Fish Tissue Report
Middle River Complex
3232 Eastern Boulevard
Middle River, Maryland

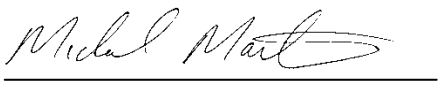
Prepared for:

Lockheed Martin Corporation

Prepared by:

Tetra Tech, Inc.

April 21, 2011



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ACRONYMS

DNR	(Maryland) Department of Natural Resources
Lockheed Martin	Lockheed Martin Corporation
MDE	Maryland Department of the Environment
µg/kg	microgram(s) per kilogram
mg/kg	milligram(s) per kilogram
MRC	Middle River Complex
PCBs	polychlorinated biphenyls
RSL	regional screening-level
SQL	sample-specific quantitation limit
USEPA	United State Environmental Protection Agency

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Section 1
Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. has prepared this report presenting analytical results for fish samples collected from waterways adjacent to the Middle River Complex (MRC) at 2323 Eastern Boulevard in Middle River, Maryland (Figures 1-1 and 1-2) and from reference areas (Figures 1-3 and 1-4). This report also compares fish tissue analytical results from the waterways adjacent to the Middle River Complex to results from three reference areas and available regional data collected by the State of Maryland in the Chesapeake Bay area (Figure 1-5), as reported in the Maryland Department of the Environment (MDE) database.

TETRA TECH

Figure 1-1
Sample Results - Total PCBs
Fish Tissue
Lockheed Martin Middle River Complex
Middle River, Maryland

Legend

Sample Location

Note: All sample results presented in ug/kg.

400 200 0 400
Feet

Drawn By: JEE 01/10/11
Checked By: L. GANSER 01/25/11
Approved By:

Contract Number: 112IC02903

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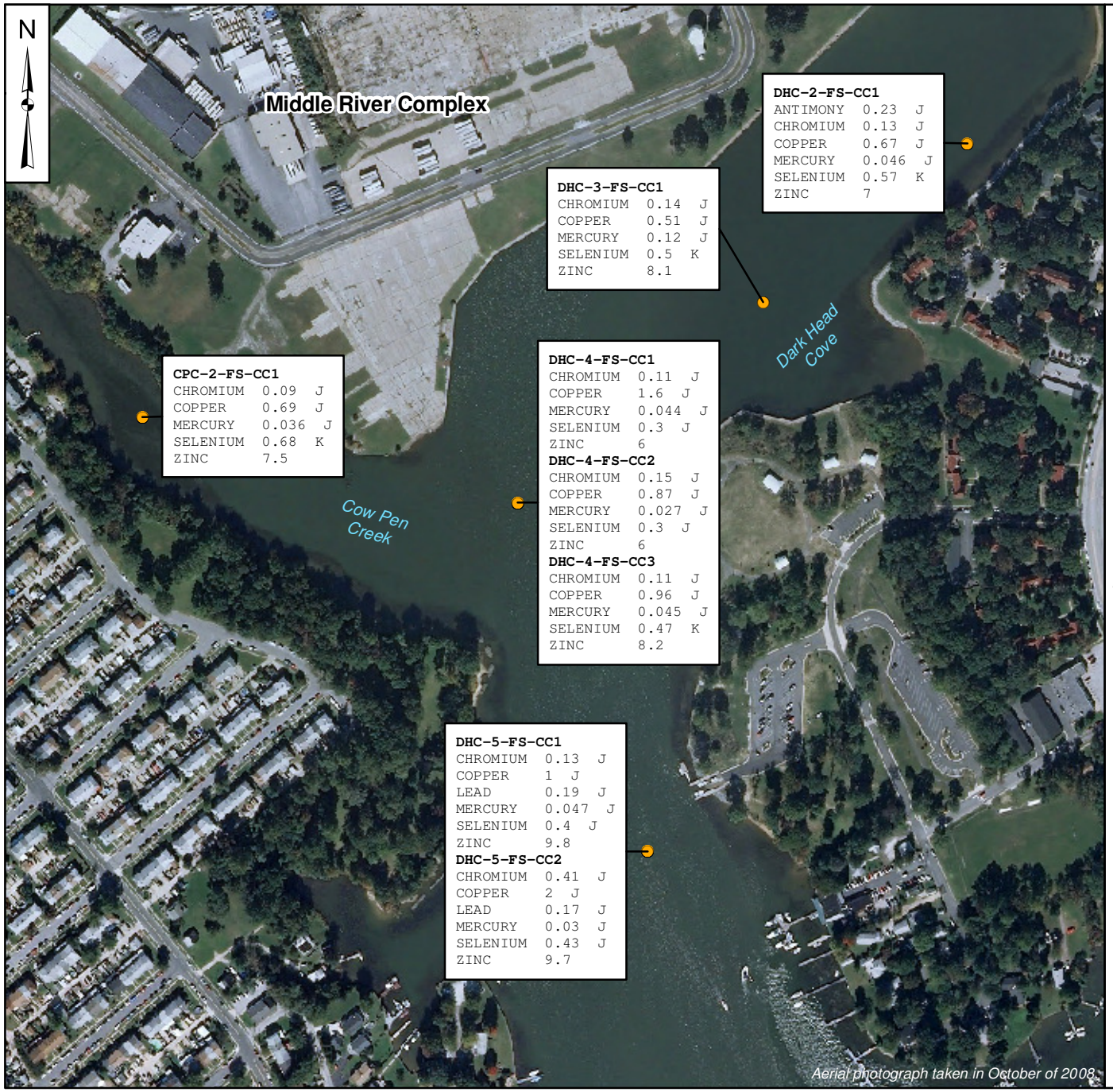
FISH_PCB_AUG10.MXD 01/25/11 SS



TETRA TECH

Figure 1-2
Sample Results - Metals
Fish Tissue
Lockheed Martin Middle River Complex
Middle River, Maryland

Legend

● Sample Location

Note: All sample results presented in mg/kg.

400 200 0 400
Feet

Drawn By: JEE 01/10/11
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Approved By:

Contract Number: 112IC02903

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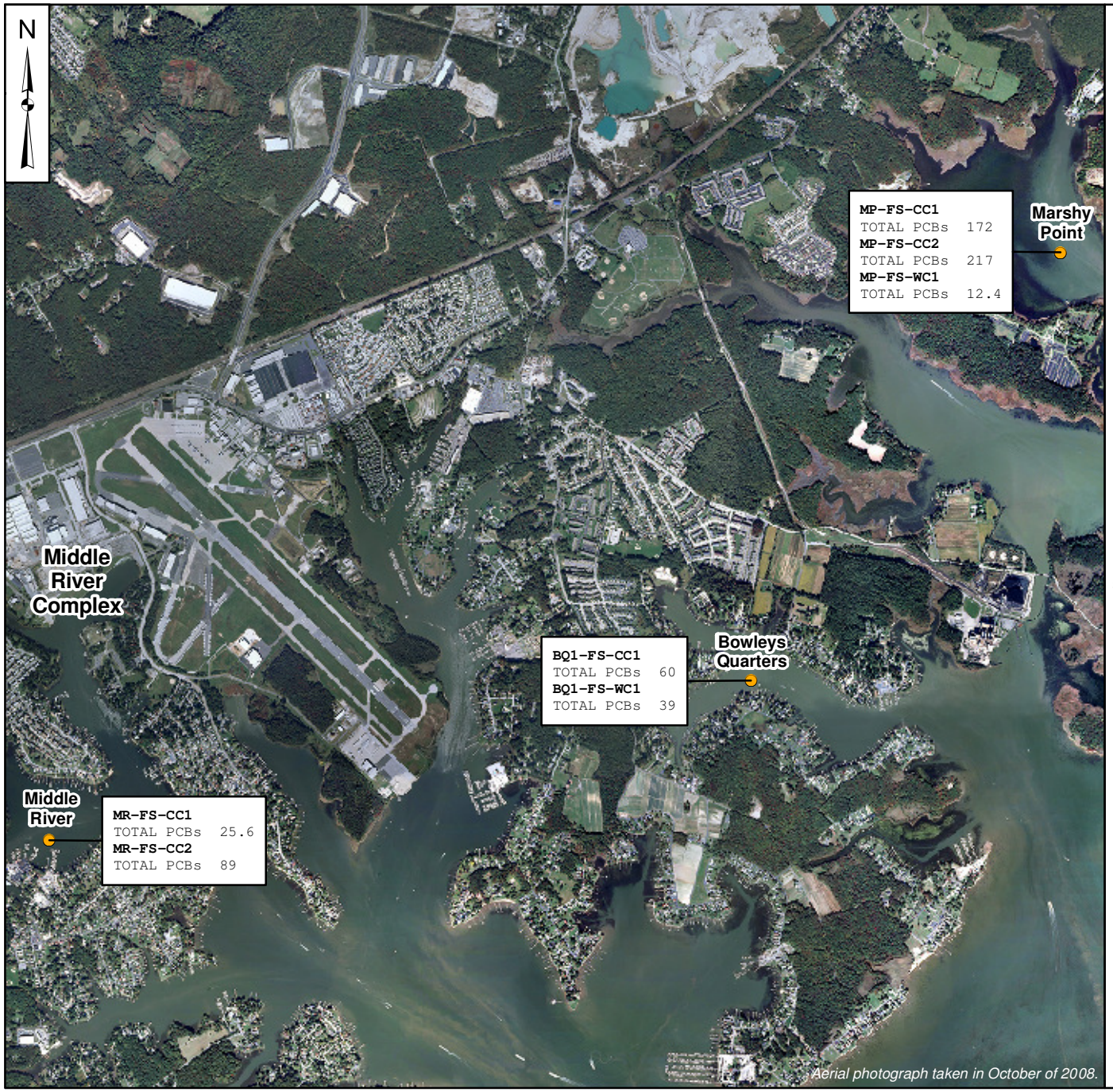

TETRA TECH

Figure 1-3
Reference Sample Results - Total PCBs
Fish Tissue
Lockheed Martin Middle River Complex
Middle River, Maryland

Legend

● Sample Location

Note: All sample results presented in ug/kg.

3,000 1,500 0 3,000
Feet

Drawn By: JEE 01/07/11
Checked By: L. GANSER 01/25/11
Approved By:

Contract Number: 112IC02903

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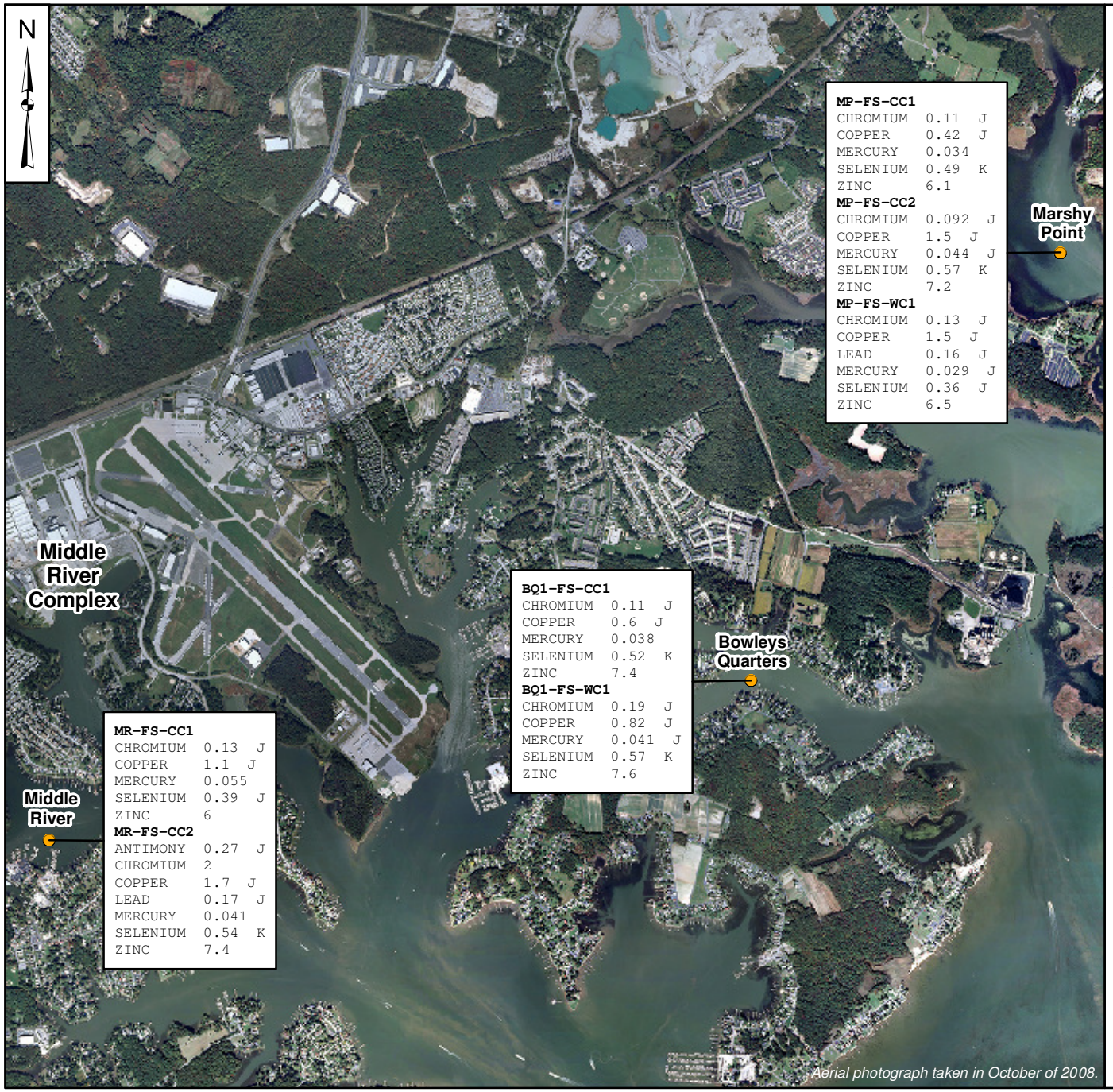
FISH_PCB_REF_AUG10.MXD 01/25/11 SS



TETRA TECH

Figure 1-4
Reference Sample Results - Metals
Fish Tissue
Lockheed Martin Middle River Complex
Middle River, Maryland

Legend

- Sample Locations

Note: All sample results presented in mg/kg.

3,000 1,500 0 3,000
Feet

Drawn By: JEE 01/07/11
Checked By: L. GANSER 01/25/11
Approved By:

Contract Number: 112IC02903

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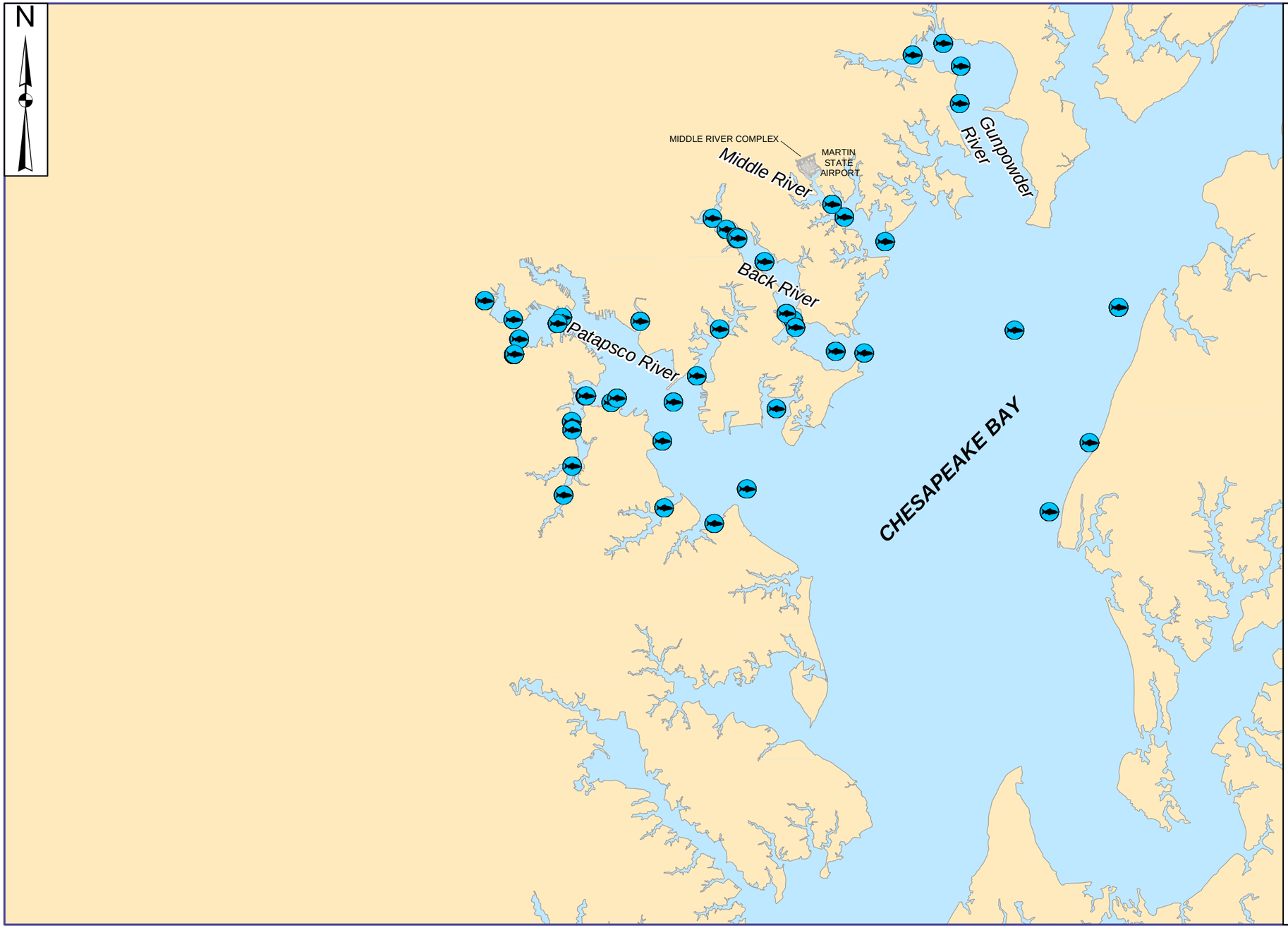
FISH_METALS_REF_AUG10.MXD 01/25/11 SS



Tetra Tech

FIGURE 1-5

Maryland DNR Fish Sample Locations
Lockheed Martin Middle River Complex
Middle River, Maryland

Legend

- Maryland DNR Fish Sample Locations
- Surface Water

0 1.5 3 6 Miles

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Approved By:

Contract Number: 112IC02903

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Section 2
Fish Tissue Sampling

Fish samples were collected from five locations at the Middle River Complex (MRC) and from three reference locations (i.e., locations not affected by contaminants possibly originating from the MRC) as part of an investigation to determine contaminant concentrations in their tissue (Table 2-1). The site locations for collecting fish included one in Cow Pen Creek, two in Dark Head Cove, and two at the confluence of the two water bodies (Figures 1-1 and 1-2). To compare these locations with similar environments in the Middle River area, samples were also collected from the same fish species at reference areas at Marshy Point, Bowleys Quarters, and Middle River (Figures 1-3 and 1-4). Reference areas include one with little to no shoreline development (i.e., Marshy Point) and two with typical regional waterfront development (i.e., Bowleys Quarters and Middle River). The analytical results presented in Figures 1-1 through 1-4 are discussed in Section 5.

TABLE 2-1

SUMMARY OF FISH TISSUE SAMPLES COLLECTED AND ANALYZED
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Sample Location	Sample ID	Fish Type	Length (inches)	Laboratory Analysis	
				PCBs[1]	Metals[2]
Reference Samples					
Bowleys Quarters	BQ1-FS-CC1	Channel Catfish	17.5	X	X
	BQ1-FS-WC1	White Catfish	15.6	X	X
Marshy Point	MP-FS-CC1	Channel Catfish	20.3	X	X
	MP-FS-CC2	Channel Catfish	16.1	X	X
	MP-FS-WC1[3]	White Catfish	10.7	X	X
			11.8		
			14.6		
Middle River	MR-FS-CC1	Channel Catfish	10.6	X	X
	MR-FS-CC2	Channel Catfish	12.0	X	X
Site Samples					
Cow Pen Creek	CPC2-FS-CC1	Channel Catfish	16.9	X	X
Dark Head Cove	DHC2-FS-CC1[3]	Channel Catfish	11.6	X	X
			12.1		
			15.3		
	DHC3-FS-CC1	Channel Catfish	20.0	X	X
	DHC4-FS-CC1	Channel Catfish	11.4	X	X
	DHC4-FS-CC2	Channel Catfish	12.5	X	X
	DHC4-FS-CC3	Channel Catfish	21.1	X	X
	DHC5-FS-CC1	Channel Catfish	10.5	X	X
	DHC5-FS-CC2	Channel Catfish	11.1	X	X

Notes:
All samples also analyzed for percent lipids.

