1.5	1.5	2.5	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>					
DECACHLOROBIPHENYL	0.00315 U	0.0031 U	0.003 U	0.0032 U	0.0072 UJ
DICHLOROBIPHENYLS	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.003 U
HEPTACHLOROBIPHENYLS	0.0019 U	0.0019 U	0.0018 U	0.0081 J	0.6
HEXACHLOROBIPHENYL	0.0013 U	0.0013 U	0.0012 U	0.017 J	0.36
MONOCHLOROBIPHENYLS	0.000725 U	0.00072 U	0.0007 U	0.00072 U	0.0016 U
NONACHLOROBIPHENYLS	0.013 U	0.013 U	0.012 U	0.013 U	0.029 UJ
OCTACHLOROBIPHENYLS	0.002 U	0.002 U	0.0019 U	0.002 U	0.17
PENTACHLOROBIPHENYLS	0.0013 U	0.0013 U	0.0012 U	0.0013 U	1
TETRACHLOROBIPHENYLS	0.00185	0.0018 J	0.0014 U	0.2	1.9
TRICHLOROBIPHENYLS	0.000645 U	0.00064 U	0.00062 U	0.017	0.087
TOTAL PCB HOMOLOGS	0.00185	0.0018	0 U	0.2421	4.117

Table C-8

Chemical Results for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 East and 005 West  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION	SD-273			SD-274			
	SD-273-02	SD-273-03	SD-273-SS	SD-274-01	SD-274-02	SD-274-03	SD-274-SS
SAMPLE ID	20140618	20140618	20140618	20140619	20140619	20140619	20140619
SAMPLE DATE							
MATRIX	SD	SD	SD	SD	SD	SD	SD
TOP DEPTH (FEET)	1.5	2.5	0	0.5	1.5	2.5	0
BOTTOM DEPTH (FEET)	2.5	4.33	0.5	1.5	2.5	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>							
DECACHLOROBIPHENYL	0.01 U	0.0047 U	0.029 UJ	0.036 U	0.036 U	0.0048 U	0.04 UJ
DICHLOROBIPHENYLS	0.0042 U	0.002 U	0.012 UJ	0.015 U	0.015 U	0.002 U	0.017 U
HEPTACHLOROBIPHENYLS	0.006 U	0.0028 U	0.48 J	0.062 J	0.022 U	0.0029 U	0.24 J
HEXACHLOROBIPHENYL	0.004 U	0.0019 U	0.78 J	0.37	0.12 J	0.0031 J	0.75
MONOCHLOROBIPHENYLS	0.0023 U	0.0011 U	0.0066 UJ	0.0083 U	0.0083 U	0.016 J	0.0093 U
NONACHLOROBIPHENYLS	0.04 U	0.019 U	0.12 UJ	0.14 U	0.14 U	0.019 U	0.16 U
OCTACHLOROBIPHENYLS	0.0064 U	0.003 U	0.045 J	0.023 U	0.023 U	0.0031 U	0.026 U
PENTACHLOROBIPHENYLS	0.0041 U	0.0019 U	0.4 J	0.87	0.05 J	0.0039 J	1.7
TETRACHLOROBIPHENYLS	0.012 J	0.003 J	3.6 J	4.6	0.13 J	0.0021 U	8.1
TRICHLOROBIPHENYLS	0.002 U	0.00096 U	0.25 J	0.33	0.011 J	0.00099 U	0.53
TOTAL PCB HOMOLOGS	0.012	0.003	5.555	6.232	0.311	0.023	11.32

U - analyte not detected at the concentration left of the letter  
 J - estimated concentration  
 UJ - analyte not detected. Detection limit may be imprecise.  
 UR - analyte not detected. Result is considered unreliable.  
 MG/KG - milligrams per kilogram  
 PCB - polychlorinated biphenyl  
 SD - sediment matrix  
 SS - 0-0.5 foot below mudline sample depth interval