Footnotes:
(1) Analyzed for Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1260, Aroclor-1262, and Aroclor-1268 using SW-846 Method 8082.
(2) Analyzed for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc using SW-846 Method 6010B and SW-846 Method 7471 for mercury.
(3) Sample is a composite of three individual fish specimens.

Abbreviations:
PCB Polychlorinated Biphenyls

Section 3
Fish Sampling Protocols

Fish sampling protocols and the target species selected for fish tissue analyses are consistent with the Maryland Department of the Environment's (MDE) regional fish monitoring program. The work plan (Tetra Tech, 2010) targeted the channel catfish and brown bullhead species for collection and tissue residue analysis because both are demersal (i.e., bottom feeding) and expected to be resident (i.e., non-migratory). These fish are likely to accumulate chemicals from sediment and are edible (MDE Science Services Administration, 2009). Channel catfish were collected as proposed, but attempts to capture brown bullhead were unsuccessful. Sample collection goals identified in the work plan (Tetra Tech, 2010) were met by collecting and submitting for tissue-residue analysis tissue samples from white catfish, which is also a demersal species, as a resident equivalent (Table 2-1).

Fish tissue collection was consistent with MDE sampling protocols set forth in *Standard Operating Procedures for Fish and Shellfish Collection and Analysis* (MDE Science Services Administration, 2009) and in accordance with Tetra Tech's scientific-collectors permit. As recommended by MDE, field scientists attempted to collect at least three similarly sized specimens representing each species from each site and reference sampling location. Considerable effort was made trying to capture enough fish for compositing at each location. Initially, three 40-foot trotlines were rotated between fish collection sites. After the second day, another six similar trotlines were set and similarly rotated among sites.

Each trotline had six hooks and was baited with either chicken flesh or store-bought catfish bait-balls of various scents. Each line was baited and placed on the bottom of the selected site. Trotlines were spread out among the sampling sites and left to fish for approximately 3–4 hours each. After approximately 3–4 hours each line was pulled, captured fish were processed, and the trotline was re-baited and either moved to a new site or replaced at the same site depending on whether target fish had been caught. Before leaving for the day, all trotlines were checked, re-baited, and deployed for overnight fishing. While giving the trot lines time to capture fish,

hook and line fishing was also done at all sites and rotated among sites depending on the number of fish collected at each location. Sites where fish sample totals were lowest were fished with the most effort when hook and line fishing. This sequence went on for nine days.

The attempts to collect three fish from each sampling location were successful at one location for the site samples (collected at Dark Head Cove) and at one location for the reference samples (collected at Marshy Point). At all other locations, only one specimen was collected. At locations where three specimens were collected, these were composited into one sample from each location for chemical analysis (Table 2-1). Remaining samples represent one specimen, as summarized in Table 2-1.

Section 4
Data Analysis

Fish samples were sent to TestAmerica Laboratories, Inc., in Pittsburgh, Pennsylvania to be analyzed for polychlorinated biphenyl compounds (PCBs) as Aroclors, using U.S. Environmental Protection Agency (USEPA) SW-846 Method 8082, for priority-pollutant metals using SW-846 Method 6010B, and using SW-846 Method 7471 for mercury and lipids (determined by the total residues procedure). Fish tissues were processed in the laboratory to remove edible fillets for analysis. A summary of the fish samples submitted for analysis is presented in Table 2-1.

Data were validated according to USEPA Region III modifications to the *National Functional Guidelines for Organic Data Review, Multimedia, Multi Concentration* (USEPA, September 1994) and *National Functional Guidelines for Inorganic Validation* (USEPA, April 1993). No major issues with the fish tissue data were identified during data validation (i.e., no data were qualified as rejected). Validation reports are included as Appendix A.

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Section 5
Data Evaluation

Concentrations of detected chemicals in fish tissue for site and reference area samples are presented in Table 5-1 and Figures 1-1 through 1-4. Statistics for the site and reference fish-tissue data are summarized in Table 5-2. Appendix B includes data tables of all analytical results as well as detection limits for non-detect results. Regional data for total polychlorinated biphenyls (PCBs) by congener analysis are presented in Table 5-3, with sampling locations identified in Figure 1-5. Regional data were provided by the Maryland Department of the Environment (MDE) Science Services Administration and were not part of the sampling effort. Figure 5-1 provides a visual comparison of site, reference areas, and regional fish tissue data. Figure 5-2 displays the range of total PCB congeners for various fish species in the Baltimore region. The following narrative discusses the analytical results for fish tissue and compares site data to reference areas and regional data. Fish tissue analytical results are also compared to sediment data.

The fish collected range in size from 10.5–21.1 inches, which is greater than the minimum legal size of 10 inches for channel catfish and white catfish (Maryland Department of Natural Resources, 2011). Only channel catfish were collected from the site. White catfish were collected from two reference locations. The lengths of white catfish (12.3–15.6 inches) collected are within the size range of channel catfish collected at site (10.5–21.1 inches) and reference locations (10.6–20.3 inches).

PCBs—Two PCBs (Aroclor-1262 and Aroclor-1268) were detected in fish samples from the site and reference areas. The lowest concentrations of PCBs in site data were detected in the sample collected from Cow Pen Creek (CPC-2-FS-CC1: 16.9 inch channel catfish containing 0.32% lipids in fillet), which had a total PCB concentration of 32 micrograms per kilogram (µg/kg). The maximum concentration of PCBs in site data was in a sample collected from Dark Head Cove upgradient from the confluence between Dark Head Cove and Cow Pen Creek, with a total PCB concentration of 1,630 µg/kg. This channel catfish (DHC-3-FS-CC1), which measured 20-inches

and had a reported 2% lipid component, is the second longest fish collected at the site. The lipid content of this fish tissue sample exceeds all others reported for the site samples.

Concentrations of total PCBs are significantly lower in all other fish tissue samples. For example, samples from the confluence of the two water bodies had a maximum total PCB concentration of 478 µg/kg in the most downgradient site sample (DHC-5-FS-CC1). The longest (21 inches) and fattiest (3.8% lipids) site fish collected (DHC-4-FS-CC3) had a total PCB concentration of 236 µg/kg, indicating that size and lipid content do not directly correlate with the total PCB concentration. The average total PCB concentration at the site was determined both with and without the sample having the maximum total PCB concentration, due to the range between the maximum concentration and the other site samples' concentrations, as discussed in the following narrative.

The average total PCB concentration at the site is 375 µg/kg, however, as indicated above, the average is strongly influenced by the site maximum-detected total PCB concentration of 1,630 µg/kg. Total PCB concentrations for all other site samples range from 32–478 µg/kg, resulting in an average site concentration of 195 µg/kg when calculated without using the maximum total PCBs concentration. Given the relatively close proximity of the site sampling locations, the average concentration is considered an accurate representation of the area nearer the Middle River Complex (MRC).

Aroclor-1262 and Aroclor-1268, which were detected in the fish tissue samples, were not detected in sediment samples from the site. The results of sediment sampling conducted near the MRC are discussed in detail in the *Additional Characterization and Sediment Sampling and Data Summary Report* (Tetra Tech, 2011). Most sediment samples collected at the site had detected concentrations of Aroclor-1260. PCB-congener distributions most likely differ between the sediment and fish tissue samples because fish tend to accumulate congeners with higher chlorine content (BEST, 2001). Aroclor-1262 and Aroclor-1268 have higher chlorine content than Aroclor-1260. Fish tissue residues are different from the original Aroclors deposited onto the sediment because of the bioaccumulation of congeners of higher chlorine content through the food chain (Cogliano, 1998).

Total PCB concentrations in reference area samples range from 12.4–217 µg/kg. Maximum and minimum concentrations were observed in Marshy Point, an area of minimal or nonexistent shoreline development. Total PCB concentrations in reference areas with typical regional waterfront development (i.e., Bowleys Quarters and Middle River) are generally similar to Marshy Point, with concentrations ranging from 25.6–89 µg/kg (Table 5-2). A comparison of site data to reference area concentrations indicates that PCB levels are generally greater in site data than in reference data. Concentrations of total PCBs in half of the site fish-tissue samples are greater than the maximum concentration of total PCBs in the reference fish-tissue samples.

MDE routinely monitors PCB concentrations (as PCB congeners) in fish tissue samples collected from numerous locations in the general Chesapeake Bay area in support of the fish advisories in effect in the area. Table 5-4 presents MDE's consumption recommendations for fish advisories affecting Middle River. Fish tissue data for samples collected by MDE from 2001–2008 are summarized in Table 5-3; sampling locations are identified in Figure 1-5. Total PCB concentrations as determined by PCB-congener analysis of regional fish tissue data and presented by fish species are in Figure 5-2.

Regional data for channel catfish and white bullhead catfish were compared to site fish tissue data. This comparison indicates that site data (maximum and average) are less than the maximum regional data concentration of 1,770 µg/kg and average regional concentration of 1,525 µg/kg observed for the channel catfish in the Patapsco River, an area with a long industrial history. Site data appear to be below regional data collected from Back River and Middle River, with average concentrations of channel catfish species of 638 µg/kg and 785 µg/kg, respectively, observed in these regional areas. Both the Back River and Middle River areas are less industrialized than those of the Patapsco River. Table 5-5 compares site data to Back River and Middle River data, as they are the data most representative of the region from which site data were collected.

Regional data from the northern-most sampling area (Gunpowder River) are slightly lower than the site data, with a maximum total PCB concentration of 276 µg/kg and average concentration of 265 µg/kg reported in channel catfish for this regional area; no regional data are available for white catfish. Fish tissue data for channel catfish in Gunpowder River appear to be consistent with reference area fish-tissue data for the same species as were collected in Marshy Point, the northern-most reference area location for this study. Total PCB concentrations in the Marshy

Point reference area for channel catfish are 172 µg/kg (MP-FS-CC1) and 217 µg/kg (MP-FS-CC2) (Figure 1-3).

Note that uncertainty is associated in comparing site data to regional data because of different analytical methods. Total PCB concentrations in the site data are a measure of Aroclors, which are commercial mixtures of PCB compounds, whereas the regional data are a measure of congeners, which are individual PCB compounds. In relation to congener specific analyses, Aroclor-specific analyses may underestimate PCB concentrations.

Sample characteristics of site, reference area, and regional fish were reviewed to determine if a correlation exists between fish size (which indicates fish age) and PCB concentrations detected in the associated fish tissue. Figure 5-3 displays the total PCB concentrations for site, reference area, and regional fish tissue samples relative to fish length. These data indicate no obvious direct correlation between fish length and total PCB concentration in these fish tissue samples.

Metals—Seven metals were detected in fish tissue samples from the site and reference areas. In general, metals concentrations in fish tissue are similar across the site and in the reference areas (Figures 1-3 and 1-4). A comparison of site data to the maximum reference area concentrations shows that copper, lead, mercury, selenium, and zinc were detected at greater concentrations in the site data than in the reference data. However, except for zinc, the site data are greater than reference area concentrations at only one site location. Zinc is greater than reference concentrations in four of eight site sampling locations; concentrations are only slightly greater than the maximum reference area concentrations (e.g., maximum site concentration of 9.8 mg/kg compared to maximum reference concentration of 7.6 mg/kg). Average metals concentrations in site data and data for reference areas, as presented in Table 5-2, further support the similarity of metals concentrations in these areas.

Several metals detected in sediment samples collected at the site were not detected in fish tissue samples (see Tetra Tech, 2011). Metals not detected in fish tissue include arsenic, beryllium, cadmium, nickel, silver, and thallium. Cadmium, which was not detected in fish tissue samples, is an example of a metal elevated in sediment samples collected near the MRC. In surface sediment (0–6 inches deep), the maximum concentration of cadmium is 296 milligrams per kilogram (mg/kg), with an average concentration of 10.9 mg/kg at the site. As detailed in

Appendix B Table B-1, the sample specific quantitation limits (SQLs) (i.e., the non-detect results) reported for cadmium for the site fish tissue samples range from 0.019–0.024 mg/kg. As a point of comparison, the USEPA Region III regional screening-level (RSL) for cadmium for fish tissue consumption is 1.4 mg/kg. Consequently, the SQLs achieved for the site-specific fish-tissue sampling event are lower than the USEPA Region III RSL for fish tissue consumption. This indicates that cadmium levels in the site-specific fish tissue samples do not exceed USEPA Region III conservative, risk based screening levels. The adequacy of the detection limits achieved for the site-specific fish-tissue sampling event will be discussed in an upcoming risk assessment being developed for the sediment and fish tissue data collected near the MRC.

TABLE 5-1

FISH TISSUE CONCENTRATIONS FOR SITE AND REFERENCE AREAS
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND
PAGE 1 OF 3

AREA:	Bowleys Quarters		Marshy Point		
SAMPLE LOCATION:	BQ1-FS		MP-FS		
SAMPLE ID:	BQ1-FS-CC1	BQ1-FS-WC1	MP-FS-CC1	MP-FS-CC2	MP-FS-WC1
SITE OR REFERENCE SAMPLE:	Reference	Reference	Reference	Reference	Reference
LENGTH OF FISH (inches):	17.5	15.6	20.3	16.1	12.3
SAMPLE DATE:	20101008	20100827	20101008	20100827	20101008
METALS (MG/KG)					
ANTIMONY	0.14 U	0.14 U	0.15 U	0.15 U	0.16 U
ARSENIC	0.19 U	0.19 U	0.2 U	0.2 U	0.22 U
BERYLLIUM	0.012 U	0.012 U	0.013 U	0.014 U	0.015 U
CADMIUM	0.02 U	0.02 U	0.021 U	0.022 U	0.024 U
CHROMIUM	**0.11 J**	**0.19 J**	**0.11 J**	**0.092 J**	**0.13 J**
COPPER	**0.6 J**	**0.82 J**	**0.42 J**	**1.5 J**	**1.5 J**
LEAD	0.12 U	0.12 U	0.13 U	0.13 U	**0.16 J**
MERCURY	**0.038**	**0.041 J**	**0.034**	**0.044 J**	**0.029 J**
NICKEL	0.32 U	0.32 U	0.34 U	0.35 U	0.38 U
SELENIUM	**0.52 K**	**0.57 K**	**0.49 K**	**0.57 K**	**0.36 J**
SILVER	0.048 U	0.048 U	0.052 U	0.052 U	0.057 U
THALLIUM	0.17 U	0.17 U	0.18 U	0.19 U	0.2 U
ZINC	**7.4**	**7.6**	**6.1**	**7.2**	**6.5**
MISCELLANEOUS PARAMETERS					
LIPIDS	**1.5**	**0.93**	**3.2**	**1.9**	**0.4**
PCBS (UG/KG)					
AROCLOR-1016	0.62 UJ	0.12 UJ	0.62 UJ	0.62 UJ	0.62 UJ
AROCLOR-1221	0.8 UJ	0.16 UJ	0.8 UJ	0.79 UJ	0.8 UJ
AROCLOR-1232	0.71 UJ	0.14 UJ	0.71 UJ	0.71 UJ	0.71 UJ
AROCLOR-1242	0.68 UJ	0.13 UJ	0.68 UJ	0.67 UJ	0.68 UJ
AROCLOR-1248	0.39 UJ	0.078 UJ	0.39 UJ	0.39 UJ	0.39 UJ
AROCLOR-1254	0.59 UJ	0.12 UJ	0.59 UJ	0.59 UJ	0.59 UJ
AROCLOR-1260	0.59 UJ	0.12 UJ	0.59 UJ	0.59 UJ	0.59 UJ
AROCLOR-1262	**40 J**	**25 J**	**110 J**	**140 J**	**8.1 J**
AROCLOR-1268	**20 J**	**14 J**	**62 J**	**77 J**	**4.3 J**
TOTAL PCBs[(1)]	**60**	**39**	**172**	**217**	**12.4**

TABLE 5-1

FISH TISSUE CONCENTRATIONS FOR SITE AND REFERENCE AREAS
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

AREA:	Middle River		Cow Pen Creek	Dark Head Cove	Dark Head Cove
SAMPLE LOCATION:	MR-FS		CPC-2	DHC-2	DHC-3
SAMPLE ID:	MR-FS-CC1	MR-FS-CC2	CPC-2-FS-CC1	DHC-2-FS-CC1	DHC-3-FS-CC1
SITE OR REFERENCE SAMPLE:	Reference	Reference	Site	Site	Site
LENGTH OF FISH (inches):	10.6	12	16.9	13	20
SAMPLE DATE:	20101007	20101007	20100826	20100825	20100826
METALS (MG/KG)					
ANTIMONY	0.15 U	**0.27 J**	0.16 U	**0.23 J**	0.16 U
ARSENIC	0.21 U	0.2 U	0.22 U	0.21 U	0.22 U
BERYLLIUM	0.014 U	0.014 U	0.015 U	0.014 U	0.015 U
CADMIUM	0.022 U	0.022 U	0.024 U	0.023 U	0.024 U
CHROMIUM	**0.13 J**	**2**	**0.09 J**	**0.13 J**	**0.14 J**
COPPER	**1.1 J**	**1.7 J**	**0.69 J**	**0.67 J**	**0.51 J**
LEAD	0.13 U	**0.17 J**	0.14 U	0.14 U	0.14 U
MERCURY	**0.055**	**0.041**	0.036 J	0.046 J	**0.12 J**
NICKEL	0.36 U	0.35 U	0.38 U	0.36 U	0.38 U
SELENIUM	**0.39 J**	**0.54 K**	**0.68 K**	**0.57 K**	**0.5 K**
SILVER	0.054 U	0.053 U	0.058 U	0.055 U	0.057 U
THALLIUM	0.19 U	0.19 U	0.21 U	0.2 U	0.2 U
ZINC	**6**	**7.4**	**7.5**	**7**	**8.1**
MISCELLANEOUS PARAMETERS					
LIPIDS	**0.25**	**0.17**	**0.74**	**0.32**	**2**
PCBS (UG/KG)					
AROCLOR-1016	0.62 UJ	0.62 UJ	0.62 UJ	0.12 UJ	3.1 U
AROCLOR-1221	0.8 UJ	0.8 UJ	0.79 UJ	0.16 UJ	3.9 U
AROCLOR-1232	0.71 UJ	0.71 UJ	0.71 UJ	0.14 UJ	3.5 U
AROCLOR-1242	0.68 UJ	0.68 UJ	0.68 UJ	0.14 UJ	3.4 U
AROCLOR-1248	0.39 UJ	0.39 UJ	0.39 UJ	0.079 UJ	2 U
AROCLOR-1254	0.59 UJ	0.59 UJ	0.59 UJ	0.12 UJ	2.9 U
AROCLOR-1260	0.59 UJ	0.59 UJ	0.59 UJ	0.12 UJ	2.9 U
AROCLOR-1262	**18 J**	**75 J**	**20 J**	**47 J**	**1500**
AROCLOR-1268	**7.6 J**	**14 J**	**12 J**	**19 J**	**130 J**
TOTAL PCBs[(1)]	**25.6**	**89**	**32**	**66**	**1630**

TABLE 5-1

FISH TISSUE CONCENTRATIONS FOR SITE AND REFERENCE AREAS
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

AREA:	Dark Head Cove			Dark Head Cove	
SAMPLE LOCATION:	DHC-4			DHC-5	
SAMPLE ID:	DHC-4-FS-CC1	DHC-4-FS-CC2	DHC-4-FS-CC3	DHC-5-FS-CC1	DHC-5-FS-CC2
SITE OR REFERENCE SAMPLE:	Site	Site	Site	Site	Site
LENGTH OF FISH (inches):	11.4	12.5	21.1	10.5	11.2
SAMPLE DATE:	20100910	20100910	20100825	20100910	20100910
METALS (MG/KG)					
ANTIMONY	0.13 U	0.16 U	0.15 U	0.16 U	0.16 U
ARSENIC	0.18 U	0.21 U	0.21 U	0.22 U	0.22 U
BERYLLIUM	0.012 U	0.014 U	0.014 U	0.015 U	0.015 U
CADMIUM	0.019 U	0.023 U	0.022 U	0.024 U	0.024 U
CHROMIUM	**0.11 J**	**0.15 J**	**0.11 J**	**0.13 J**	**0.41 J**
COPPER	**1.6 J**	**0.87 J**	**0.96 J**	**1 J**	**2 J**
LEAD	0.12 U	0.14 U	0.13 U	**0.19 J**	**0.17 J**
MERCURY	**0.044 J**	**0.027 J**	**0.045 J**	**0.047 J**	**0.03 J**
NICKEL	0.31 U	0.36 U	0.36 U	0.38 U	0.38 U
SELENIUM	**0.3 J**	**0.3 J**	**0.47 K**	**0.4 J**	**0.43 J**
SILVER	0.047 U	0.055 U	0.054 U	0.058 U	0.057 U
THALLIUM	0.17 U	0.2 U	0.19 U	0.21 U	0.2 U
ZINC	**6**	**6**	**8.2**	**9.8**	**9.7**
MISCELLANEOUS PARAMETERS					
LIPIDS	**0.6**	**0.27**	**3.8**	**0.55**	**1**
PCBS (UG/KG)					
AROCLOR-1016	0.12 UJ	0.12 U	1.2 U	0.62 UJ	0.62 UJ
AROCLOR-1221	0.16 UJ	0.16 U	1.6 U	0.8 UJ	0.8 UJ
AROCLOR-1232	0.14 UJ	0.14 U	1.4 U	0.71 UJ	0.71 UJ
AROCLOR-1242	0.14 UJ	0.13 U	1.3 U	0.68 UJ	0.68 UJ
AROCLOR-1248	0.079 UJ	0.077 U	0.78 U	0.39 UJ	0.39 UJ
AROCLOR-1254	0.12 UJ	0.12 U	1.2 U	0.59 UJ	0.59 UJ
AROCLOR-1260	0.12 UJ	0.12 U	1.2 U	0.59 UJ	0.59 UJ
AROCLOR-1262	**53 J**	**100**	**200**	**400 J**	**310 J**
AROCLOR-1268	**19 J**	**14 J**	**36 J**	**78 J**	**58 J**
TOTAL PCBs[(1)]	**72**	**114**	**236**	**478**	**368**

Notes:
Positive detections are bolded.