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-195		SD-197		
					SD-195-SS 20140610 0 0.5	SD-197-01 20140611 0.5 1.5	SD-197-02 20140611 1.5 2.5	SD-197-03 20140611 2.5 4.33	SD-197-SS 20140611 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.89 J	0.0025 J	--	0.17 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	1.5 J	0.019	--	0.31 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.052 J	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	1.3 J	0.031	0.0081 J	0.077 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	2.7 J	0.06	0.021	0.3 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.073 J	0.0073	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	6.515	0.1198	0.0291	0.857

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-199				
					SD-199-01	SD-199-02	SD-199-02-AVG	SD-199-02-D	SD-199-03
					20140611	20140611	20140611	20140611	20140611
					0.5	1.5	1.5	1.5	2.5
					1.5	2.5	2.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.018 J	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	3.9	--	--	--	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	5.1	0.0057 J	0.00365	--	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.69	--	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	4.6	0.017 J	0.0131	0.0092 J	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	20	0.15 J	0.17	0.19 J	--
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	1.2	0.012 J	0.012	0.012 J	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	35.508	0.1847	0.19795	0.2112	--

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-200				
					SD-199-SS 20140611 0 0.5	SD-200-01 20140610 0.5 1.5	SD-200-02 20140610 1.5 2.5	SD-200-03 20140610 2.5 4.33	SD-200-SS 20140610 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.19 J	4.2 J	--	0.0018 J	1.1 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.32 J	4.3 J	0.022 J	0.0071 J	1.5 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.024 J	0.52 J	--	--	0.067 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.11 J	4.5 J	0.016 J	0.0015 J	0.91 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.35 J	16 J	0.19	0.0052 J	1.9 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0069 J	0.69 J	0.012 J	--	0.047 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.0009	30.21	0.24	0.0156	5.524



Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-202			SD-204	
					SD-202-01	SD-202-02	SD-202-SS	SD-204-01	SD-204-02
					20140610	20140610	20140610	20140611	20140611
					0.5	1.5	0	0.5	1.5
					1.5	2.5	0.5	1.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.059 J	0.011 J	44	--	0.1 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.095	0.018	59	--	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.4 J	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	5.2	--	0.0089 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.019 J	0.0039 J	18	0.0065 J	0.0091 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.092	0.025	10	0.079	0.022 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0029 J	0.00074 J	0.53	--	0.00091 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.2679	0.05864	137.13	0.0855	0.14091

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-207				
					SD-204-SS 20140611 0 0.5	SD-207-01 20140611 0.5 1.5	SD-207-02 20140611 1.5 2.5	SD-207-03 20140611 2.5 4.33	SD-207-SS 20140611 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0061 J	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	6.5	6.8	0.29	0.013 J	30
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	7.1	7.4	0.51	0.039 J	43
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.073 J	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.2	1.8	0.052 J	--	7.3
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	2.8	17	0.88	0.036 J	39
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	6.3	95	5.3	0.35	150
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.36	6.4	0.34	0.005 J	8.9
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	24.3391	134.4	7.372	0.443	278.2

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-209			SD-223	
					SD-209-01	SD-209-02	SD-209-03	SD-223-01	SD-223-02
					20140611 0.5 1.5	20140611 1.5 2.5	20140611 2.5 4.33	20140613 0.5 1.5	20140613 1.5 2.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.023	--	0.25 J	0.006 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	0.037	0.0023 J	0.65 J	0.0045 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.0038 J	--	0.028 J	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.012	0.0048 J	1.3 J	0.013
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.00099 J	0.025	0.00059 J	6.1 J	0.1
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.00049 J	--	0.31 J	0.007
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.00099	0.10129	0.00769	8.638	0.1305

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**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-224				
					SD-223-SS 20140613 0 0.5	SD-224-01 20140613 0.5 1.5	SD-224-02 20140613 1.5 2.5	SD-224-03 20140613 2.5 4.33	SD-224-SS 20140613 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.34 J	0.31 J	--	--	0.49 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.34 J	0.67 J	0.045 J	--	0.47 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.021 J	0.039 J	--	--	0.061 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.19 J	0.75 J	0.21	--	0.43 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.32 J	10 J	0.56	--	0.71 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.62 J	0.2	--	0.02 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.211	12.389	1.015	--	2.181