Footnotes:
1 - Sum of positive detections

Data Qualifier Definitions:
J = Estimated
K = Biased high
U = Non-detected

TABLE 5-2

SUMMARY STATISTICS FOR FISH TISSUE DATA
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Site Data					
	Frequency of Detection	Minimum Detection	Maximum Detection	Sample with Maximum Detection	Average of Positive Results	Standard Deviation
PCBs (ug/kg)						
AROCLOR-1262	8/8	20 J	1500	DHC-3-FS-CC1	329	492
AROCLOR-1268	8/8	12 J	130 J	DHC-3-FS-CC1	45.8	41.3
TOTAL PCBs[(1)]	8/8	32	1630	DHC-3-FS-CC1	375	532
Inorganics (mg/kg)						
ANTIMONY	1/8	0.23 J	0.23 J	DHC-2-FS-CC1	0.23	0.05
CHROMIUM	8/8	0.09 J	0.41 J	DHC-5-FS-CC2	0.16	0.10
COPPER	8/8	0.51 J	2 J	DHC-5-FS-CC2	1.0	0.51
LEAD	2/8	0.17 J	0.19 J	DHC-5-FS-CC1	0.18	0.05
MERCURY	8/8	0.027 J	0.12 J	DHC-3-FS-CC1	0.05	0.03
SELENIUM	8/8	0.3 J	0.68 K	CPC-2-FS-CC1	0.46	0.13
ZINC	8/8	6	9.8	DHC-5-FS-CC1	7.8	1.5
Miscellaneous (%)						
LIPIDS	8/8	0.27	3.8	DHC-4-FS-CC3	1.2	1.2

Associated Samples:
CPC-2-FS-CC1
DHC-2-FS-CC1
DHC-3-FS-CC1
DHC-4-FS-CC1
DHC-4-FS-CC2
DHC-4-FS-CC3
DHC-5-FS-CC1
DHC-5-FS-CC2

TABLE 5-2

SUMMARY STATISTICS FOR FISH TISSUE DATA
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	All Reference Data					
	Frequency of Detection	Minimum Detection	Maximum Detection	Sample with Maximum Detection	Average of Positive Results	Standard Deviation
PCBs (ug/kg)						
AROCLOR-1262	7/7	8.1 J	140 J	MP-FS-CC2	59.4	50.3
AROCLOR-1268	7/7	4.3 J	77 J	MP-FS-CC2	28.4	28.8
TOTAL PCBs[(1)]	7/7	12.4	217	MP-FS-CC2	87.9	78.0
Inorganics (mg/kg)						
ANTIMONY	1/7	0.27 J	0.27 J	MR-FS-CC2	0.27	0.07
CHROMIUM	7/7	0.092 J	2	MR-FS-CC2	0.39	0.71
COPPER	7/7	0.42 J	1.7 J	MR-FS-CC2	1.1	0.50
LEAD	2/7	0.16 J	0.17 J	MR-FS-CC2	0.17	0.05
MERCURY	7/7	0.029 J	0.055	MR-FS-CC1	0.04	0.01
SELENIUM	7/7	0.36 J	0.57 K	BQ1-FS-WC1/ MP-FS-CC2	0.49	0.08
ZINC	7/7	6	7.6	BQ1-FS-WC1	6.9	0.67
Miscellaneous (%)						
LIPIDS	7/7	0.17	3.2	MP-FS-CC1	1.2	1.1

Associated Samples:
BQ1-FS-CC1
BQ1-FS-WC1
MP-FS-CC1
MP-FS-CC2
MP-FS-WC1
MR-FS-CC1
MR-FS-CC2

TABLE 5-2

SUMMARY STATISTICS FOR FISH TISSUE DATA
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Reference Data - No shoreline Development					
	Frequency of Detection	Minimum Detection	Maximum Detection	Sample with Maximum Detection	Average of Positive Results	Standard Deviation
PCBs (ug/kg)						
AROCLOR-1262	3/3	8.1 J	140 J	MP-FS-CC2	86.0	69.1
AROCLOR-1268	3/3	4.3 J	77 J	MP-FS-CC2	47.8	38.4
TOTAL PCBs[(1)]	3/3	12.4	217	MP-FS-CC2	134	108
Inorganics (mg/kg)						
ANTIMONY	0/3	-- --	-- --	--	--	--
CHROMIUM	3/3	0.092 J	0.13 J	MP-FS-WC1	0.11	0.02
COPPER	3/3	0.42 J	1.5 J	MP-FS-CC2/ MP-FS-WC1	1.1	0.62
LEAD	1/3	0.16 J	0.16 J	MP-FS-WC1	0.16	0.05
MERCURY	3/3	0.029 J	0.044 J	MP-FS-CC2	0.04	0.01
SELENIUM	3/3	0.36 J	0.57 K	MP-FS-CC2	0.47	0.11
ZINC	3/3	6.1	7.2	MP-FS-CC2	6.6	0.56
Miscellaneous (%)						
LIPIDS	3/3	0.4	3.2	MP-FS-CC1	1.8	1.4

Associated Samples:
MP-FS-CC1
MP-FS-CC2
MP-FS-WC1

TABLE 5-2

SUMMARY STATISTICS FOR FISH TISSUE DATA
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Reference Data - Shoreline Development					
	Frequency of Detection	Minimum Detection	Maximum Detection	Sample with Maximum Detection	Average of Positive Results	Standard Deviation
PCBs (ug/kg)						
AROCLOR-1262	4/4	18 J	75 J	MR-FS-CC2	39.5	25.4
AROCLOR-1268	4/4	7.6 J	20 J	BQ1-FS-CC1	13.9	5.1
TOTAL PCBs(1)	4/4	25.6	89	MR-FS-CC2	53.4	27.6
Inorganics (mg/kg)						
ANTIMONY	1/4	0.27 J	0.27 J	MR-FS-CC2	0.27	0.10
CHROMIUM	4/4	0.11 J	2	MR-FS-CC2	0.61	0.93
COPPER	4/4	0.6 J	1.7 J	MR-FS-CC2	1.1	0.48
LEAD	1/4	0.17 J	0.17 J	MR-FS-CC2	0.17	0.05
MERCURY	4/4	0.038	0.055	MR-FS-CC1	0.04	0.01
SELENIUM	4/4	0.39 J	0.57 K	BQ1-FS-WC1	0.51	0.08
ZINC	4/4	6	7.6	BQ1-FS-WC1	7.1	0.74
Miscellaneous (%)						
LIPIDS	4/4	0.17	1.5	BQ1-FS-CC1	0.71	0.63

Associated Samples:
BQ1-FS-CC1
BQ1-FS-WC1
MR-FS-CC1
MR-FS-CC2

Footnotes:
1 Not a separate analytical measurement; summation of individual detected Aroclors.

Abbreviations:
J Estimated value
K Biased high
PCB Polychlorinated Biphenyls

TABLE 5-3

TOTAL PCB CONGENER CONCENTRATIONS IN FISH TISSUE SAMPLES IN THE BALTIMORE REGION [1]
SUM OF PCB CONGENER CONCENTRATIONS (µg/kg wet weight)
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

	Surface Water Body																	
	Patapsco River			Back River			Middle River			Gunpowder River			Mid Bay: Middle River to Patapsco			Jones Falls		
Species	Values	Mean	Range	Values	Mean	Range	Values	Mean	Range	Values	Mean	Range	Values	Mean	Range	Values	Mean	Range
1) American Eel	NA	---	---	695, 766, 630, 540, 863, 488,	657.4	488 - 863	400, 259	329.5	259 - 400	NA	---	---	NA	---	---	NA	---	---
2) Atlantic Menhaden	NA	---	---	338, 560, 409	435.7	338 - 560	NA	---	---	NA	---	---	NA	---	---	NA	---	---
3) Atlantic Silversides	577, 468	522.5	468 - 577	NA	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---
4) Blue Crab	25.5, 23.4, 20.7, 28.0, 106, 26.7, 77.6	44.0	20.7 - 106	NA	---	---	4.69	---	---	NA	---	---	3.09, 5.46, 17.0	8.5	3.09 - 17.0	NA	---	---
5) Blue Crab Hepa	455, 1302, 715, 1012, 1280	952.8	455 - 1302	NA	---	---	703	---	---	NA	---	---	305, 578, 731	538.0	305 - 731	NA	---	---
6) Blueback Herring	119	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---
7) Bluefish	NA	---	---	NA	---	---	NA	---	---	NA	---	---	175, 310	242.5	175 - 310	NA	---	---
8) Brown Bullhead Catfish	223, 524, 112, 125	246.0	112 - 524	NA	---	---	111	---	---	NA	---	---	NA	---	---	NA	---	---
9) Brown Trout	NA	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---	29	---	---
10) Carp	NA	---	---	1370, 711, 854, 1250, 1350	1107.0	711 - 1370	NA	---	---	NA	---	---	NA	---	---	NA	---	---
11) Channel Catfish	1280, 1770, 33.6	1028	33.6 - 1770	624, 407, 367, 915, 854, 880, 274, 408, 362, 1160, 818, 593	638.5	274 - 1160	565, 1005	785.0	565 - 1005	276, 253	264.5	253 - 276	NA	---	---	NA	---	---
12) Oyster	11.4, 3.56, 4.13	6.4	3.56 - 11.4	NA	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---
13) Rock Bass	NA	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---	12.5	---	---
14) Striped Bass	NA	---	---	NA	---	---	NA	---	---	NA	---	---	183, 199, 27.3, 271, 87.7, 145, 248, 115, 126,	148.9	27.3 - 271	NA	---	---
15) Striped Killfish	872	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---
16) White Bullhead Catfish	993	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---	NA	---	---
17) White Perch	716, 471, 553, 550, 488, 878, 985, 1030, 670, 638, 332, 585, 351, 539, 567, 372, 622, 365, 1630, 610, 393,	633.1	332 - 1630	183, 328, 246, 251, 546, 260, 420, 232, 389	317.2	232 - 546	569, 268, 406, 191	358.5	191 - 569	102, 328, 176, 190	199.0	102 - 328	286, 184, 321, 347, 368, 291	299.5	184 - 368	NA	---	---
18) White Sucker	92.3, 77.9	85.1	77.9 - 92.3	NA	---	---	NA	---	---	NA	---	---	NA	---	---	10.4, 39.5	25.0	10.4 - 39.5
19) Yellow Perch	NA	---	---	NA	---	---	449	---	---	148, 316, 125, 152, 73.4	166.9	73.4 - 316	NA	---	---	NA	---	---

Footnotes:
1 Analytical data for fillet tissue samples for Maryland stations monitored between 2001 and 2008. Data submitted to Tetra Tech via email from the MDE Science Services Administration in July 2009. The information has not been published to date.

Abbreviations:
NA No data
PCBs Polychlorinated biphenyls

TABLE 5-4

STATE OF MARYLAND CURRENT FISH ADVISORIES AFFECTING THE MIDDLE RIVER AREA
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Fish Species	Contaminant driving risk	USEPA Screening Level[1] (ppm)	Maryland Consumption Recommendations		USEPA Consumption Limits and Associated Fish Tissue Concentrations[4]		Location of Fish Advisory[6]
			(meals/yr)[2]	(meals/month)[3]	(meals/month)	Tissue Concentration[5] (ppm)	
American Eel	PCBs	0.02 C	13	1.1	1	>0.023-0.047	Middle River
Brown Bullhead	PCBs	0.02 C	38	3.2	3	>0.012-0.016	Middle River
Striped Bass	PCBs	0.02 C	9-25[7]	0.75-2.1[7]	0.5-2	>0.047-0.023	Chesapeake bay and tributaries
Small mouth bass	Methylmercury	0.4 N	48	4	4	>0.12-0.23	State wide
Large mouth bass	Methylmercury	0.4 N	48	4	4	>0.12-0.23	State wide
Yellow perch	PCBs	0.02 C	9	0.75	0.5	>0.047-0.094	Middle River
White perch	PCBs	0.02 C	12	1	1	>0.023-0.047	Middle River
Channel catfish	PCBs	0.02 C	0	0	<0.5	>0.094	Middle River, Patapsco River/Baltimore Harbor
Blue crab "mustard"	PCBs	0.02 C	0	0	<0.5	>0.094	Middle River, Mid Bay (Middle to Patapsco River), Patapsco River/Baltimore Harbor

1 - Based on fish consumption rate of 17.5 g/day, 70 kg body weight, 70-yr lifetime (USEPA, November 2000).
2 - Based on an 8 oz meal for the general population (MDE, May 2007). Maryland consumption recommendations include the following assumptions:
76 kg body weight, 30-yr exposure duration averaged over 30 yrs for carcinogens and 70 yrs for noncarcinogens (MDE, March 2009).
3 - Converted by reviewer using 12 months/year
4 - USEPA, November 2000.
5 - Concentrations based on consumption of 8 oz meals, e.g. the 3-meal-per-month level represents the concentrations associated with 3 to 3.9 meals
6 - Location used for Maryland Consumption Recommendations listed; however, other waterbodies have fish advisories for these species with different consumption recommendations. See Recommended Maximum Meals Each Year for Maryland Waters (MDE, May 2007).
7 - Seasonally based recommendation

C = Carcinogen (based on a 10^{-5} risk level)
N = Noncarcinogen
MDE = Maryland Department of the Environment
PCB = Polychlorinated biphenyl
USEPA = United States Environmental Protection Agency

MDE. May 2007. Recommended Maximum Meals Each Year for Maryland Waters. Available at:
http://www.mde.state.md.us/programs/Marylander/CitizensInfoCenterHome/Documents/www.mde.state.md.us/assets/document/Fish_Advisory_Table_2007.pdf

MDE. March 2009. Technical Support Document for establishing Fish and Shellfish Consumption Advisories in Maryland. Science Services Administration.

USEPA. November 2000. Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume 1 and 2. Third Edition. Office of Water. Document No. EPA 823-B-00-008. Available at: http://water.epa.gov/scitech/swguidance/fishshellfish/techguidance/guidance.cfm

Table 5-5

Total PCB Concentrations in Fish Tissue from Site Compared to Region

	Surface Water Body									
	Site Data[1]				Back River[2]			Middle River[2]		
Species	Values	Mean[3]	Mean[4]	Range	Values	Mean	Range	Values	Mean	Range
Channel Catfish	32, 66, 1630, 72, 114, 236, 478, 368	375	195	32-1630	624, 407, 367, 915, 854, 880, 274, 408, 362, 1160, 818, 593	638.5	274 - 1160	565, 1005	785.0	565 - 1005

1 Data presented in µg/kg wet weight for fillet samples of total PCB concentrations determined from PCB-Aroclor concentrations

2 Data presented in µg/kg wet weight for fillet samples of total PCB concentrations determined from PCB-congener concentrations for fillet tissue samples for Maryland stations monitored between 2001-2008. Data submitted to Tetra Tech via email from the MDE Science Services Administration in July 2009. The information has not yet been published

3 Including maximum concentration

4 Excluding maximum concentration

FIGURE 5-1

TOTAL PCB CONCENTRATIONS IN SITE, REFERENCE, AND REGIONAL FISH TISSUE DATA
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

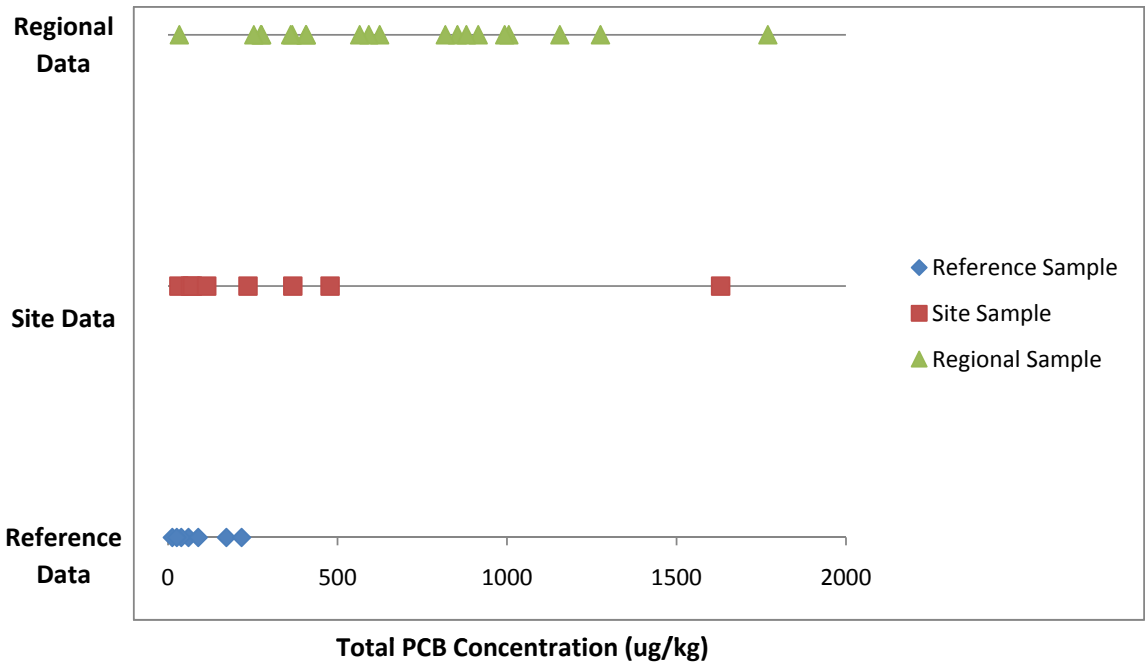


FIGURE 5−2
TOTAL PCB CONGENER CONCENTRATIONS IN BALTIMORE REGION FISH
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

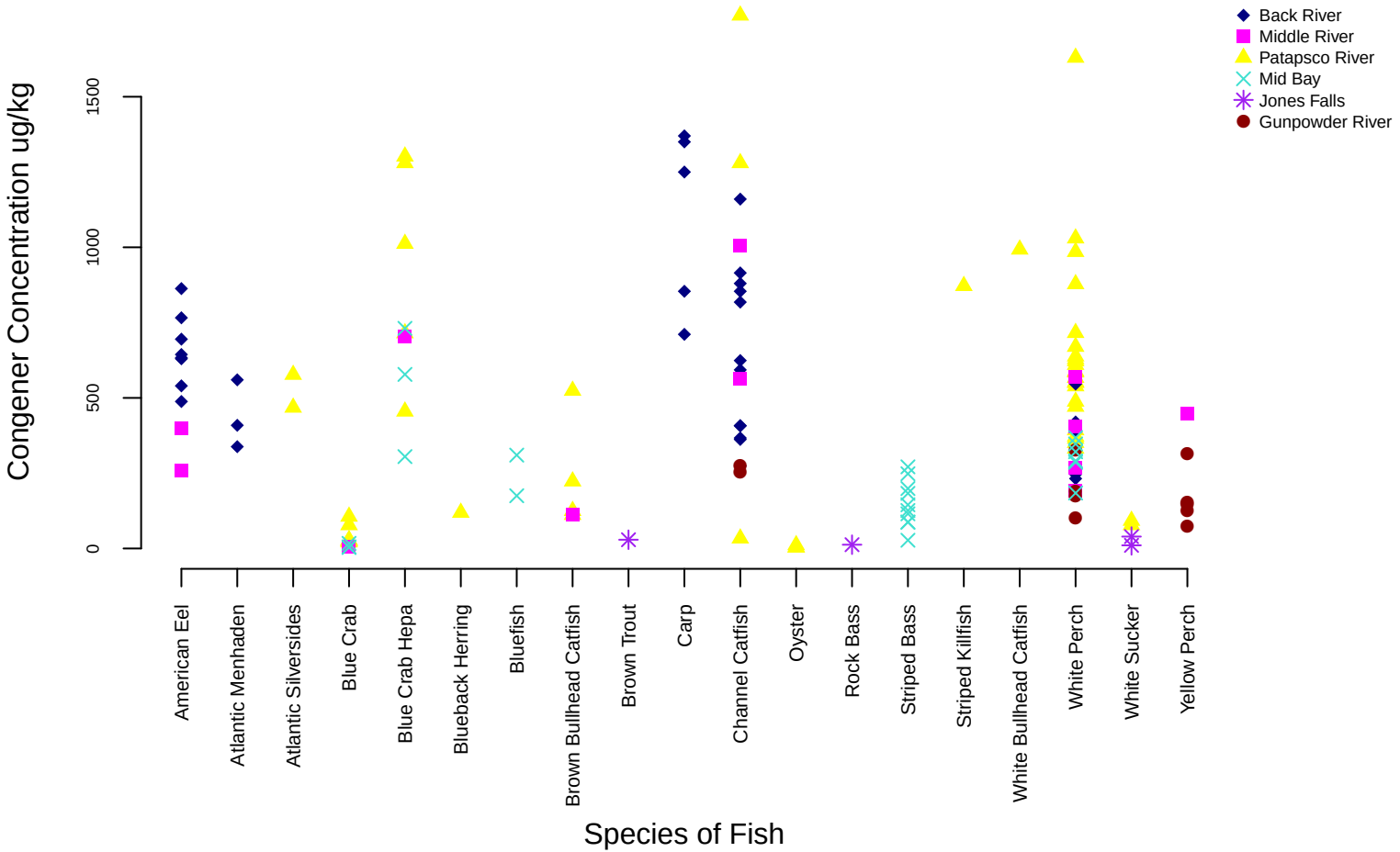
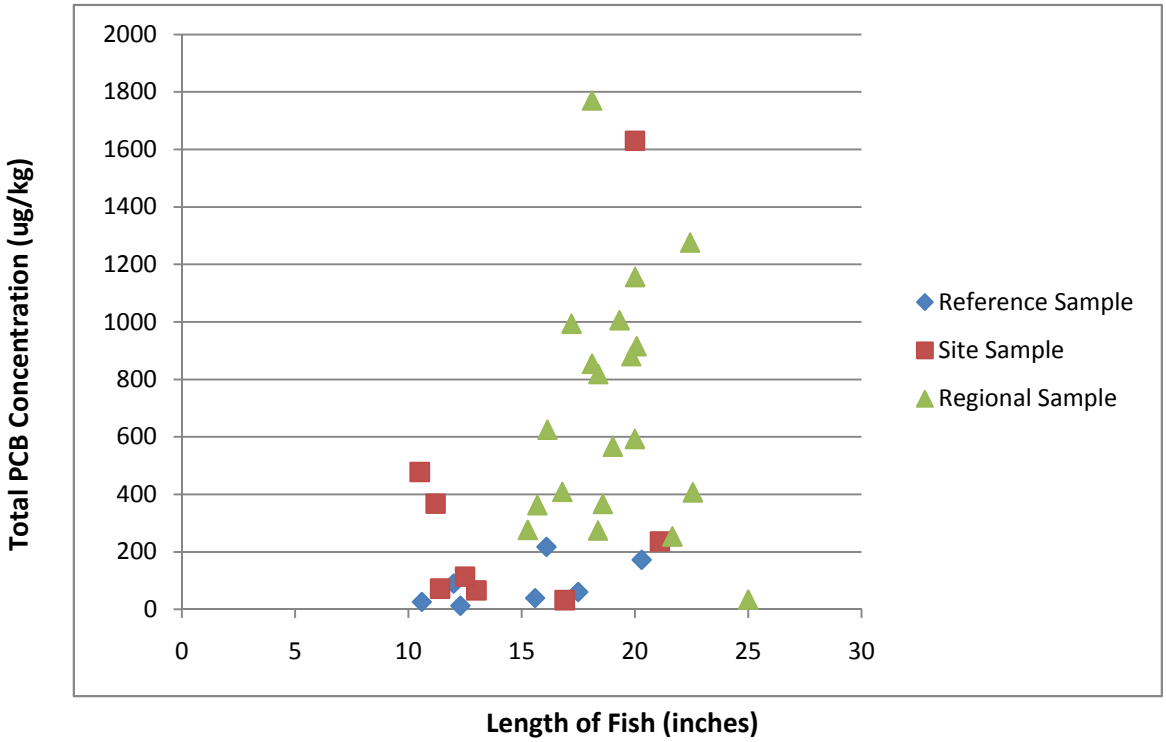


FIGURE 5-3

TOTAL PCB CONCENTRATIONS IN RELATION TO FISH SIZE
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND



Section 6
Conclusions

Here is a summary of the findings presented above:

- Concentrations of detected chemicals in fish tissue samples collected near the Middle River Complex (MRC) study area are similar to reference or regional concentrations. Average total polychlorinated biphenyl (PCB) concentrations in channel catfish (the species most frequently collected in this study) are less than average concentrations reported for regional samples from Back River and Middle River, which are most likely representative of the region from which the site data were collected. Metals concentrations in channel catfish from the site are generally similar to reference concentrations, based on a comparison of site versus reference area average concentrations.

- The lipid content and size of fish collected from the site, from reference locations, and compiled from regional data do not appear to correlate with the polychlorinated biphenyl concentrations detected.

- Fish accumulate polychlorinated biphenyl s with higher chlorine content because of bioaccumulation through the food chain, resulting in different residues in fish tissue versus sediment samples.

- Several metals detected in the sediment were not detected in fish tissue, including cadmium, which is elevated in sediment samples collected from the site.

Several fish advisories are in effect in many areas of the Chesapeake Bay, including the Middle River area. Fish advisories including the Middle River area are due to risk from polychlorinated biphenyls and methyl mercury. These chemicals are being monitored by the Maryland Department of the Environment (MDE) and fish consumption recommendations are in place due to Maryland fish advisories.

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Section 7
References

1) MDE Science Services Administration, 2009. *Standard Operating Procedures for Fish and Shellfish Collection and Analysis*.

2) Tetra Tech, Inc., 2011. *Additional Characterization and Sediment Sampling and Data Summary Report. Middle River Complex, Middle River, Maryland*. February.

3) Tetra Tech, Inc., 2010. *Additional Characterization and Sediment-Sampling Work Plan. Middle River Complex, Middle River, Maryland*. July.

4) Maryland DNR (Department of Natural Resources), 2011. *Summary of Maryland Tidal Recreational Fisheries Regulations.* Available at: http://dnr.maryland.gov/fisheries/regulations/recregchrt.asp. (Accessed January 24, 2011.)

5) BEST (Board on Environmental Studies and Toxicology), 2001. "A Risk Management Strategy for PCB Contaminated Sediments."Chapter 6: *Analyzing Risks*. National Academy Press, Washington, D.C.

6) Cogliano, V. 1998. "Assessing the Cancer Risk from Environmental PCBs." *Environmental Health Perspectives* 106 (6): 317-323.

7) USEPA, September 1994. Region III Modifications to the National Functional Guidelines for Organic Data Review, Multi-Media, Multi-Concentration. USEPA Region III Central Regional Laboratory - Quality Assurance Branch.

8) USEPA, April 1993. Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses. USEPA Region III Central Regional Laboratory - Quality Assurance Branch.

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Appendices appear on CD only.

APPENDIX A—DATA VALIDATION

APPENDIX B—DATA TABLES

APPENDIX A—DATA VALIDATION

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **M. MARTIN** **DATE: DECEMBER 8, 2010**

FROM: **LEANNE M. GANSER** **COPIES: DV FILE**

SUBJECT: **DATA VALIDATION – METALS AND LIPIDS**
MIDDLE RIVER CENTER
SAMPLE DELIVERY GROUP (SDG) – C0J300446

SAMPLES: 15/Fish Tissue/

BQ1-FS-CC1	BQ1-FS-WC1	CPC-2-FS-CC1
DHC-2-FS-CC1	DHC-3-FS-CC1	DHC-4-FS-CC1
DHC-4-FS-CC2	DHC-4-FS-CC3	DHC-5-FS-CC1
DHC-5-FS-CC2	MP-FS-CC1	MP-FS-CC2
MP-FS-WC1	MR-FS-CC1	MR-FS-CC2

Overview

The sample set for Middle River Center, SDG C0J300446, consists of fifteen (15) fish tissue samples. No field duplicate pairs were included within this SDG.

All samples were analyzed for select metals and lipids. The samples were collected by Tetra Tech NUS on August 25-27, September 10, and October 7-8, 2010 and analyzed by Test America. All analyses were conducted using SW-846 methods 6010B for metals, 7471A for mercury and lipids were determined by total residues procedure.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, laboratory control sample recoveries, matrix spike / matrix spike duplicate recoveries, ICP serial dilution results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems – None.

Minor Problems

- Mercury was analyzed outside of the 28 day holding time for samples BQ1-FS-WC1, CPC-2-FS-CC1, DHC-2-FS-CC1, DHC-3-FS-CC1, DHC-4-FS-CC1, DHC-4-FS-CC2, DHC-4-FS-CC3, DHC-5-FS-CC1, DHC-5-FS-CC2, and MP-FS-CC2. Positive results for mercury in the aforementioned samples were qualified as estimated, "J".

- The CRDL percent recoveries for lead, selenium, and thallium on 11/5/2010 were > 110% quality control limit affecting all samples. Positive results < 2X CRDL reported for lead and selenium were qualified as biased high, "K", or estimated, "J", due to conflicting bias. No action was taken for thallium as all results were nondetects.

- Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated, "J".

Notes

Nondetected results were reported to the MDL.

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Beryllium	0.2 ug/L	0.1 mg/kg
Zinc[1]	0.34 mg/kg	1.7 mg/kg

1. Maximum concentration in preparation blank.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No action was taken as results were nondetects or greater than the blank action level.

Executive Summary

Laboratory Performance: The CRDL percent recoveries for lead, selenium, and thallium were outside the 90-110% quality control limits. Several analytes were present in the laboratory method / preparation blanks.

Other Factors Affecting Data Quality: Positive results reported below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to Region III modifications to the "National Functional Guidelines for Inorganic Data Validation", April 1993.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech NUS
Leanne M. Ganser
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % 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 = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
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 (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 02903	NSAMPLE	BQ1-FS-CC1			BQ1-FS-WC1			CPC-2-FS-CC1			DHC-2-FS-CC1		
SDG: C0J300446	LAB_ID	C0J300446002			C0J300446001			C0J300446008			C0J300446005		
FRACTION: M	SAMP_DATE	10/8/2010			8/27/2010			8/26/2010			8/25/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.14	U		0.14	U		0.16	U		0.23	J	P
ARSENIC		0.19	U		0.19	U		0.22	U		0.21	U	
BERYLLIUM		0.012	U		0.012	U		0.015	U		0.014	U	
CADMIUM		0.02	U		0.02	U		0.024	U		0.023	U	
CHROMIUM		0.11	J	P	0.19	J	P	0.09	J	P	0.13	J	P
COPPER		0.6	J	P	0.82	J	P	0.69	J	P	0.67	J	P
LEAD		0.12	U		0.12	U		0.14	U		0.14	U	
MERCURY		0.038			0.041	J	H	0.036	J	H	0.046	J	H
NICKEL		0.32	U		0.32	U		0.38	U		0.36	U	
SELENIUM		0.52	K	C	0.57	K	C	0.68	K	C	0.57	K	C
SILVER		0.048	U		0.048	U		0.058	U		0.055	U	
THALLIUM		0.17	U		0.17	U		0.21	U		0.2	U	
ZINC		7.4			7.6			7.5			7		

PROJ_NO: 02903	NSAMPLE	DHC-3-FS-CC1			DHC-4-FS-CC1			DHC-4-FS-CC2			DHC-4-FS-CC3		
SDG: C0J300446	LAB_ID	C0J300446003			C0J300446006			C0J300446007			C0J300446004		
FRACTION: M	SAMP_DATE	8/26/2010			9/10/2010			9/10/2010			8/25/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.16	U		0.13	U		0.16	U		0.15	U	
ARSENIC		0.22	U		0.18	U		0.21	U		0.21	U	
BERYLLIUM		0.015	U		0.012	U		0.014	U		0.014	U	
CADMIUM		0.024	U		0.019	U		0.023	U		0.022	U	
CHROMIUM		0.14	J	P	0.11	J	P	0.15	J	P	0.11	J	P
COPPER		0.51	J	P	1.6	J	P	0.87	J	P	0.96	J	P
LEAD		0.14	U		0.12	U		0.14	U		0.13	U	
MERCURY		0.12	J	H	0.044	J	H	0.027	J	HP	0.045	J	H
NICKEL		0.38	U		0.31	U		0.36	U		0.36	U	
SELENIUM		0.5	K	C	0.3	J	CP	0.3	J	CP	0.47	K	C
SILVER		0.057	U		0.047	U		0.055	U		0.054	U	
THALLIUM		0.2	U		0.17	U		0.2	U		0.19	U	
ZINC		8.1			6			6			8.2		

PROJ_NO: 02903	NSAMPLE	DHC-5-FS-CC1			DHC-5-FS-CC2			MP-FS-CC1			MP-FS-CC2		
SDG: C0J300446	LAB_ID	C0J300446014			C0J300446015			C0J300446011			C0J300446010		
FRACTION: M	SAMP_DATE	9/10/2010			9/10/2010			10/8/2010			8/27/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.16	U		0.16	U		0.15	U		0.15	U	
ARSENIC		0.22	U		0.22	U		0.2	U		0.2	U	
BERYLLIUM		0.015	U		0.015	U		0.013	U		0.014	U	
CADMIUM		0.024	U		0.024	U		0.021	U		0.022	U	
CHROMIUM		0.13	J	P	0.41	J	P	0.11	J	P	0.092	J	P
COPPER		1	J	P	2	J	P	0.42	J	P	1.5	J	P
LEAD		0.19	J	CP	0.17	J	CP	0.13	U		0.13	U	
MERCURY		0.047	J	H	0.03	J	HP	0.034			0.044	J	H
NICKEL		0.38	U		0.38	U		0.34	U		0.35	U	
SELENIUM		0.4	J	CP	0.43	J	CP	0.49	K	C	0.57	K	C
SILVER		0.058	U		0.057	U		0.052	U		0.052	U	
THALLIUM		0.21	U		0.2	U		0.18	U		0.19	U	
ZINC		9.8			9.7			6.1			7.2		

PROJ_NO: 02903	NSAMPLE	MP-FS-WC1			MR-FS-CC1			MR-FS-CC2		
SDG: C0J300446	LAB_ID	C0J300446009			C0J300446013			C0J300446012		
FRACTION: M	SAMP_DATE	10/8/2010			10/7/2010			10/7/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS									
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.16	U		0.15	U		0.27	J	P
ARSENIC		0.22	U		0.21	U		0.2	U	
BERYLLIUM		0.015	U		0.014	U		0.014	U	
CADMIUM		0.024	U		0.022	U		0.022	U	
CHROMIUM		0.13	J	P	0.13	J	P	2		
COPPER		1.5	J	P	1.1	J	P	1.7	J	P
LEAD		0.16	J	CP	0.13	U		0.17	J	CP
MERCURY		0.029	J	P	0.055			0.041		
NICKEL		0.38	U		0.36	U		0.35	U	
SELENIUM		0.36	J	CP	0.39	J	CP	0.54	K	C
SILVER		0.057	U		0.054	U		0.053	U	
THALLIUM		0.2	U		0.19	U		0.19	U	
ZINC		6.5			6			7.4		

PROJ_NO: 02903	NSAMPLE	BQ1-FS-CC1			BQ1-FS-WC1			CPC-2-FS-CC1			DHC-2-FS-CC1		
SDG: C0J300446	LAB_ID	C0J300446002			C0J300446001			C0J300446008			C0J300446005		
FRACTION: MISC	SAMP_DATE	10/8/2010			8/27/2010			8/26/2010			8/25/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
LIPIDS		1.5			0.93			0.74			0.32		

PROJ_NO: 02903	NSAMPLE	DHC-3-FS-CC1			DHC-4-FS-CC1			DHC-4-FS-CC2			DHC-4-FS-CC3		
SDG: C0J300446	LAB_ID	C0J300446003			C0J300446006			C0J300446007			C0J300446004		
FRACTION: MISC	SAMP_DATE	8/26/2010			9/10/2010			9/10/2010			8/25/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
LIPIDS		2			0.6			0.27			3.8		

PROJ_NO: 02903	NSAMPLE	DHC-5-FS-CC1			DHC-5-FS-CC2			MP-FS-CC1			MP-FS-CC2		
SDG: C0J300446	LAB_ID	C0J300446014			C0J300446015			C0J300446011			C0J300446010		
FRACTION: MISC	SAMP_DATE	9/10/2010			9/10/2010			10/8/2010			8/27/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	%			%			%			%		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
LIPIDS		0.55			1			3.2			1.9		

PROJ_NO: 02903	NSAMPLE	MP-FS-WC1			MR-FS-CC1			MR-FS-CC2		
SDG: C0J300446	LAB_ID	C0J300446009			C0J300446013			C0J300446012		
FRACTION: MISC	SAMP_DATE	10/8/2010			10/7/2010			10/7/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM		
	UNITS	%			%			%		
	PCT_SOLIDS									
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
LIPIDS		0.4			0.25			0.17		

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

Tetra Tech NUS, Inc

Client Sample ID: BQ1-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-002
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10
% Moisture.....:
Matrix.....: BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.038**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C2L1AC**
		Dilution Factor: 1		Analysis Time..: 09:28	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.42	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AD
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.048	
Arsenic	ND	0.83	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AE
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Beryllium	ND	0.33	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AF
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.012	
Cadmium	ND	0.42	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AG
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.020	
Chromium	**0.11 B**	**0.42**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2L1AH**
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.071	
Copper	**0.60 B**	**2.1**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2L1AJ**
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.28	
Nickel	ND	3.3	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AK
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.32	
Lead	ND	0.25	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AL
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.12	

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Tetra Tech NUS, Inc

Client Sample ID: BQ1-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-002 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.83	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AM
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	
Selenium	**0.52**	**0.42**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2L1AN**
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.17	
Thallium	ND	0.83	mg/kg	SW846 6010B	11/04-11/05/10	L9C2L1AP
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.17	
Zinc	**7.4 J**	**1.7**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2L1AQ**
		Dilution Factor: 0.83		Analysis Time..: 12:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: BQ1-FS-WC1