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-225				
					SD-225-01	SD-225-02	SD-225-03	SD-225-SS	SD-226-01
					20140613 0.5 1.5	20140613 1.5 2.5	20140613 2.5 4.33	20140613 0 0.5	20140613 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.38 J	0.026 J	--	0.89 J	0.47 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	1 J	0.14	--	1.2 J	0.42 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.19 J	0.089 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	3.2 J	0.45	--	1.9 J	0.73 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	18 J	0.26	--	6.5 J	1.8 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	1.1 J	--	--	0.22 J	0.077 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	23.68	0.876	--	10.9	3.586

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-226			SD-227	
					SD-226-02	SD-226-03	SD-226-SS	SD-227-01	SD-227-02
					20140613	20140613	20140613	20140613	20140613
					1.5	2.5	0	0.5	1.5
					2.5	4.33	0.5	1.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.7	--	0.021 J	0.046 J	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	2.1	--	0.036 J	0.22 J	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.33	--	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	2	--	0.02 J	0.34 J	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	5	0.0053 J	0.046 J	0.85 J	0.0082 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.42	--	--	0.037 J	0.0013 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	11.55	0.0053	0.123	1.493	0.0095

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-228				
					SD-227-SS	SD-228-01	SD-228-02	SD-228-03	SD-228-SS
					20140613 0 0.5	20140613 0.5 1.5	20140613 1.5 2.5	20140613 2.5 4.33	20140613 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.0083 J	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.02 J	0.48 J	--	--	0.49 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.049 J	0.7 J	0.02 J	--	0.51 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	0.057 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.068 J	0.79 J	0.066 J	--	0.35 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.18 J	3.2 J	0.041 J	--	0.8 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0064 J	0.22 J	--	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.3234	5.3983	0.127	--	2.207

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-234		SD-235		
					SD-234-01	SD-234-SS	SD-235-01	SD-235-02	SD-235-03
					20140613 0.5 1.5	20140613 0 0.5	20140613 0.5 1.5	20140613 1.5 2.5	20140613 2.5 4.33
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.032 J	0.043 J	0.018 J	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.094	17	4.5	0.14	0.0054 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.13	25	4.5 J	0.35	0.015
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.3 J	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0088 J	3.2	0.92	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.073	9.1	6.6	0.81	0.042
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.21	37	29 J	4.6	0.047
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0086 J	2.2	2.1 J	0.44	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.5244	93.832	47.663	6.358	0.1094



Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-236				
					SD-235-SS 20140613 0 0.5	SD-236-01 20140613 0.5 1.5	SD-236-02 20140613 1.5 2.5	SD-236-SS 20140613 0 0.5	SD-237-01 20140613 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	53	--	--	--	2.7
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	78	0.0052 J	--	--	4
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	9.1	--	--	--	0.25 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	29	0.0088 J	--	--	4.7
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	97	--	0.00054 J	--	32
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	5.4	--	--	--	2.5
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	271.5	0.014	0.00054	--	46.15

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-237				
					SD-237-02	SD-237-02-AVG	SD-237-02-D	SD-237-03	SD-237-SS
					20140613	20140613	20140613	20140613	20140613
					1.5	1.5	2.5	2.5	0
					2.5	2.5	4.33	4.33	0.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.16	0.08123	--	--	21
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.23 J	0.123	0.016 J	0.00088 J	19
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.013 J	0.0078	--	--	4.9
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.68 J	0.3625	0.045 J	0.0027 J	16
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.3 J	0.765	0.23 J	0.028	40
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.16 J	0.1135	0.067 J	0.0021 J	2.4
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	2.543	1.4505	0.358	0.03368	103.3