TOTAL Metals

Lot-Sample #...: C0J300446-001
Date Sampled...: 08/27/10 Date Received..: 10/30/10 Matrix.....: BIOLOGIC
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.041**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C2F1AC**
		Dilution Factor: 1		Analysis Time..: 09:23	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.42	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AD
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.048	
Arsenic	ND	0.83	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AE
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Beryllium	ND	0.33	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AF
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.012	
Cadmium	ND	0.42	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AG
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.020	
Chromium	**0.19 B**	**0.42**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2F1AH**
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.071	
Copper	**0.82 B**	**2.1**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2F1AJ**
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.28	
Nickel	ND	3.3	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AK
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.32	
Lead	ND	0.25	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AL
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.12	

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Tetra Tech NUS, Inc

Client Sample ID: BQ1-FS-WC1

TOTAL Metals

Lot-Sample #...: C0J300446-001 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.83	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AM
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	
Selenium	**0.57**	**0.42**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2F1AN**
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.17	
Thallium	ND	0.83	mg/kg	SW846 6010B	11/04-11/05/10	L9C2F1AP
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.17	
Zinc	**7.6 J**	**1.7**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2F1AQ**
		Dilution Factor: 0.83		Analysis Time..: 10:50	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: CPC-2-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-008 **Matrix.....:** BIOLOGIC
Date Sampled...: 08/26/10 **Date Received..:** 10/30/10
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.036**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C271AC**
		Dilution Factor: 1		Analysis Time..: 09:42	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AD
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.058	
Arsenic	ND	1.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AE
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	
Beryllium	ND	0.40	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AF
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.015	
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AG
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.024	
Chromium	**0.090 B**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C271AH**
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.085	
Copper	**0.69 B**	**2.5**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C271AJ**
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.34	
Nickel	ND	4.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AK
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.38	
Lead	ND	0.30	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AL
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	

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Tetra Tech NUS, Inc

Client Sample ID: CPC-2-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-008 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	1.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AM
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.16	
Selenium	**0.68**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C271AN**
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Thallium	ND	1.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C271AP
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Zinc	**7.5 J**	**2.0**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C271AQ**
		Dilution Factor: 1		Analysis Time..: 10:39	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: DHC-2-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-005 **Matrix.....:** BIOLOGIC
Date Sampled...: 08/25/10 **Date Received..:** 10/30/10
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.046**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C201AC**
		Dilution Factor: 1		Analysis Time..: 09:37	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.48	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AD
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.055	
Arsenic	ND	0.95	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AE
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Beryllium	ND	0.38	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AF
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.014	
Cadmium	ND	0.48	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AG
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.023	
Chromium	**0.13 B**	**0.48**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C201AH**
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.081	
Copper	**0.67 B**	**2.4**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C201AJ**
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.32	
Nickel	ND	3.8	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AK
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.36	
Lead	ND	0.28	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AL
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	

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Tetra Tech NUS, Inc

Client Sample ID: DHC-2-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-005 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	0.23 B	0.95	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AM
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.16	
Selenium	0.57	0.48	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AN
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Thallium	ND	0.95	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AP
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Zinc	7.0 J	1.9	mg/kg	SW846 6010B	11/04-11/05/10	L9C201AQ
		Dilution Factor: 0.95		Analysis Time..: 10:23	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: DHC-3-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-003
Date Sampled...: 08/26/10 Date Received..: 10/30/10 Matrix.....: BIOLOGIC
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.12**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C2N1AC**
		Dilution Factor: 1		Analysis Time..: 09:33	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AD
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.057	
Arsenic	ND	0.99	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AE
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	
Beryllium	ND	0.40	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AF
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.015	
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AG
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.024	
Chromium	**0.14 B**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2N1AH**
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.084	
Copper	**0.51 B**	**2.5**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2N1AJ**
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.34	
Nickel	ND	4.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AK
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.38	
Lead	ND	0.30	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AL
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	

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Tetra Tech NUS, Inc

Client Sample ID: DHC-3-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-003 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.99	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AM
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.16	
Selenium	**0.50**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2N1AN**
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Thallium	ND	0.99	mg/kg	SW846 6010B	11/04-11/05/10	L9C2N1AP
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Zinc	**8.1 J**	**2.0**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2N1AQ**
		Dilution Factor: 0.99		Analysis Time..: 11:04	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-006
Date Sampled...: 09/10/10 **Date Received..:** 10/30/10
% Moisture.....:
Matrix.....: BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.044**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C231AC**
		Dilution Factor: 1		Analysis Time..: 09:39	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.40	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AD
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.047	
Arsenic	ND	0.81	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AE
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.18	
Beryllium	ND	0.32	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AF
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.012	
Cadmium	ND	0.40	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AG
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.019	
Chromium	**0.11 B**	**0.40**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C231AH**
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.069	
Copper	**1.6 B**	**2.0**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C231AJ**
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.28	
Nickel	ND	3.2	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AK
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.31	
Lead	ND	0.24	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AL
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.12	

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Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-006 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.81	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AM
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.13	
Selenium	**0.30 B**	**0.40**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C231AN**
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.17	
Thallium	ND	0.81	mg/kg	SW846 6010B	11/04-11/05/10	L9C231AP
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.17	
Zinc	**6.0 J**	**1.6**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C231AQ**
		Dilution Factor: 0.81		Analysis Time..: 10:28	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.18	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-007
Date Sampled...: 09/10/10 **Date Received..:** 10/30/10
% Moisture.....:
Matrix.....: BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.027 B**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C261AC**
		Dilution Factor: 1		Analysis Time..: 09:41	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.48	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AD
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.055	
Arsenic	ND	0.95	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AE
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Beryllium	ND	0.38	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AF
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.014	
Cadmium	ND	0.48	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AG
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.023	
Chromium	**0.15 B**	**0.48**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C261AH**
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.081	
Copper	**0.87 B**	**2.4**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C261AJ**
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.32	
Nickel	ND	3.8	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AK
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.36	
Lead	ND	0.28	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AL
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	

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Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-007 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.95	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AM
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.16	
Selenium	**0.30 B**	**0.48**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C261AN**
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Thallium	ND	0.95	mg/kg	SW846 6010B	11/04-11/05/10	L9C261AP
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Zinc	**6.0 J**	**1.9**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C261AQ**
		Dilution Factor: 0.95		Analysis Time..: 10:34	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC3

TOTAL Metals

Lot-Sample #...: C0J300446-004
Date Sampled...: 08/25/10 **Date Received..:** 10/30/10 **Matrix.....:** BIOLOGIC
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.045**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C2R1AC**
		Dilution Factor: 1		Analysis Time..: 09:35	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.46	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AD
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.054	
Arsenic	ND	0.93	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AE
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Beryllium	ND	0.37	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AF
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.014	
Cadmium	ND	0.46	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AG
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.022	
Chromium	**0.11 B**	**0.46**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2R1AH**
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.079	
Copper	**0.96 B**	**2.3**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2R1AJ**
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.32	
Nickel	ND	3.7	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AK
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.36	
Lead	ND	0.28	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AL
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.13	

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Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC3

TOTAL Metals

Lot-Sample #...: C0J300446-004 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.93	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AM
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.15	
Selenium	**0.47**	**0.46**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2R1AN**
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Thallium	ND	0.93	mg/kg	SW846 6010B	11/04-11/05/10	L9C2R1AP
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Zinc	**8.2 J**	**1.9**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C2R1AQ**
		Dilution Factor: 0.93		Analysis Time..: 11:21	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: DHC5-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-014 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/10/10 **Date Received..:** 10/30/10
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.047**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C351AC**
		Dilution Factor: 1		Analysis Time..: 09:57	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C351AD
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.058	
Arsenic	ND	1.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C351AE
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	
Beryllium	ND	0.40	mg/kg	SW846 6010B	11/04-11/05/10	L9C351AF
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.015	
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C351AG
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.024	
Chromium	**0.13 B**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C351AH**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.085	
Copper	**1.0 B**	**2.5**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C351AJ**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.34	
Nickel	ND	4.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C351AK
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.38	
Lead	**0.19 B**	**0.30**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C351AL**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	

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Tetra Tech NUS, Inc

Client Sample ID: DHC5-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-014 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	1.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C351AM
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.16	
Selenium	**0.40 B**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C351AN**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Thallium	ND	1.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C351AP
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Zinc	**9.8 J**	**2.0**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C351AQ**
		Dilution Factor: 1		Analysis Time..: 11:26	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: DHC5-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-015 **Matrix.....:** BIOLOGIC
Date Sampled...: 09/10/10 **Date Received..:** 10/30/10
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.030 B**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C391AC**
		Dilution Factor: 1		Analysis Time..: 09:58	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.49	mg/kg	SW846 6010B	11/04-11/05/10	L9C391AD
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.057	
Arsenic	ND	0.98	mg/kg	SW846 6010B	11/04-11/05/10	L9C391AE
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	
Beryllium	ND	0.39	mg/kg	SW846 6010B	11/04-11/05/10	L9C391AF
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.015	
Cadmium	ND	0.49	mg/kg	SW846 6010B	11/04-11/05/10	L9C391AG
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.024	
Chromium	**0.41 B**	**0.49**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C391AH**
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.083	
Copper	**2.0 B**	**2.4**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C391AJ**
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.34	
Nickel	ND	3.9	mg/kg	SW846 6010B	11/04-11/05/10	L9C391AK
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.38	
Lead	**0.17 B**	**0.29**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C391AL**
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	

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Tetra Tech NUS, Inc

Client Sample ID: DHC5-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-015 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.98	mg/kg	SW846 6010B	11/04-11/05/10	L9C391AM
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.16	
Selenium	**0.43 B**	**0.49**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C391AN**
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Thallium	ND	0.98	mg/kg	SW846 6010B	11/04-11/05/10	L9C391AP
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Zinc	**9.7 J**	**2.0**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C391AQ**
		Dilution Factor: 0.98		Analysis Time..: 11:32	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: MP-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-011 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.034**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C3G1AC**
		Dilution Factor: 1		Analysis Time..: 09:52	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.44	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AD
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.052	
Arsenic	ND	0.89	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AE
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Beryllium	ND	0.36	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AF
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.013	
Cadmium	ND	0.44	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AG
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.021	
Chromium	**0.11 B**	**0.44**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3G1AH**
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.076	
Copper	**0.42 B**	**2.2**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3G1AJ**
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.30	
Nickel	ND	3.6	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AK
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.34	
Lead	ND	0.27	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AL
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.13	

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Tetra Tech NUS, Inc

Client Sample ID: MP-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-011 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.89	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AM
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.15	
Selenium	**0.49**	**0.44**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3G1AN**
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.18	
Thallium	ND	0.89	mg/kg	SW846 6010B	11/04-11/05/10	L9C3G1AP
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.18	
Zinc	**6.1 J**	**1.8**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3G1AQ**
		Dilution Factor: 0.89		Analysis Time..: 11:43	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: MP-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-010
Date Sampled...: 08/27/10 Date Received..: 10/30/10 Matrix.....: BIOLOGIC
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.044**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C3C1AC**
		Dilution Factor: 1		Analysis Time..: 09:50	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.45	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AD
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.052	
Arsenic	ND	0.90	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AE
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Beryllium	ND	0.36	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AF
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.014	
Cadmium	ND	0.45	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AG
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.022	
Chromium	**0.092 B**	**0.45**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3C1AH**
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.076	
Copper	**1.5 B**	**2.2**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3C1AJ**
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.31	
Nickel	ND	3.6	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AK
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.35	
Lead	ND	0.27	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AL
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.13	

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Tetra Tech NUS, Inc

Client Sample ID: MP-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-010 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.90	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AM
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.15	
Selenium	**0.57**	**0.45**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3C1AN**
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Thallium	ND	0.90	mg/kg	SW846 6010B	11/04-11/05/10	L9C3C1AP
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Zinc	**7.2 J**	**1.8**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3C1AQ**
		Dilution Factor: 0.9		Analysis Time..: 11:37	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: MP-FS-WC1

TOTAL Metals

Lot-Sample #...: C0J300446-009
Date Sampled...: 10/08/10 Date Received..: 10/30/10 Matrix.....: BIOLOGIC
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.029 B**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C291AC**
		Dilution Factor: 1		Analysis Time..: 09:44	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C291AD
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.057	
Arsenic	ND	0.99	mg/kg	SW846 6010B	11/04-11/05/10	L9C291AE
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	
Beryllium	ND	0.40	mg/kg	SW846 6010B	11/04-11/05/10	L9C291AF
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.015	
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/04-11/05/10	L9C291AG
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.024	
Chromium	**0.13 B**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C291AH**
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.084	
Copper	**1.5 B**	**2.5**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C291AJ**
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.34	
Nickel	ND	4.0	mg/kg	SW846 6010B	11/04-11/05/10	L9C291AK
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.38	
Lead	**0.16 B**	**0.30**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C291AL**
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.14	

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Tetra Tech NUS, Inc

Client Sample ID: MP-FS-WC1

TOTAL Metals

Lot-Sample #...: C0J300446-009 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.99	mg/kg	SW846 6010B	11/04-11/05/10	L9C291AM
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.16	
Selenium	**0.36 B**	**0.50**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C291AN**
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Thallium	ND	0.99	mg/kg	SW846 6010B	11/04-11/05/10	L9C291AP
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Zinc	**6.5 J**	**2.0**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C291AQ**
		Dilution Factor: 0.99		Analysis Time..: 10:45	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.22	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: MR-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-013 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/07/10 **Date Received..:** 10/30/10
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.055**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C3L1AC**
		Dilution Factor: 1		Analysis Time..: 09:55	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.46	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AD
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.054	
Arsenic	ND	0.93	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AE
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	
Beryllium	ND	0.37	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AF
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.014	
Cadmium	ND	0.46	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AG
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.022	
Chromium	**0.13 B**	**0.46**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3L1AH**
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.079	
Copper	**1.1 B**	**2.3**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3L1AJ**
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.32	
Nickel	ND	3.7	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AK
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.36	
Lead	ND	0.28	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AL
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.13	

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Tetra Tech NUS, Inc

Client Sample ID: MR-FS-CC1

TOTAL Metals

Lot-Sample #...: C0J300446-013 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	ND	0.93	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AM
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.15	
Selenium	**0.39 B**	**0.46**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3L1AN**
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Thallium	ND	0.93	mg/kg	SW846 6010B	11/04-11/05/10	L9C3L1AP
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Zinc	**6.0 J**	**1.9**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3L1AQ**
		Dilution Factor: 0.93		Analysis Time..: 12:10	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.21	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech NUS, Inc

Client Sample ID: MR-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-012
Date Sampled...: 10/07/10 Date Received..: 10/30/10
% Moisture.....:
Matrix.....: BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 0307023						
Mercury	**0.041**	**0.033**	**mg/kg**	**SW846 7471A**	**11/03/10**	**L9C3J1AC**
		Dilution Factor: 1		Analysis Time..: 09:53	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA		MS Run #.....: 0307013	MDL.....: 0.011	
Prep Batch #...: 0307214						
Silver	ND	0.46	mg/kg	SW846 6010B	11/04-11/05/10	L9C3J1AD
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.053	
Arsenic	ND	0.91	mg/kg	SW846 6010B	11/04-11/05/10	L9C3J1AE
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	
Beryllium	ND	0.36	mg/kg	SW846 6010B	11/04-11/05/10	L9C3J1AF
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.014	
Cadmium	ND	0.46	mg/kg	SW846 6010B	11/04-11/05/10	L9C3J1AG
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.022	
Chromium	**2.0**	**0.46**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3J1AH**
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.077	
Copper	**1.7 B**	**2.3**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3J1AJ**
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.31	
Nickel	ND	3.6	mg/kg	SW846 6010B	11/04-11/05/10	L9C3J1AK
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.35	
Lead	**0.17 B**	**0.27**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3J1AL**
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.13	

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Tetra Tech NUS, Inc

Client Sample ID: MR-FS-CC2

TOTAL Metals

Lot-Sample #...: C0J300446-012 Matrix.....: BIOLOGI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony	**0.27 B**	**0.91**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3J1AM**
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.15	
Selenium	**0.54**	**0.46**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3J1AN**
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Thallium	ND	0.91	mg/kg	SW846 6010B	11/04-11/05/10	L9C3J1AP
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.19	
Zinc	**7.4 J**	**1.8**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9C3J1AQ**
		Dilution Factor: 0.91		Analysis Time..: 12:05	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP		MS Run #.....: 0307100	MDL.....: 0.20	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Tetra Tech Middle River, MD

Percent Lipids

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Tetra Tech NUS, Inc
Matrix: BIOLOGIC
Method: SW846 Total Residu
Lot Number: C0J300446

SOXHLET, AUTOMATED (NONE, Na2SO4)

Client Sample ID	Sample Number	Workorder	Result	Units	Method Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BQ1-FS-WC1	C0J300446 001	L9C2F1AR	0.93	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
BQ1-FS-CC1	C0J300446 002	L9C2L1AR	1.5	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
DHC-3-FS-CC1	C0J300446 003	L9C2N1AR	2.0	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
DHC-4-FS-CC3	C0J300446 004	L9C2R1AR	3.8	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
DHC-2-FS-CC1	C0J300446 005	L9C201AR	0.32	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
DHC-4-FS-CC1	C0J300446 006	L9C231AR	0.60	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
DHC-4-FS-CC2	C0J300446 007	L9C261AR	0.27	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
CPC-2-FS-CC1	C0J300446 008	L9C271AR	0.74	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
MP-FS-WC1	C0J300446 009	L9C291AR	0.40	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
MP-FS-CC2	C0J300446 010	L9C3C1AR	1.9	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
MP-FS-CC1	C0J300446 011	L9C3G1AR	3.2	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
MR-FS-CC2	C0J300446 012	L9C3J1AR	0.17	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
MR-FS-CC1	C0J300446 013	L9C3L1AR	0.25	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
DHC5-FS-CC1	C0J300446 014	L9C351AR	0.55	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054
DHC5-FS-CC2	C0J300446 015	L9C391AR	1.0	%	0.030		1	11/3/2010 - 11/4/2010 15:22	0307054

APPENDIX C
SUPPORT DOCUMENTATION

HOLDTIME

SDG C0J300446

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	MR-FS-CC1	C0J300446013	NM	10/07/2010	11/03/2010	11/03/2010	27	0	27
HG	MG/KG	BQ1-FS-CC1	C0J300446002	NM	10/08/2010	11/03/2010	11/03/2010	26	0	26
HG	MG/KG	MR-FS-CC2	C0J300446012	NM	10/07/2010	11/03/2010	11/03/2010	27	0	27
HG	MG/KG	MP-FS-WC1	C0J300446009	NM	10/08/2010	11/03/2010	11/03/2010	26	0	26
HG	MG/KG	MP-FS-CC2	C0J300446010	NM	08/27/2010	11/03/2010	11/03/2010	68	0	68
HG	MG/KG	MP-FS-CC1	C0J300446011	NM	10/08/2010	11/03/2010	11/03/2010	26	0	26
HG	MG/KG	DHC-5-FS-CC2	C0J300446015	NM	09/10/2010	11/03/2010	11/03/2010	54	0	54
HG	MG/KG	DHC-5-FS-CC1	C0J300446014	NM	09/10/2010	11/03/2010	11/03/2010	54	0	54
HG	MG/KG	DHC-4-FS-CC2	C0J300446007	NM	09/10/2010	11/03/2010	11/03/2010	54	0	54
HG	MG/KG	DHC-4-FS-CC1	C0J300446006	NM	09/10/2010	11/03/2010	11/03/2010	54	0	54
HG	MG/KG	DHC-3-FS-CC1	C0J300446003	NM	08/26/2010	11/03/2010	11/03/2010	69	0	69
HG	MG/KG	DHC-2-FS-CC1	C0J300446005	NM	08/25/2010	11/03/2010	11/03/2010	70	0	70
HG	MG/KG	CPC-2-FS-CC1	C0J300446008	NM	08/26/2010	11/03/2010	11/03/2010	69	0	69
HG	MG/KG	DHC-4-FS-CC3	C0J300446004	NM	08/25/2010	11/03/2010	11/03/2010	70	0	70
HG	MG/KG	BQ1-FS-WC1	C0J300446001	NM	08/27/2010	11/03/2010	11/03/2010	68	0	68