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-238				
					SD-238-01	SD-238-02	SD-238-03	SD-238-SS	SD-239-01
					20140617 0.5 1.5	20140617 1.5 2.5	20140617 2.5 4.33	20140617 0 0.5	20140617 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	0.005 J
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.013 J	0.18 J	--	--	0.15 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.04 J	0.25 J	--	--	0.073 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.041 J	--	--	0.016 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0064 J	0.28 J	--	0.0072 J	0.17 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0086 J	0.66 J	0.033	0.043 J	2 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.029 J	0.003 J	0.0061 J	0.19 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.068	1.44	0.036	0.0563	2.604

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-239			
					SD-239-02	SD-239-03	SD-239-SS	SD-240-01
					20140617 1.5	20140617 2.5	20140617 0	20140617 0.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.31 J	8.9
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.004 J	--	0.27 J	12
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.052 J	1.4 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.015 J	--	0.4 J	15
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0091 J	0.018 J	1.7 J	59
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.0013 J	0.14 J	4.3
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.0281	0.0193	2.872	100.6

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-240				
					SD-240-02	SD-240-03	SD-240-SS	SD-241-01	SD-241-02
					20140617	20140617	20140617	20140617	20140617
					1.5	2.5	0	0.5	1.5
					2.5	4.33	0.5	1.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0039 J	--	--	--	0.0025 J
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.29	0.026 J	0.42 J	26	0.37 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.34	0.061	0.59 J	25	0.39 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.063 J	--	0.11 J	1.1	0.066 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.75	0.11	0.89 J	11	0.66 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	3	0.39	2.7 J	56	3.5 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.2	0.021	0.13 J	3	0.27
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	4.6469	0.608	4.84	122.1	5.2585

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-241				
					SD-241-02-AVG	SD-241-02-D	SD-241-03	SD-241-SS	SD-242-01
					20140617	20140617	20140617	20140617	20140617
					1.5	1.5	2.5	0	0.5
					2.5	2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0025 J	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.935	3.5 J	--	0.92 J	0.28 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	1.695	3 J	0.0097 J	0.91 J	0.34 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.054	0.042 J	--	0.23 J	0.017 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.43	2.2 J	0.033 J	1.1 J	0.24 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	5.4	7.3 J	0.25	2.8 J	0.29 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.32	0.37	0.019 J	0.12 J	0.021 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	10.8353	16.412	0.3117	6.08	1.188

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-242			
					SD-242-02 20140617 1.5 2.5	SD-242-03 20140617 2.5 4.33	SD-242-SS 20140617 0 0.5	SD-243-01 20140617 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.3 J	1.4	0.052 J	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	1.3 J	1.7	0.091 J	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.18	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	5.9 J	1.9	0.047 J	0.0055 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	39 J	6.9	0.035 J	0.027 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	2.8 J	0.35	0.0033 J	0.0015 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	50.3	12.43	0.2283	0.034

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-243			
					SD-243-02	SD-243-03	SD-243-SS	SD-244-01
					20140617 1.5	20140617 2.5	20140617 0	20140617 0.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.31 J	3.9 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	0.39	4.8 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.013 J	0.49 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.2	3.7 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.029	0.0035 J	0.44	15 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0017 J	--	0.032	1.1 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.0307	0.0035	1.385	28.99



Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-244			
					SD-244-02 20140617 1.5 2.5	SD-244-03 20140617 2.5 4.33	SD-244-SS 20140617 0 0.5	SD-245-01 20140617 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.013 J	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.28 J	--	15	4.8 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.39 J	0.026 J	16	1.9 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.27 J	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.2 J	0.036	18	9.8 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	4.5 J	0.071	62	58 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.56 J	0.0029 J	4.1	3.3 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	6.943	0.1359	115.37	77.8

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-245			
					SD-245-02	SD-245-03	SD-245-SS	SD-246-01
					20140617 1.5	20140617 2.5	20140617 0	20140617 0.5
PCB HOMOLOGS (MG/KG)								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.02 J	--	--	0.15 J
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.23 J	--	1.7 J	10
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.24 J	0.087 J	0.89 J	11
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0041 J	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.048 J	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.18 J	1.4 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	1.6 J	0.21 J	1 J	22
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	12 J	0.79 J	4.3 J	100
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.94 J	--	0.29 J	7.6
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	15.0341	1.087	8.408	152.15