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	CPC-2-FS-CC1	C0J300446008	NM	08/26/2010	11/04/2010	11/05/2010	70	1	71
M	MG/KG	MR-FS-CC1	C0J300446013	NM	10/07/2010	11/04/2010	11/05/2010	28	1	29
M	MG/KG	MP-FS-WC1	C0J300446009	NM	10/08/2010	11/04/2010	11/05/2010	27	1	28
M	MG/KG	MP-FS-CC2	C0J300446010	NM	08/27/2010	11/04/2010	11/05/2010	69	1	70
M	MG/KG	MP-FS-CC1	C0J300446011	NM	10/08/2010	11/04/2010	11/05/2010	27	1	28
M	MG/KG	DHC-5-FS-CC2	C0J300446015	NM	09/10/2010	11/04/2010	11/05/2010	55	1	56
M	MG/KG	DHC-4-FS-CC3	C0J300446004	NM	08/25/2010	11/04/2010	11/05/2010	71	1	72
M	MG/KG	DHC-4-FS-CC1	C0J300446006	NM	09/10/2010	11/04/2010	11/05/2010	55	1	56
M	MG/KG	BQ1-FS-CC1	C0J300446002	NM	10/08/2010	11/04/2010	11/05/2010	27	1	28
M	MG/KG	DHC-2-FS-CC1	C0J300446005	NM	08/25/2010	11/04/2010	11/05/2010	71	1	72
M	MG/KG	BQ1-FS-WC1	C0J300446001	NM	08/27/2010	11/04/2010	11/05/2010	69	1	70
M	MG/KG	MR-FS-CC2	C0J300446012	NM	10/07/2010	11/04/2010	11/05/2010	28	1	29
M	MG/KG	DHC-5-FS-CC1	C0J300446014	NM	09/10/2010	11/04/2010	11/05/2010	55	1	56
M	MG/KG	DHC-3-FS-CC1	C0J300446003	NM	08/26/2010	11/04/2010	11/05/2010	70	1	71
M	MG/KG	DHC-4-FS-CC2	C0J300446007	NM	09/10/2010	11/04/2010	11/05/2010	55	1	56
LIPID	%	DHC-5-FS-CC1	C0J300446014	NM	09/10/2010	11/03/2010	11/04/2010	54	1	55
LIPID	%	BQ1-FS-CC1	C0J300446002	NM	10/08/2010	11/03/2010	11/04/2010	26	1	27
LIPID	%	BQ1-FS-WC1	C0J300446001	NM	08/27/2010	11/03/2010	11/04/2010	68	1	69

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
LIPID	%	CPC-2-FS-CC1	C0J300446008	NM	08/26/2010	11/03/2010	11/04/2010	69	1	70
LIPID	%	DHC-2-FS-CC1	C0J300446005	NM	08/25/2010	11/03/2010	11/04/2010	70	1	71
LIPID	%	DHC-3-FS-CC1	C0J300446003	NM	08/26/2010	11/03/2010	11/04/2010	69	1	70
LIPID	%	DHC-4-FS-CC1	C0J300446006	NM	09/10/2010	11/03/2010	11/04/2010	54	1	55
LIPID	%	DHC-4-FS-CC3	C0J300446004	NM	08/25/2010	11/03/2010	11/04/2010	70	1	71
LIPID	%	DHC-5-FS-CC2	C0J300446015	NM	09/10/2010	11/03/2010	11/04/2010	54	1	55
LIPID	%	MP-FS-CC1	C0J300446011	NM	10/08/2010	11/03/2010	11/04/2010	26	1	27
LIPID	%	MP-FS-CC2	C0J300446010	NM	08/27/2010	11/03/2010	11/04/2010	68	1	69
LIPID	%	MP-FS-WC1	C0J300446009	NM	10/08/2010	11/03/2010	11/04/2010	26	1	27
LIPID	%	MR-FS-CC1	C0J300446013	NM	10/07/2010	11/03/2010	11/04/2010	27	1	28
LIPID	%	MR-FS-CC2	C0J300446012	NM	10/07/2010	11/03/2010	11/04/2010	27	1	28
LIPID	%	DHC-4-FS-CC2	C0J300446007	NM	09/10/2010	11/03/2010	11/04/2010	54	1	55
PCB	UG/KG	BQ1-FS-WC1	C0J300446001	NM	08/27/2010	11/03/2010	11/10/2010	68	7	75
PCB	UG/KG	MR-FS-CC2	C0J300446012	NM	10/07/2010	11/03/2010	11/10/2010	27	7	34
PCB	UG/KG	MR-FS-CC1	C0J300446013	SUR	10/07/2010	11/03/2010	11/10/2010	27	7	34
PCB	UG/KG	MR-FS-CC1	C0J300446013	NM	10/07/2010	11/03/2010	11/10/2010	27	7	34
PCB	UG/KG	MP-FS-WC1	C0J300446009	SUR	10/08/2010	11/03/2010	11/10/2010	26	7	33
PCB	UG/KG	MP-FS-WC1	C0J300446009	NM	10/08/2010	11/03/2010	11/10/2010	26	7	33

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	MP-FS-CC2	C0J300446010	SUR	08/27/2010	11/03/2010	11/10/2010	68	7	75
PCB	UG/KG	MP-FS-CC2	C0J300446010	NM	08/27/2010	11/03/2010	11/10/2010	68	7	75
PCB	UG/KG	MP-FS-CC1	C0J300446011	SUR	10/08/2010	11/03/2010	11/10/2010	26	7	33
PCB	UG/KG	MP-FS-CC1	C0J300446011	NM	10/08/2010	11/03/2010	11/10/2010	26	7	33
PCB	UG/KG	DHC-5-FS-CC2	C0J300446015	SUR	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-5-FS-CC2	C0J300446015	NM	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-5-FS-CC1	C0J300446014	SUR	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-5-FS-CC1	C0J300446014	NM	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-2-FS-CC1	C0J300446005	SUR	08/25/2010	11/03/2010	11/10/2010	70	7	77
PCB	UG/KG	DHC-4-FS-CC2	C0J300446007	SUR	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-4-FS-CC2	C0J300446007	NM	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-4-FS-CC1	C0J300446006	SUR	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-4-FS-CC1	C0J300446006	NM	09/10/2010	11/03/2010	11/10/2010	54	7	61
PCB	UG/KG	DHC-3-FS-CC1	C0J300446003	SUR	08/26/2010	11/03/2010	11/11/2010	69	8	77
PCB	UG/KG	DHC-4-FS-CC3	C0J300446004	SUR	08/25/2010	11/03/2010	11/11/2010	70	8	78
PCB	UG/KG	BQ1-FS-CC1	C0J300446002	NM	10/08/2010	11/03/2010	11/10/2010	26	7	33
PCB	UG/KG	BQ1-FS-CC1	C0J300446002	SUR	10/08/2010	11/03/2010	11/10/2010	26	7	33
PCB	UG/KG	MR-FS-CC2	C0J300446012	SUR	10/07/2010	11/03/2010	11/10/2010	27	7	34

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/KG	DHC-2-FS-CC1	C0J300446005	NM	08/25/2010	11/03/2010	11/10/2010	70	7	77
PCB	UG/KG	CPC-2-FS-CC1	C0J300446008	SUR	08/26/2010	11/03/2010	11/10/2010	69	7	76
PCB	UG/KG	CPC-2-FS-CC1	C0J300446008	NM	08/26/2010	11/03/2010	11/10/2010	69	7	76
PCB	UG/KG	BQ1-FS-WC1	C0J300446001	SUR	08/27/2010	11/03/2010	11/10/2010	68	7	75
PCB	UG/KG	DHC-4-FS-CC3	C0J300446004	NM	08/25/2010	11/03/2010	11/11/2010	70	8	78
PCB	UG/KG	DHC-3-FS-CC1	C0J300446003	NM	08/26/2010	11/03/2010	11/11/2010	69	8	77

CASE NARRATIVE
TETRA TECH NUS, INC.
Middle River, MD

Lot #: C0J300446

Sample Receiving:
TestAmerica's Pittsburgh laboratory received samples on October 30, 2010. The coolers were received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

PCBs:
Due to limited sample volume, several samples were digested using 15-grams of sample instead of 30-grams. The amount of surrogate spiked and the final extract volumes were adjusted accordingly.

Due to the concentration of PCBs detected, several samples were analyzed at a dilution.

The recovery of decachlorobiphenyl surrogate was not calculated for several samples due to matrix interference.

Samples DHC-3-FS-CC1 and DHC-4-FS-CC3 had the surrogates diluted out.

The matrix spike and matrix spike duplicate recovered outside of the control limits for AR1260.

Metals:
The method blanks had analytes detected at concentrations between the MDL and the reporting limit. The results were flagged with a "B" qualifier. Any sample associated with a method blank that had the same analyte detected had the result flagged with a "J" qualifier.

General Chemistry:
There were no problems associated with the analysis.

METHODS SUMMARY

C0J300446

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Lipids	SW846 Total Res	
PCBs by SW-846 8082 PCBs (8082) Low Level	SW846 8082 Low	SW846 3541
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C0J300446

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L9C2F	001	BQ1-FS-WC1	08/27/10	
L9C2L	002	BQ1-FS-CC1	10/08/10	
L9C2N	003	DHC-3-FS-CC1	08/26/10	
L9C2R	004	DHC-4-FS-CC3	08/25/10	
L9C20	005	DHC-2-FS-CC1	08/25/10	
L9C23	006	DHC-4-FS-CC1	09/10/10	
L9C26	007	DHC-4-FS-CC2	09/10/10	
L9C27	008	CPC-2-FS-CC1	08/26/10	
L9C29	009	MP-FS-WC1	10/08/10	
L9C3C	010	MP-FS-CC2	08/27/10	
L9C3G	011	MP-FS-CC1	10/08/10	
L9C3J	012	MR-FS-CC2	10/07/10	
L9C3L	013	MR-FS-CC1	10/07/10	
L9C35	014	DHC5-FS-CC1	09/10/10	
L9C39	015	DHC5-FS-CC2	09/10/10	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

C0J300446

![Tt] Tetra Tech, Inc. | Biological Research Facility

CHAIN-OF-CUSTODY RECORD

Project Manager or Client Contact: TestAmerica-Pittsburgh

Address/Phone: 301 Alpha Dr. RIDC Park Pittsburgh PA 15238

Contact Name/Phone: Marcus Bowden 410-356-8893

Project Number: 112IC02639 Project Name: Middle River

Page 1 of 1 Sample Location: Middle River

Type of Analyses Requested

	Date	Time	Sample Identification/Station	Preservative (Only) Dry Ice	Number of Containers	8082 PCB Aroclors (7 Aroclors)	6020 Metals (PP list)	7471 Mercury	% lipids	[illegible]	Homogenization
BQ1-FS-WC1 ✓	8/27/10	—	BQ-1 (white catfish, 395mm)	Y	1	✓	✓	✓	✓	✓	✓
BQ1-FS-CC1 ✓	10/8/10	—	BQ-1 (Channel catfish, 444mm)	Y	1	✓	✓	✓	✓	✓	✓
DHC-3-FS-CC1 ✓	8/26/10	—	DHC-3 (channel Catfish, 507mm)	Y	1	✓	✓	✓	✓	✓	✓
DHC-4-FS-CC3 ✓	8/25/10	—	DHC-4 (Channel Catfish, 536mm)	Y	1	✓	✓	✓	✓	✓	✓
DHC-2-FS-CC1 ✓	8/25/10	—	DHC-2 (Channel Catfish, 388mm)	Y	1	✓	✓	✓	✓	✓	✓
DHC-4-FS-CC1 ✓	[illegible]/10	—	DHC-4 (Channel Catfish, 290mm)	Y	1	✓	✓	✓	✓	✓	✓
	9/10/10	—	DHC-2 (channel Catfish, 308mm)	Y	1	✓	✓	✓	✓	✓	✓
	9/10/10	—	DHC-2 (channel Catfish, 295mm)	Y	1	✓	✓	✓	✓	✓	✓
DHC-4-FS-CC2 ✓	9/10/10	—	DHC-4 (Channel Catfish, 318mm	Y	1	✓	✓	✓	✓	✓	✓

[redacted]

11

Sampled by: (signature) [signature]	Date/Time: 10/29/10	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
Received by: (signature)	Date/Time:	Received by: (signature)	Date/Time:	Received by: (signature) [signature]	Date/Time: 10/30/10 1030

FORM DISTRIBUTION: White - Tt BRF Yellow - Report Pink - Sampler

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C0J300446

Tetra Tech, Inc. | Biological Research Facility

CHAIN-OF-CUSTODY RECORD

Project Manager or Client Contact: Test America Pittsburgh

Address/Phone: 301 Alpha Dr. RIC Park Pittsburgh PA 15238

Contact Name/Phone: Marcus Bowden 410-356-8993

Project Number: 112IC02659 Project Name: Middle River

Page 1 of 1 Sample Location: Middle River

	Date	Time	Sample Identification/Station	Preservative (Y/N) Dry Ice	Number of Containers	Type of Analyses Requested: 8082 PCB Aroclors (Standard)	1630 Metals (PPL List)	7471A Mercury	% Lipids	Fish Filleting	Homogenization		
CPC-2-FS-CC1 ✓	8/26/10	—	CPC-2 (Channel Catfish, 430mm)	Y	1	✓	✓	✓	✓	✓	✓		
MP-FS-WC1 ✓	10/8/10	—	Marshy Point (White Catfish, 272mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
12 ·	10/8/10	—	Marshy Point (White Catfish, 372mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
MP-FS-CC2 ✓	8/26/10	—	MP-1 (Channel Catfish, 409mm) Marshy Point	Y	1	✓	✓	✓	✓	✓	✓	✓	
MP-FS-CC1 ✓	10/8/10	—	Marshy Point (Channel Catfish, 515mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
·	10/8/10	—	Marshy Point (White Catfish, ~~444mm~~ 300mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
MR-FS-CC2 ✓	10/7/10	—	Middle River (Channel Catfish, 304mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
MR-FS-CC1 ✓	10/7/10	—	Middle River (Channel Catfish, 290mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
DHC-5-FS-CC1 ✓	9/10/10	—	DHC-5 (Channel Catfish, 266mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
DHC-5-FS-CC2 ✓	9/10/10	—	DHC-5 (Channel Catfish, 282mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	

Sampled by: (signature)	Date/Time: 10/09/10	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
Received by: (signature)	Date/Time:	Received by: (signature)	Date/Time:	Received by: (signature)	Date/Time: 10/30/10

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Tetra Tech, Inc. | Biological Research Facility

CHAIN-OF-CUSTODY RECORD

Project Manager or Client Contact: Test America Pittsburgh

Address/Phone: 301 Alpha Rd. RIC Park Pittsburgh PA 15238

Contact Name/Phone: Marcus Bowersox 410-356-8993

Project Number: 112IC02639 Project Name: Middle River

Page 1 of 1 Sample Location: Middle River

Date	Time	Sample Identification/Station	Preservative (Y/N) Dry Ice	Number of Containers	8082 PCB Congeners (7 Aroclors)	6020 Metals (PPL-13)	7471 Mercury	% lipids	% Moisture	Homogenization		
8/27/10	—	BQ-1 (white catfish, 395mm)	Y	1	✓	✓	✓	✓	✓	✓		
10/8/10	—	BQ-1 (Channel catfish, 444mm)	Y	1	✓	✓	✓	✓	✓	✓		
8/26/10	—	DHC-3 (Channel Catfish, 507mm)	Y	1	✓	✓	✓	✓	✓	✓		
8/25/10	—	DHC-4 (Channel Catfish, 536mm)	Y	1	✓	✓	✓	✓	✓	✓		
8/25/10	—	DHC-2 (Channel Catfish, 388mm)	Y	1	✓	✓	✓	✓	✓	✓		
[illegible]/10	—	DHC-4 (Channel Catfish, 290mm)	Y	1	✓	✓	✓	✓	✓	✓		
9/10/10	—	DHC-2 (Channel Catfish, 308mm)	Y	1	✓	✓	✓	✓	✓	✓		
9/10/10	—	DHC-2 (Channel Catfish, 295mm)	Y	1	✓	✓	✓	✓	✓	✓		
9/10/10	—	DHC-4 (Channel Catfish, 318mm	Y	1	✓	✓	✓	✓	✓	✓		

Sampled by: *(signature)* [signature]	Date/Time: 10/29/10	Relinquished by: *(signature)*	Date/Time:	Received by: *(signature)*	Date/Time:
Received by: *(signature)*	Date/Time:	Received by: *(signature)*	Date/Time:	Received by: *(signature)* [signature]	Date/Time: 10/30/10 1030

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Tetra Tech, Inc. | Biological Research Facility

CHAIN-OF-CUSTODY RECORD

Project Manager or Client Contact: Test America Pittsburgh

Address/Phone: 301 Alpha Dr. RIC Park Pittsburgh PA 15238

Contact Name/Phone: Marcus Bowser 412-826-8923

Project Number: 112IC02657 Project Name: Middle River

Page | of | Sample Location: Middle River

Date	Time	Sample Identification/Station	Preservative (Y/N) Dry Ice	Number of Containers	Type of Analyses Requested: 8082 PCB Aroclors (Targeted)	6020 Metals (PPL List)	7471A Mercury	% Lipids	Fish Filleting	Homogenization		
8/26/10	—	CPC-2 (Channel Catfish, 430mm)	Y	1	✓	✓	✓	✓	✓	✓		
10/8/10	—	Marshy Point (White Catfish, 272mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
10/8/10	—	Marshy Point (White Catfish, 372mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
8/27/10	—	MP-1 (Channel Catfish, 409mm) Marshy Point	Y	1	✓	✓	✓	✓	✓	✓	✓	
10/8/10	—	Marshy Point (Channel Catfish, 515mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
10/8/10	—	Marshy Point (White Catfish, ~~444mm~~ 300mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
10/7/10	—	Middle River (Channel Catfish, 304mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
10/7/10	—	Middle River (Channel Catfish, 290mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
9/10/10	—	DHC-5 (Channel Catfish, 266mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	
9/10/10	—	DHC-5 (Channel Catfish, 282mm)	Y	1	✓	✓	✓	✓	✓	✓	✓	

Sampled by (signature)	Date/Time: 10/29/10	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
Received by: (signature)	Date/Time:	Received by: (signature)	Date/Time:	Received by: (signature)	Date/Time: 10/30/10

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10 3d

TestAmerica Pittsburgh

Cooler Receipt Form

Client: TETRA TECH Project: _____ Quote: 86823

Cooler Rec'd & Opened for Temp. Check on: 10 | 30 | 10

Coolers Opened and Unpacked on: 10 | 30 | 10 By: JG

(Signature)

TestAmerica Pittsburgh Lot Number: COJ300446

		Yes	No	NA
1.	Were custody seals on the outside of the cooler?		✓	
	If YES, how many and where? Quantity __ Location			
	Were signatures and date correct?			
2.	Were custody papers included inside the cooler?	✓		
3.	Were custody papers properly filled out (ink, signed, match labels)?	✓		
4.	Did you sign the custody papers in the appropriate place?	✓		
5.	Was shippers packing slip attached to this form?	✓		
6.	Were packing materials used?		✓	
	If YES, what type?			
7.	Were the samples received within the acceptable temperature range?	✓		
8.	Were the samples appropriately preserved?			✓
9.	Were all bottles sealed in separate plastic bags?	✓		
10.	Did all bottles arrive in good condition (unbroken)?	✓		
11.	Were all bottle labels complete (sample ID, preservatives, etc.)?	✓		
12.	Did all bottle labels and/or tags agree with custody papers?	✓		
13.	Were correct bottles used for tests indicated?	✓		
14.	Were all VOA vials checked for the presence of air bubbles?			✓
15.	Was a sufficient amount of sample sent in each bottle?	✓		

16. Samples received by: (FEDEX) UPS CLIENT DROP-OFF OTHER DHL US CARGO

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

Rev. 1, 01/20/2010
X:\Forms\Cooler Receipt Form_updated 102010.DOC

TestAmerica Pittsburgh

Cooler Receipt Form

P: Preserved

UP: Unpreserved

Sample ID	TMET PH<2	DMET PH<2	HG PH<2	NUT(1) PH<2	CN PH ≥12	OG TPHC PH<2	PHEN PH<2	SULF PH ≥12	TOC PH<2	TOX PH<2	VOA P/UP	hardness PH<2	Residual CL	

(1) "NUT" could include sample bottles for ammonia, chemical oxygen demand, nitrate/nitrite, TKN, or total phosphorus

Comments: _____

_____

_____

Cooler Number	Temperature*	Thermometer ID
1	0.0	8
2	0.0	9

Sample	Lot Number**

*Acceptable Temperature Range: < 0-6 °C

**Please use an asterisk if bottle lot number was covered by the label

If samples required preservation in the laboratory, the following lot number(s) was/were used:

Nitric Acid _____ Hydrochloric Acid _____

Sulfuric Acid _____ Sodium Hydroxide _____

(Baking)

v1.0.6 - Last Revised 12/30/2005

Method 3050B	**Matrix** Biological	**Start Time** 1700	**SDG** -
Analyst Jessica Ryan	**Date** 11-04-10	**Lot Numbers**	
MS TAPITT-MS-B, TAPITT-MS-C		C0J300446	
Lab Lot # MET 4435-10, MET 4267-10			
Analyst Sign Jessica Ryan			

Sample ID	Initial Wt/Vol g/mL	Final Vol mL	Comments
L9C20	1.05 g	100mL	
L9C23	1.24 g		
L9C26	1.05 g		
L9C27	1.0 g		
L9C29	1.01 g		
L9C2F	1.21 g		
L9C2L	1.20 g		11/4/10 JR
L9C2N	1.01 g		
L9C2R	1.07 g		
L9C35	1.0 g		
L9C39	1.02 g		
L9C3C	1.11 g		
L9C3G	1.12 g		
L9C3G S	1.14 g		+1.0mL MS-B, MS-C
L9C3G D	1.17 g		
L9C3J	1.10 g		
L9C3L	1.08 g		11/4/10 JR
L9GLP B	1.32g ea		
L9GLP C	1.07g		+1.0mL MS-B, MS-C
			11/4/10 JR

SAMPLE CODING: B-Blank C-Check L-Check Duplicate S-Matrix Spike D-Matrix Spike Duplicate X-Sample Duplicate

NOTE: Samples marked with an asterisk (*) required filtration after digestion and prior to analysis
Samples marked with a plus sign (+) required additional Conc.HNO3 in digestion process, brown fumes were observed

Reagents:
10mL 30% H2O2, 3408 J15A02, Mallinckrodt
10mL Conc. HCl, 5587 032030, Mallinckrodt
10mL 1:1 HNO3, MET 5715-10, Standards Log
5 mL Conc. HNO3, 6623 J11045, Mallinckrodt

Minimum digestion times have been met (analyst initials): JR

Hot Plate/Block Temp	Correction Factor
#10/ 91°C	-1.0°C

Digestate(s)	Date	Time	(Received)	Analyst	Location	Date	Time	(Relinquished)	Analyst	Location
All Aqueous	11/4/10	2002		JR	PREP	11/4/10	2010		JR	B8
All Aqueous	11/5/10	0805		RLG	B8	11/5/10	1240		RLG	B8

	Lot Number	Manufacturer		
Initial Digestion Vessel:	1007292	Environmental Express	**Pipet #:** 03F95602	0307214
Final Digestion Vessel:	100911	Corning	**Balance #:** P1856710	LCS spike analytes had low concentrations.
Filter Paper:	0390592B	Whatman	Printed on: 04-Nov-10 6:20:28 PM	

Reviewed By: Ron Rountree **Date:** 11/5/10 **MET-159-0307214-R**

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: T01105A.ARC **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** MET4904-10

Element	WL/ Mass	True Conc	CCV1-1 11/5/2010 9:01 AM Found	% Rec	CCV1-2 11/5/2010 9:55 AM Found	% Rec	CCV1-3 11/5/2010 11:10 AM Found	% Rec	CCV1-4 11/5/2010 12:16 PM Found	% Rec	CCV1-5 11/5/2010 12:34 PM Found	% Rec
Antimony	220.353	500.0	498.04	**99.6**	500.80	**100.2**	501.59	**100.3**	498.52	**99.7**	493.10	**98.6**
Arsenic	189.042	500.0	499.05	**99.8**	499.87	**100.0**	501.93	**100.4**	500.72	**100.1**	494.48	**98.9**
Beryllium	313.042	2000.0	1999.15	**100.0**	2020.43	**101.0**	2042.24	**102.1**	2054.79	**102.7**	2036.53	**101.8**
Cadmium	226.502	500.0	483.92	**96.8**	486.38	**97.3**	488.65	**97.7**	488.98	**97.8**	484.55	**96.9**
Chromium	267.716	2000.0	1976.19	**98.8**	1985.46	**99.3**	1986.83	**99.3**	1974.49	**98.7**	1958.04	**97.9**
Copper	324.753	2000.0	2031.07	**101.6**	2046.31	**102.3**	2048.93	**102.4**	2031.99	**101.6**	2011.85	**100.6**
Lead	220.353	500.0	487.26	**97.5**	490.54	**98.1**	491.06	**98.2**	489.30	**97.9**	483.80	**96.8**
Nickel	231.604	2000.0	1963.87	**98.2**	1974.81	**98.7**	1982.10	**99.1**	1976.19	**98.8**	1959.73	**98.0**
Selenium	220.353	500.0	497.70	**99.5**	499.11	**99.8**	499.34	**99.9**	501.13	**100.2**	492.81	**98.6**
Silver	328.068	1000.0	1014.02	**101.4**	1026.12	**102.6**	1034.51	**103.5**	1030.98	**103.1**	1022.74	**102.3**
Thallium	190.864	1000.0	981.70	**98.2**	986.62	**98.7**	981.94	**98.2**	977.91	**97.8**	966.77	**96.7**
Zinc	213.856	2000.0	2041.45	**102.1**	2051.54	**102.6**	2054.40	**102.7**	2034.19	**101.7**	2016.52	**100.8**

TestAmerica Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: G01103A.PRN **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** MET5876-10

Element	WL/ Mass	True Conc	CCV6-1 11/3/2010 8:02 AM Found	% Rec	CCV6-2 11/3/2010 8:22 AM Found	% Rec	CCV6-3 11/3/2010 8:42 AM Found	% Rec	CCV6-4 11/3/2010 9:03 AM Found	% Rec	CCV6-5 11/3/2010 9:25 AM Found	% Rec
Mercury	253.7	5.0	5.04	**100.8**	5.08	**101.6**	5.14	**102.8**	5.06	**101.2**	5.16	**103.2**

TestAmerica Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: G01103A.PRN **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** MET5876-10

Element	WL/ Mass	True Conc	CCV6-6 11/3/2010 9:46 AM Found	% Rec	CCV6-7 11/3/2010 10:00 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.14	**102.8**	5.17	**103.4**						

R611810

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T01105A	METTRACE	11/05/10	08:10		X	IR
2	STD2	T01105A	METTRACE	11/05/10	08:16		X	IR
3	STD3	T01105A	METTRACE	11/05/10	08:21		X	IR
4	STD4	T01105A	METTRACE	11/05/10	08:27		X	IR
5	ICV1-1 MET5341-10	T01105A	METTRACE	11/05/10	08:32	RJG	S	CONC
6	ICB1	T01105A	METTRACE	11/05/10	08:39	RJG	S	CONC
7	CRA/RLV MET5196-10	T01105A	METTRACE	11/05/10	08:44	RJG	S	CONC
8	ICSA MET5195-10	T01105A	METTRACE	11/05/10	08:50	RJG	Q	CONC
9	ICSAB MET4874-10	T01105A	METTRACE	11/05/10	08:55	RJG	Q	CONC
10	CCV1-1 MET5866-10	T01105A	METTRACE	11/05/10	09:01	RJG	S	CONC
11	CCB1	T01105A	METTRACE	11/05/10	09:06	RJG	S	CONC
12	L9KFFB	T01105A	METTRACE	11/05/10	09:11	RJG	S	CONC
13	L9KFFC	T01105A	METTRACE	11/05/10	09:17	RJG	S	CONC
14	L9G2C	T01105A	METTRACE	11/05/10	09:22	RJG	S	CONC
15	L9JA6	T01105A	METTRACE	11/05/10	09:28	RJG	S	CONC
16	L9JA6P5	T01105A	METTRACE	11/05/10	09:33	RJG	S	CONC
17	L9JA6S	T01105A	METTRACE	11/05/10	09:39	RJG	S	CONC
18	L9JA6D	T01105A	METTRACE	11/05/10	09:44	RJG	S	CONC
19	L9JA9	T01105A	METTRACE	11/05/10	09:50	RJG	S	CONC
20	CCV1-2	T01105A	METTRACE	11/05/10	09:55	RJG	S	CONC
21	CCB2	T01105A	METTRACE	11/05/10	10:01	RJG	S	CONC
22	L9GLPB	T01105A	METTRACE	11/05/10	10:12	RJG	S	CONC
23	L9GLPC	T01105A	METTRACE	11/05/10	10:18	RJG	S	CONC
24	L9C20	T01105A	METTRACE	11/05/10	10:23	RJG	S	CONC
25	L9C23	T01105A	METTRACE	11/05/10	10:28	RJG	S	CONC
26	L9C26	T01105A	METTRACE	11/05/10	10:34	RJG	S	CONC
27	L9C27	T01105A	METTRACE	11/05/10	10:39	RJG	S	CONC
28	L9C29	T01105A	METTRACE	11/05/10	10:45	RJG	S	CONC
29	L9C2F	T01105A	METTRACE	11/05/10	10:50	RJG	S	CONC
30	L9C2L	T01105A	METTRACE	11/05/10	10:56	RJG	S	CONC
31	L9C2N	T01105A	METTRACE	11/05/10	11:04	RJG	S	CONC
32	CCV1-3	T01105A	METTRACE	11/05/10	11:10	RJG	S	CONC
33	CCB3	T01105A	METTRACE	11/05/10	11:15	RJG	S	CONC
34	L9C2R	T01105A	METTRACE	11/05/10	11:21	RJG	S	CONC
35	L9C35	T01105A	METTRACE	11/05/10	11:26	RJG	S	CONC
36	L9C39	T01105A	METTRACE	11/05/10	11:32	RJG	S	CONC
37	L9C3C	T01105A	METTRACE	11/05/10	11:37	RJG	S	CONC
38	L9C3G	T01105A	METTRACE	11/05/10	11:43	RJG	S	CONC
39	L9C3GP5	T01105A	METTRACE	11/05/10	11:48	RJG	S	CONC
40	L9C3GS	T01105A	METTRACE	11/05/10	11:54	RJG	S	CONC
41	L9C3GD	T01105A	METTRACE	11/05/10	11:59	RJG	S	CONC
42	L9C3J	T01105A	METTRACE	11/05/10	12:05	RJG	S	CONC
43	L9C3L	T01105A	METTRACE	11/05/10	12:10	RJG	S	CONC
44	CCV1-4	T01105A	METTRACE	11/05/10	12:16	RJG	S	CONC
45	CCB4	T01105A	METTRACE	11/05/10	12:21	RJG	S	CONC
46	L9C2L Rerun	T01105A	METTRACE	11/05/10	12:28	RJG	S	CONC
47	CCV1-5	T01105A	METTRACE	11/05/10	12:34	RJG	S	CONC
48	CCB5	T01105A	METTRACE	11/05/10	12:39	RJG	S	CONC
49	L9JD6B	T01105A	METTRACE	11/05/10	12:46	RJG	S	CONC
50	L9JD6C	T01105A	METTRACE	11/05/10	12:52	RJG	S	CONC
51	L9CA4	T01105A	METTRACE	11/05/10	12:57	RJG	S	CONC
52	L9CCC	T01105A	METTRACE	11/05/10	13:03	RJG	S	CONC
53	L9CCD	T01105A	METTRACE	11/05/10	13:08	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	L9CCE	T01105A	METTRACE	11/05/10	13:14	RJG	S	CONC
55	L9CCG	T01105A	METTRACE	11/05/10	13:19	RJG	S	CONC
56	L9CCGP5	T01105A	METTRACE	11/05/10	13:24	RJG	S	CONC
57	L9CCGS	T01105A	METTRACE	11/05/10	13:30	RJG	S	CONC
58	L9CCGD	T01105A	METTRACE	11/05/10	13:35	RJG	S	CONC
59	CCV1-6	T01105A	METTRACE	11/05/10	13:41	RJG	S	CONC
60	CCB6	T01105A	METTRACE	11/05/10	13:46	RJG	S	CONC
61	L9CCGA	T01105A	METTRACE	11/05/10	13:55	RJG	S	CONC
62	L9CCK	T01105A	METTRACE	11/05/10	14:01	RJG	S	CONC
63	L9JECB	T01105A	METTRACE	11/05/10	14:07	RJG	S	CONC
64	L9JECC	T01105A	METTRACE	11/05/10	14:12	RJG	S	CONC
65	L9G62	T01105A	METTRACE	11/05/10	14:18	RJG	S	CONC
66	L9G62P5	T01105A	METTRACE	11/05/10	14:23	RJG	S	CONC
67	L9G62S	T01105A	METTRACE	11/05/10	14:29	RJG	S	CONC
68	L9G62D	T01105A	METTRACE	11/05/10	14:34	RJG	S	CONC
69	L9GA5B	T01105A	METTRACE	11/05/10	14:40	RJG	S	CONC
70	L9GA5C	T01105A	METTRACE	11/05/10	14:45	RJG	S	CONC
71	CCV1-7	T01105A	METTRACE	11/05/10	14:51	RJG	S	CONC
72	CCB7	T01105A	METTRACE	11/05/10	14:56	RJG	S	CONC
73	L8986	T01105A	METTRACE	11/05/10	15:04	RJG	S	CONC
74	L8988	T01105A	METTRACE	11/05/10	15:09	RJG	S	CONC
75	L898J	T01105A	METTRACE	11/05/10	15:15	RJG	S	CONC
76	L898JP5	T01105A	METTRACE	11/05/10	15:20	RJG	S	CONC
77	L898JS	T01105A	METTRACE	11/05/10	15:26	RJG	S	CONC
78	L898JD	T01105A	METTRACE	11/05/10	15:31	RJG	S	CONC
79	L8990	T01105A	METTRACE	11/05/10	15:37	RJG	S	CONC
80	L8992	T01105A	METTRACE	11/05/10	15:42	RJG	S	CONC
81	L8993	T01105A	METTRACE	11/05/10	15:47	RJG	S	CONC
82	L8994	T01105A	METTRACE	11/05/10	15:53	RJG	S	CONC
83	CCV1-8	T01105A	METTRACE	11/05/10	15:58	RJG	S	CONC
84	CCB8	T01105A	METTRACE	11/05/10	16:04	RJG	S	CONC
85	L8995	T01105A	METTRACE	11/05/10	16:09	RJG	S	CONC
86	L8996	T01105A	METTRACE	11/05/10	16:15	RJG	S	CONC
87	L8997	T01105A	METTRACE	11/05/10	16:20	RJG	S	CONC
88	L8998	T01105A	METTRACE	11/05/10	16:26	RJG	S	CONC
89	L899A	T01105A	METTRACE	11/05/10	16:31	RJG	S	CONC
90	L899E	T01105A	METTRACE	11/05/10	16:37	RJG	S	CONC
91	L899H	T01105A	METTRACE	11/05/10	16:42	RJG	S	CONC
92	L899R	T01105A	METTRACE	11/05/10	16:48	RJG	S	CONC
93	L899T	T01105A	METTRACE	11/05/10	16:53	RJG	S	CONC
94	L899W	T01105A	METTRACE	11/05/10	16:59	RJG	S	CONC
95	CCV1-9	T01105A	METTRACE	11/05/10	17:04	RJG	S	CONC
96	CCB9	T01105A	METTRACE	11/05/10	17:10	RJG	S	CONC
97	L9FEP	T01105A	METTRACE	11/05/10	17:15	RJG	S	CONC
98	L9H2CB	T01105A	METTRACE	11/05/10	17:21	RJG	S	CONC
99	L9H2CC	T01105A	METTRACE	11/05/10	17:26	RJG	S	CONC
100	L9H2CL	T01105A	METTRACE	11/05/10	17:32	RJG	S	CONC
101	L9G0A	T01105A	METTRACE	11/05/10	17:37	RJG	S	CONC
102	L9G0C	T01105A	METTRACE	11/05/10	17:43	RJG	S	CONC
103	L9GX0	T01105A	METTRACE	11/05/10	17:48	RJG	S	CONC
104	L9GX1	T01105A	METTRACE	11/05/10	17:54	RJG	S	CONC
105	L9GX2	T01105A	METTRACE	11/05/10	17:59	RJG	S	CONC
106	L9GX3	T01105A	METTRACE	11/05/10	18:05	RJG	S	CONC
107	CCV1-10	T01105A	METTRACE	11/05/10	18:10	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	CCB10	T01105A	METTRACE	11/05/10	18:16	RJG	S	CONC
109	L9GX4	T01105A	METTRACE	11/05/10	18:21	RJG	S	CONC
110	L9GX5	T01105A	METTRACE	11/05/10	18:27	RJG	S	CONC
111	L9GX6	T01105A	METTRACE	11/05/10	18:32	RJG	S	CONC
112	L9GX7	T01105A	METTRACE	11/05/10	18:38	RJG	S	CONC
113	L9GX8	T01105A	METTRACE	11/05/10	18:43	RJG	S	CONC
114	L9GXT	T01105A	METTRACE	11/05/10	18:49	RJG	S	CONC
115	L9GXTP5	T01105A	METTRACE	11/05/10	18:54	RJG	S	CONC
116	L9HK6B	T01105A	METTRACE	11/05/10	19:00	RJG	S	CONC
117	L9HK6C	T01105A	METTRACE	11/05/10	19:05	RJG	S	CONC
118	L9HK6L	T01105A	METTRACE	11/05/10	19:11	RJG	S	CONC
119	CCV1-11	T01105A	METTRACE	11/05/10	19:16	RJG	S	CONC
120	CCB11	T01105A	METTRACE	11/05/10	19:22	RJG	S	CONC
121	L9GV1	T01105A	METTRACE	11/05/10	19:27	RJG	S	CONC
122	L9GV6	T01105A	METTRACE	11/05/10	19:33	RJG	S	CONC
123	L9GV8	T01105A	METTRACE	11/05/10	19:38	RJG	S	CONC
124	L9GWA	T01105A	METTRACE	11/05/10	19:44	RJG	S	CONC
125	L9GWC	T01105A	METTRACE	11/05/10	19:49	RJG	S	CONC
126	L9GWE	T01105A	METTRACE	11/05/10	19:55	RJG	S	CONC
127	L9GWG	T01105A	METTRACE	11/05/10	20:00	RJG	S	CONC
128	L9GWL	T01105A	METTRACE	11/05/10	20:06	RJG	S	CONC
129	L9GWN	T01105A	METTRACE	11/05/10	20:11	RJG	S	CONC
130	L9GWV	T01105A	METTRACE	11/05/10	20:17	RJG	S	CONC
131	CCV1-12	T01105A	METTRACE	11/05/10	20:22	RJG	S	CONC
132	CCB12	T01105A	METTRACE	11/05/10	20:28	RJG	S	CONC
133	L9GWVP5	T01105A	METTRACE	11/05/10	20:33	RJG	S	CONC
134	L9GEEF/10	T01105A	METTRACE	11/05/10	20:39	RJG	S	CONC
135	L9GEEP50F	T01105A	METTRACE	11/05/10	20:44	RJG	S	CONC
136	L9GEEF/25	T01105A	METTRACE	11/05/10	20:50	RJG	S	CONC
137	L9GEEP125F	T01105A	METTRACE	11/05/10	20:55	RJG	S	CONC
138	L9GEHF/5	T01105A	METTRACE	11/05/10	21:01	RJG	S	CONC
139	L9GEKF/10	T01105A	METTRACE	11/05/10	21:06	RJG	S	CONC
140	L9GEKF/25	T01105A	METTRACE	11/05/10	21:12	RJG	S	CONC
141	L9GELF/10	T01105A	METTRACE	11/05/10	21:17	RJG	S	CONC
142	L9GELF/25	T01105A	METTRACE	11/05/10	21:23	RJG	S	CONC
143	CCV1-13	T01105A	METTRACE	11/05/10	21:28	RJG	S	CONC
144	CCB13	T01105A	METTRACE	11/05/10	21:34	RJG	S	CONC
145	L9GEMF/2	T01105A	METTRACE	11/05/10	21:39	RJG	S	CONC
146	L9GEMF/5	T01105A	METTRACE	11/05/10	21:45	RJG	S	CONC
147	L9GEMF/10	T01105A	METTRACE	11/05/10	21:50	RJG	S	CONC
148	L9GEMF/25	T01105A	METTRACE	11/05/10	21:56	RJG	S	CONC
149	L9CA4/2 Int Std	T01105A	METTRACE	11/05/10	22:01	RJG	S	CONC
150	L9CCC/5 Int Std	T01105A	METTRACE	11/05/10	22:07	RJG	S	CONC
151	L9CCD/2 Int Std	T01105A	METTRACE	11/05/10	22:12	RJG	S	CONC
152	L9CCE/2 Int Std	T01105A	METTRACE	11/05/10	22:18	RJG	S	CONC
153	L9CCG/5 Int Std	T01105A	METTRACE	11/05/10	22:23	RJG	S	CONC
154	L9CCGP25 Int Std	T01105A	METTRACE	11/05/10	22:29	RJG	S	CONC
155	CCV1-14	T01105A	METTRACE	11/05/10	22:34	RJG	S	CONC
156	CCB14	T01105A	METTRACE	11/05/10	22:40	RJG	S	CONC
157	L9CCGS/5 Int Std	T01105A	METTRACE	11/05/10	22:45	RJG	S	CONC
158	L9CCGD/5 Int Std	T01105A	METTRACE	11/05/10	22:51	RJG	S	CONC
159	L9CCGA/5 Int Std	T01105A	METTRACE	11/05/10	22:56	RJG	S	CONC
160	L9CCK/5 Int Std	T01105A	METTRACE	11/05/10	23:02	RJG	S	CONC
161	L9GA5B Pb Rerun	T01105A	METTRACE	11/05/10	23:07	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
162	L9GA5C Pb Rerun	T01105A	METTRACE	11/05/10	23:13	RJG	S	CONC
163	L9G62/10 Na	T01105A	METTRACE	11/05/10	23:18	RJG	S	CONC
164	L9G62P50 Na	T01105A	METTRACE	11/05/10	23:24	RJG	S	CONC
165	L9G62S/10 Na	T01105A	METTRACE	11/05/10	23:29	RJG	S	CONC
166	L9G62D/10 Na	T01105A	METTRACE	11/05/10	23:35	RJG	S	CONC
167	CCV1-15	T01105A	METTRACE	11/05/10	23:40	RJG	S	CONC
168	CCB15	T01105A	METTRACE	11/05/10	23:46	RJG	S	CONC