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-246			
					SD-246-02 20140617 1.5 2.5	SD-246-03 20140617 2.5 4.33	SD-246-SS 20140617 0 0.5	SD-247-01 20140617 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.011 J	--	--	0.034 J
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.11 J	--	15	0.62 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.25 J	--	17	0.91 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.0088 J
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.032 J	--	2.7 J	0.065 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.81 J	0.0032 J	25	3.9 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	6 J	0.014 J	110	25 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.45 J	0.0029 J	7.7	2.1 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	7.663	0.0201	177.4	32.6378

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-247			
					SD-247-02 20140617 1.5 2.5	SD-247-03 20140617 2.5 4.33	SD-247-SS 20140617 0 0.5	SD-248-01 20140617 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.035 J	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.052 J	--	8.9	0.015 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.22 J	--	11	0.052 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	1.3	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.71 J	--	9.4	0.062 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	3.2 J	0.094 J	41	0.21 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.079 J	--	3.3	0.013 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	4.261	0.094	74.935	0.352

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-248			
					SD-248-02	SD-248-03	SD-248-SS	SD-249-01
					20140617	20140617	20140617	20140617
					1.5	2.5	0	0.5
					2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.048 J	15
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	0.18 J	17
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.0059 J	2.4
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0016 J	--	0.23 J	14
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.019	--	0.42 J	46
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0011 J	--	0.01 J	2.7
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.0217	--	0.8939	97.1

Table C-9

Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 West and 005 East  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-249			
					SD-249-02 20140617 1.5 2.5	SD-249-03 20140617 2.5 4.33	SD-249-SS 20140617 0 0.5	SD-250-01 20140618 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.27	0.23	0.31	0.34 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.31	0.33	0.36	0.67 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.052	0.042	0.045 J	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.15	0.25	0.14	0.94 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.91	0.25	0.55	2.2 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.063	0.023	0.029	0.068 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.755	1.125	1.434	4.218

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-250			
					SD-250-02	SD-250-03	SD-250-SS	SD-251-01
					20140618 1.5	20140618 2.5	20140618 0	20140618 0.5
PCB HOMOLOGS (MG/KG)								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	2.4 J	3.6	0.19 J	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	2.5	4	0.34 J	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.54 J	0.41	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	5.1	4	0.14 J	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	37	18	0.41 J	0.06
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	2.5	1.3	--	0.0031 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	50.04	31.31	1.08	0.0631

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014**  
**Dark Head Cove-Outfalls 005 West and 005 East**  
**Lockheed Martin Middle River Complex, Middle River, Maryland**  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-251			
					SD-251-02	SD-251-03	SD-251-SS	SD-260-01
					20140618 1.5 2.5	20140618 2.5 4.33	20140618 0 0.5	20140619 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	1.7 J	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	1.1 J	0.18 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.14 J	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0052 J	--	0.58 J	0.17 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0082 J	0.0026 J	0.74 J	0.58 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.019 J	0.058 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.0134	0.0026	4.279	0.988



Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-260			
					SD-260-02	SD-260-03	SD-260-SS	SD-261-01
					20140619 1.5	20140619 2.5	20140619 0	20140619 0.5
PCB HOMOLOGS (MG/KG)								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.11 J	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	0.52 J	0.37 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.39 J	0.7
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	1.3 J	3.1
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.052 J	0.19 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	--	2.372	4.36

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-261				
					SD-261-02	SD-261-03	SD-261-SS	SD-262-01	SD-262-02
					20140619	20140619	20140619	20140618	20140618
					1.5	2.5	0	0.5	1.5
					2.5	4.33	0.5	1.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	--	--	0.14 J	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.091 J	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.15 J	--
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.012 J	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	--	--	0.393	--

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-262				SD-263-01 20140618 0.5 1.5
					SD-262-03	SD-262-SS	SD-262-SS-AVG	SD-262-SS-D	
					20140618 2.5 4.33	20140618 0 0.5	20140618 0 0.5	20140618 0 0.5	
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.098 J	0.066	--	0.47 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	0.15 J	0.08625	--	0.67 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.2 J	0.1115	--	0.92 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.33 J	0.1775	--	3.3 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	0.2 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	0.778	0.389	--	5.56

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-263			
					SD-263-02 20140618 1.5 2.5	SD-263-03 20140618 2.5 4.33	SD-263-SS 20140618 0 0.5	SD-264-01 20140618 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.58	--	0.083 J	0.87 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.27	--	0.24 J	1.2 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.13 J	--	--	0.035 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.93	0.0048 J	0.038 J	1.3 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	6.2	0.03 J	0.18 J	2.7 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.47	0.0043 J	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	8.58	0.0391	0.541	6.105

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-264			
					SD-264-02	SD-264-03	SD-264-SS	SD-265-01
					20140618 1.5	20140618 2.5	20140618 0	20140618 0.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.61 J	--	0.095 J	0.13 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.65	--	0.098 J	0.17 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.017 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	2.3	--	0.07 J	0.12 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	12	0.056	0.092 J	0.25 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.85	--	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	16.41	0.056	0.355	0.687

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-265			
					SD-265-02 20140618 1.5 2.5	SD-265-03 20140618 2.5 4.33	SD-265-SS 20140618 0 0.5	SD-266-01 20140619 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.069 J	0.24 J	0.14 J	0.45 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.097 J	0.36	0.2 J	0.58 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0099 J	0.057 J	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.079 J	0.79	0.097 J	0.36 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.17 J	4.5	0.3 J	0.72 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0028 J	0.3	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.4277	6.247	0.737	2.11

Table C-9

Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
 Dark Head Cove-Outfalls 005 West and 005 East  
 Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-266			
					SD-266-02	SD-266-03	SD-266-SS	SD-267-01
					20140619	20140619	20140619	20140619
					1.5	2.5	0	0.5
					2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.041 J	5.2
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.3 J	0.014 J	0.057 J	8.2
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	1.1
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.46 J	0.015 J	0.015 J	9
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.97 J	0.073 J	0.044 J	31
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.026 J	0.0031 J	--	1.6
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.756	0.1051	0.157	56.1

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-267			
					SD-267-02	SD-267-03	SD-267-SS	SD-268-01
					20140619	20140619	20140619	20140618
					1.5	2.5	0	0.5
					2.5	4.33	0.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0052 J	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.013 J	--	0.047 J	3.4
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.096 J	0.035 J	0.071 J	3.6
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.41 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.27 J	0.12 J	0.016 J	2.8
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.93 J	0.057	0.13 J	11
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.12 J	--	--	0.67
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	1.4342	0.212	0.264	21.88



Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-268			
					SD-268-02	SD-268-03	SD-268-SS	SD-269-01
					20140618 1.5	20140618 2.5	20140618 0	20140618 0.5
PCB HOMOLOGS (MG/KG)								
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	9.1	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.075 J	--	5.4	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	1.3	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.099 J	--	5.1	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.15	0.0056 J	20	0.22 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.069	--	1.3	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.393	0.0056	42.2	0.22

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-269				
					SD-269-02	SD-269-03	SD-269-SS	SD-270-01	SD-270-02
					20140618	20140618	20140618	20140618	20140618
					1.5	2.5	0	0.5	1.5
					2.5	4.33	0.5	1.5	2.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.036 J	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	5.6	1.1	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.02 J	--	6.3	0.89	0.013 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.75 J	0.079 J	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.026 J	--	5.7	1.3	0.013 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0077 J	--	35	5.5	0.049
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0024 J	--	2.8	0.49	0.0033 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.0561	--	56.186	9.359	0.0783

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-270				
					SD-270-02-AVG	SD-270-02-D	SD-270-03	SD-270-SS	SD-271-01
					20140618 1.5 2.5	20140618 1.5 2.5	20140618 2.5 4.33	20140618 0 0.5	20140618 0.5 1.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.0047 J	26	0.21 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.0069	--	0.0068 J	25	0.25 J
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.36 J	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	3.4	0.038 J
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0098	0.0066 J	0.0052 J	16	0.25 J
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.02495	--	0.034	34	1.4 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.00225	0.0012 J	0.0022 J	1.8	0.1 J
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.04305	0.0078	0.0529	106.56	2.248

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-271		SD-272		
					SD-271-02	SD-271-SS	SD-272-01	SD-272-01-AVG	SD-272-01-D
					20140618	20140618	20140619	20140619	20140619
					1.5	0	0.5	0.5	0.5
					2.5	0.5	1.5	1.5	1.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.0066 J	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.37	--	--	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	0.57	--	--	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.034 J	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.00065 J	0.98	--	--	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.0036 J	6.2	0.0019 J	0.00185	0.0018 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.00054 J	0.42	--	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	0.00479	8.5806	0.0019	0.00185	0.0018

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-273				
					SD-272-02	SD-272-SS	SD-273-01	SD-273-02	SD-273-03
					20140619	20140619	20140618	20140618	20140618
					1.5	0	0.5	1.5	2.5
					2.5	0.5	1.5	2.5	4.33
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.0081 J	0.6	--	--
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	--	0.017 J	0.36	--	--
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	0.17	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	1	--	--
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.2	1.9	0.012 J	0.003 J
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	0.017	0.087	--	--
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	--	0.2421	4.117	0.012	0.003

Table C-9

**Detected Analytes and Screening Level Exceedances for Sediment Samples-2014  
Dark Head Cove-Outfalls 005 West and 005 East  
Lockheed Martin Middle River Complex, Middle River, Maryland  
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LOCATION SAMPLE ID SAMPLE DATE TOP DEPTH (FEET) BOTTOM DEPTH (FEET)	Site-wide sediment background concentration <sup>(1)</sup> (mg/kg)	Probable effects concentration (PEC) <sup>(2)</sup> (mg/kg)	10X Probable effects concentration (PEC) (mg/kg)	TSCA disposal concentration <sup>(3)</sup> (mg/kg)	SD-274				
					SD-273-SS 20140618 0 0.5	SD-274-01 20140619 0.5 1.5	SD-274-02 20140619 1.5 2.5	SD-274-03 20140619 2.5 4.33	SD-274-SS 20140619 0 0.5
<b>PCB HOMOLOGS (MG/KG)</b>									
DICHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
HEPTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.48 J	0.062 J	--	--	0.24 J
HEXACHLOROBIPHENYL	0.195	0.676	6.76	50	0.78 J	0.37	0.12 J	0.0031 J	0.75
MONOCHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	0.016 J	--
NONACHLOROBIPHENYLS	0.195	0.676	6.76	50	--	--	--	--	--
OCTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.045 J	--	--	--	--
PENTACHLOROBIPHENYLS	0.195	0.676	6.76	50	0.4 J	0.87	0.05 J	0.0039 J	1.7
TETRACHLOROBIPHENYLS	0.195	0.676	6.76	50	3.6 J	4.6	0.13 J	--	8.1
TRICHLOROBIPHENYLS	0.195	0.676	6.76	50	0.25 J	0.33	0.011 J	--	0.53
TOTAL PCB HOMOLOGS	0.195	0.676	6.76	50	5.555	6.232	0.311	0.023	11.32

1 Value from Middle River Complex sediment feasibility study (Tetra Tech, 2012)

2 See Tetra Tech (2012).

3 TSCA - Toxic Substances Control Act, Code of Federal Regulations (CFR), Title 40, Part 761.

-- = analyte not detected

J - estimated concentration

MG/KG - milligrams per kilogram

PCB - polychlorinated biphenyl

SD - sediment matrix

SS - 0-0.5 foot below mudline sample depth interval

Figure C-1  
Total Aroclor PCB Concentrations Versus Total PCB Homolog Concentrations  
Dark Head Cove Sediment Samples, 2014  
Lockheed Martin Middle River Complex, Middle River, Maryland