STD2: MET5813-10
STD3: MET5814-10
STD4: MET5815-10

Internal Standard: MET5773-10

Note: Analytical run briefly delayed before and after the analysis of ICV1-1 to set the instrument to analyze 4 exposures for the ICV analysis, and then to reset it to analyze 3 exposures for the duration of the run. (Method 200.7 requirement)

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#	Sample Name	AG	AS	BE	CD	CR	CU
1	STD1	-.00023	.01857	-.02002	.00398	.00106	.01251
2	STD2	7.10179	3.04491		9.502		
3	STD3						
4	STD4			6.84714		10.7644	2.55032
5	ICV1-1 MET5341-10	.50368	.25029	.99496	.24752	1.0117	1.0374
6	ICB1	.00031	.00079	.00006	-.00006	.00018	-.00195
7	CRA/RLV MET5196-10	.00503	.00917	.00420	.00482	.00551	.02331
8	ICSA MET5195-10	.00038	-.00156	-.00047	-.00024	.00034	.00044
9	ICSAB MET4874-10	1.0736	1.0034	.49283	.94199	.50068	.53686
10	CCV1-1 MET5866-10	1.0140	.49905	1.9992	.48392	1.9762	2.0311
11	CCB1	-.00027	.00066	.00009	-.00011	.00021	-.00273
12	L9KFFB	.00066	.00038	-.00009	.00014	.00042	-.00054
13	L9KFFC	.04656	1.8949	.04746	.04889	.19860	.25145
14	L9G2C	.01516	.03611	.00051	.00127	.04560	.44944
15	L9JA6	.00190	.05840	.00515	-.00022	.13430	.36509
16	L9JA6P5	.00040	.01303	.00124	-.00032	.02950	.07378
17	L9JA6S	.04723	1.7760	.04956	.04295	.31574	.53882
18	L9JA6D	.04757	1.7934	.04990	.04302	.31310	.55040
19	L9JA9	.00223	.05216	.00498	-.00067	.12653	.32869
20	CCV1-2	1.0261	.49987	2.0204	.48638	1.9855	2.0463
21	CCB2	.00026	.00126	.00007	-.00011	.00033	-.00348
22	L9GLPB	.00010	.00008	.00000	.00003	.00062	-.00249
23	L9GLPC	.05032	1.8968	.05004	.04933	.20059	.25394
24	L9C20	-.00025	.00123	-.00024	.00000	.00133	.00710
25	L9C23	.00018	.00134	-.00008	-.00001	.00139	.01914
26	L9C26	.00010	.00134	-.00014	.00000	.00154	.00913
27	L9C27	-.00046	.00114	-.00020	.00000	.00090	.00689
28	L9C29	.00011	.00038	-.00014	-.00002	.00133	.01477
29	L9C2F	.00010	.00112	-.00020	.00008	.00232	.00988
30	L9C2L	~~.00037~~	~~.00210~~	~~.00933~~	~~-.00016~~	~~.00001~~	~~.01691~~
31	L9C2N	.00049	.00069	-.00012	.00001	.00141	.00520
32	CCV1-3	1.0345	.50193	2.0422	.48865	1.9868	2.0489
33	CCB3	.00005	.00026	.00020	.00004	.00028	-.00423
34	L9C2R	-.00003	.00086	-.00043	.00002	.00120	.01029
35	L9C35	.00004	.00105	-.00012	.00004	.00129	.01006
36	L9C39	.00049	.00153	-.00015	.00013	.00419	.02055
37	L9C3C	-.00012	.00227	-.00042	-.00011	.00102	.01691
38	L9C3G	.00024	.00189	-.00032	.00009	.00128	.00474
39	L9C3GP5	.00005	.00049	-.00009	-.00006	.00044	-.00249
40	L9C3GS	.04768	1.8035	.04587	.04530	.18463	.24437
41	L9C3GD	.04713	1.7626	.04385	.04380	.17964	.24735
42	L9C3J	.00052	.00131	-.00021	.00000	.02223	.01892
43	L9C3L	.00031	.00129	-.00014	.00007	.00145	.01150
44	CCV1-4	1.0310	.50072	2.0548	.48898	1.9745	2.0320
45	CCB4	.00006	-.00018	.00013	-.00001	.00018	-.00464
46	L9C2L Rerun	.00000	.00192	-.00018	.00005	.00131	.00723
47	CCV1-5	1.0227	.49448	2.0365	.48455	1.9580	2.0119
48	CCB5	-.00008	-.00002	.00015	.00003	.00021	-.00454
49	L9JD6B	.00002	.00049	-.00014	-.00006	.00091	-.00025
50	L9JD6C	.04786	1.7956	.04530	.04542	.18290	.23731
51	L9CA4	.00026	.02035	.01159	-.00280	.16017	.09539
52	L9CCC	-.00004	.02614	.01504	-.00341	.21097	.16877
53	L9CCD	.00039	.02668	.01568	-.00358	.19464	.17796

VOID autosampler missed sample see rerun RB 11/8/10

#	Sample Name	AG	AS	BE	CD	CR	CU
54	L9CCE	.00048	.02094	.01213	-.00296	.18012	.14338
55	L9CCG	-.00002	.02352	.01408	-.00311	.15350	.11413
56	L9CCGP5	.00007	.00726	.00399	-.00132	.04108	.02592
57	L9CCGS	.03111	1.2405	.04721	.02850	.29205	.29039
58	L9CCGD	.03158	1.2490	.04824	.02849	.27621	.28434
59	CCV1-6	1.0468	.50531	2.0768	.49163	1.9977	2.0664
60	CCB6	.00013	.00167	.00024	-.00003	.00026	-.00500
61	L9CCGA	.03631	1.3905	.05047	.03136	.29308	.29558
62	L9CCK	-.00066	.02657	.01584	-.00311	.20230	.16908
63	L9JECB	-.00005	.00096	.00002	-.00004	.00066	-.00196
64	L9JECC	L.00027	L.00050	L-.00002	L-.00007	L.00176	L.00107
65	L9G62	H3.4469	.07747	.02550	.00741	.05672	5.1024
66	L9G62P5	.70059	.01439	.00528	.00139	.01173	.96728
67	L9G62S	H4.7238	.04604	.03829	.01391	.08886	8.2483
68	L9G62D	H5.3128	.03196	.01272	.00665	.04455	3.3280
69	L9GA5B	.00411	-.00036	.00013	-.00007	.00016	-.00466
70	L9GA5C	.05713	1.9989	.05161	.05095	.20286	.25572
71	CCV1-7	1.0515	.50593	2.0916	.49307	1.9956	2.0627
72	CCB7	H.00552	.00027	.00045	.00008	.00039	-.00548
73	L8986	.00447	.00089	.00012	.00004	.00326	.00315
74	L8988	.00420	.00046	.00018	-.00005	.00262	.00011
75	L898J	.00409	.00050	.00023	.00000	.00360	.00141
76	L898JP5	.00426	.00006	.00035	.00000	.00084	-.00425
77	L898JS	.06236	2.2288	.05817	.05618	.23054	.29541
78	L898JD	.06435	2.3222	.06065	.05873	.23920	.30665
79	L8990	.00381	.00209	.00018	-.00005	.00097	-.00230
80	L8992	.00309	.00178	.00016	-.00007	.00266	.00013
81	L8993	.00314	.00015	.00045	-.00009	.00317	.00077
82	L8994	.00277	.00043	.00035	.00000	.00355	.00119
83	CCV1-8	1.0409	.50688	2.0939	.49529	1.9969	2.0459
84	CCB8	.00285	.00020	.00049	.00003	.00018	-.00572
85	L8995	.00320	.00006	.00022	.00006	.00093	-.00285
86	L8996	.00241	.00069	.00037	-.00012	.00278	-.00013
87	L8997	.00272	.00111	.00045	-.00004	.00317	.00014
88	L8998	.00210	.00077	.00043	.00005	.00319	-.00019
89	L899A	.00273	.00000	.00031	.00000	.00320	.00004
90	L899E	.00227	.00014	.00050	.00002	.00375	.00081
91	L899H	.00197	.00076	.00035	-.00007	.00090	-.00159
92	L899R	.00175	.00034	.00044	-.00013	.00274	-.00066
93	L899T	.00162	.00031	.00049	.00005	.00301	-.00037
94	L899W	.00197	-.00026	.00056	.00002	.00364	.00082
95	CCV1-9	1.0224	.49675	2.0484	.48473	1.9615	2.0266
96	CCB9	.00223	.00078	.00062	-.00001	.00036	-.00586
97	L9FEP	.00148	.00013	.00020	.00001	.00073	-.00532
98	L9H2CB	-.00028	-.00005	.00041	-.00014	.00002	.00389
99	L9H2CC	L.00035	L.00017	L.00055	L-.00023	L.00029	L-.00441
100	L9H2CL	L.00037	L-.00007	L.00040	L-.00013	L.00017	L-.00511
101	L9G0A	.00020	.00001	.00038	.00001	.00064	-.00261
102	L9G0C	.00029	.00056	.00043	-.00002	.00955	.00658
103	L9GX0	.00003	.00033	.00035	-.00010	.00049	-.00446
104	L9GX1	-.00015	.00040	.00030	.00002	.00062	-.00122
105	L9GX2	.00013	.00240	.00018	.00001	.00088	-.00213
106	L9GX3	.00018	.02011	.00033	-.00011	.00231	.00852
107	CCV1-10	1.0308	.50202	2.0716	.49117	1.9801	2.0504

#	Sample Name	AG	AS	BE	CD	CR	CU
108	CCB10	.00144	-.00034	.00063	-.00004	.00039	-.00589
109	L9GX4	-.00007	-.00008	.00049	-.00008	.00068	-.00203
110	L9GX5	.00027	.00136	.00047	-.00004	.00227	-.00010
111	L9GX6	.00010	.00092	.00031	.00000	.00047	-.00011
112	L9GX7	.00014	.00031	.00030	-.00004	.00039	.00145
113	L9GX8	.00010	.01151	.00030	-.00012	.00097	.00128
114	L9GXT	.00015	.00056	.00034	-.00010	.00029	-.00521
115	L9GXTP5	.00065	.00083	.00073	.00005	.00035	-.00007
116	L9HK6B	.00106	-.00015	.00051	-.00005	.00034	-.00574
117	L9HK6C	L.00118	L-.00066	L.00056	L-.00030	L.00026	L-.00542
118	L9HK6L	L.00114	L.00045	L.00063	L-.00017	L.00049	L-.00342
119	CCV1-11	1.0248	.50178	2.0582	.48799	1.9666	2.0393
120	CCB11	.00100	.00071	.00073	-.00003	.00030	-.00614
121	L9GV1	.00075	.00007	.00048	-.00005	.00107	-.00372
122	L9GV6	.00080	.00194	.00056	-.00001	.00071	-.00354
123	L9GV8	.00049	.00022	.00063	-.00001	.00056	-.00547
124	L9GWA	.00051	.00169	.00060	-.00025	.00265	-.00481
125	L9GWC	.00024	.00048	.00065	-.00007	.00073	-.00422
126	L9GWE	.00022	.00035	.00054	-.00001	.00334	-.00462
127	L9GWG	.00058	.00351	.00046	.00008	.00086	-.00243
128	L9GWL	.00030	.00023	.00060	-.00002	.00052	-.00539
129	L9GWN	.00055	.00282	.00066	-.00007	.00091	-.00486
130	L9GWV	.00023	.00165	.00064	.00009	.00062	-.00349
131	CCV1-12	1.0317	.50875	2.0839	.49600	1.9985	2.0593
132	CCB12	.00007	.00056	.00065	.00005	.00022	-.00637
133	L9GWVP5	-.00001	.00078	.00075	.00006	.00033	-.00585
134	L9GEEF/10	.00322	.00060	.00101	.00014	.00320	-.00616
135	L9GEEP50F	.00061	-.00082	.00082	-.00005	.00090	-.00638
136	L9GEEF/25	.00148	-.00012	.00090	.00011	.00156	-.00624
137	L9GEEP125F	.00022	.00006	.00084	-.00003	.00046	-.00643
138	L9GEHF/5	.00313	.00056	.00086	-.00045	.00311	-.00567
139	L9GEKF/10	.00319	-.00061	.00113	.00315	.00324	-.00586
140	L9GEKF/25	.00123	.00019	.00091	.00120	.00147	-.00626
141	L9GELF/10	.00370	.00084	.00123	.00366	.00370	-.00569
142	L9GELF/25	.00127	.00038	.00092	.00131	.00135	-.00618
143	CCV1-13	1.0237	.50683	2.0683	.49482	1.9961	2.0525
144	CCB13	-.00014	.00016	.00074	-.00007	.00001	-.00641
145	L9GEMF/2	.02260	.00048	.00276	.03576	.02031	.05583
146	L9GEMF/5	.00892	.00011	.00160	.01438	.00826	.01873
147	L9GEMF/10	.00451	.00039	.00128	.00732	.00424	.00660
148	L9GEMF/25	.00205	.00010	.00102	.00285	.00225	-.00142
149	L9CA4/2 Int Std	.00009	.00998	.00741	-.00177	.09311	.05121
150	L9CCC/5 Int Std	-.00003	.00712	.00512	-.00117	.06262	.04376
151	L9CCD/2 Int Std	.00038	.01603	.00972	-.00201	.11390	.09852
152	L9CCE/2 Int Std	.00036	.01169	.00747	-.00174	.10161	.07644
153	L9CCG/5 Int Std	.00034	.00668	.00442	-.00092	.04056	.02456
154	L9CCGP25 Int Std	-.00009	.00097	.00160	-.00026	.00873	-.00005
155	CCV1-14	1.0197	.50524	2.0594	.49337	1.9926	2.0485
156	CCB14	.00020	-.00015	.00065	.00000	.00032	-.00628
157	L9CCGS/5 Int Std	.00828	.33741	.01328	.00755	.07881	.07109
158	L9CCGD/5 Int Std	.00821	.34073	.01348	.00767	.07516	.07124
159	L9CCGA/5 Int Std	.00949	.37500	.01395	.00822	.07876	.07252
160	L9CCK/5 Int Std	-.00003	.00813	.00564	-.00126	.06392	.04644
161	L9GA5B Pb Rerun	.00015	-.00013	.00069	-.00007	.00030	-.00603

#	Sample Name	AG	AS	BE	CD	CR	CU
.62	L9GA5C Pb Rerun	.05137	2.0246	.05179	.05121	.20417	.25538
.63	L9G62/10 Na	.30276	.00834	.00318	.00067	.00615	.47583
.64	L9G62P50 Na	.05942	.00193	.00131	.00010	.00132	.33729
.65	L9G62S/10 Na	.40761	.00409	.00452	.00134	.00931	.77036
.66	L9G62D/10 Na	.46851	.00323	.00192	.00077	.00469	.30947
.67	CCV1-15	1.0247	.50555	2.0549	.49229	1.9925	2.0637
.68	CCB15	-.00008	.00094	.00064	-.00005	.00007	-.00635

#	Sample Name	NI	PB	SB	SE	TL	ZN
1	STD1	-.00019				-.01675	.00073
2	STD2					5.22539	
3	STD3						
4	STD4	2.19596					1.81225
5	ICV1-1 MET5341-10	.98248	.25127	.25583	.25110	.50977	1.0216
6	ICB1	.00084	.00023	.00011	-.00001	.00034	.00210
7	CRA/RLV MET5196-10	.04150	.00345	.01085	.00608	.01135	.02177
8	ICSA MET5195-10	.00311	.00129	-.00078	-.00180	-.00994	.00010
9	ICSAB MET4874-10	.94704	.95582	1.0287	.98301	.93972	1.0337
10	CCV1-1 MET5866-10	1.9639	.48726	.49804	.49770	.98170	2.0415
11	CCB1	.00096	.00008	.00036	.00199	.00115	.00211
12	L9KFFB	.00188	.00026	.00075	.00051	-.00365	.00126
13	L9KFFC	.49113	.48444	.49273	1.8408	1.9057	.51276
14	L9G2C	.04836	.18775	.00315	.00562	-.00585	.89404
15	L9JA6	.21243	.93926	.00483	.00183	-.00482	1.0536
16	L9JA6P5	.04748	.20545	.00022	.00169	-.00013	.23426
17	L9JA6S	.62676	1.8679	.30411	1.6877	1.7070	1.3419
18	L9JA6D	.62515	1.6796	.30247	1.7038	1.7237	1.3269
19	L9JA9	.20260	1.0465	.00315	.00423	-.00560	.91496
20	CCV1-2	1.9748	.49054	.50080	.49911	.98662	2.0515
21	CCB2	.00112	-.00014	.00029	.00134	.00120	.00243
22	L9GLPB	.00161	.00101	.00011	.00085	-.00014	.00444
23	L9GLPC	.49578	.48575	.47354	1.8454	1.9270	.51958
24	L9C20	.00121	.00105	.00238	.00605	-.00121	.07413
25	L9C23	.00175	.00155	.00047	.00374	-.00145	.07363
26	L9C26	.00159	.00112	.00131	.00318	-.00276	.06287
27	L9C27	.00086	.00090	.00059	.00679	-.00265	.07511
28	L9C29	.00119	.00165	.00080	.00359	-.00328	.06606
29	L9C2F	.00181	.00136	.00065	.00684	-.00306	.09106
30	L9C2L	.00111	.00006	.00084	-.00120	.00340	-.00115
31	L9C2N	.00202	.00111	.00090	.00509	-.00359	.08210
32	CCV1-3	1.9821	.49106	.50159	.49934	.98194	2.0544
33	CCB3	.00148	-.00006	.00043	.00060	.00170	.00311
34	L9C2R	.00133	.00096	.00055	.00502	-.00352	.08802
35	L9C35	.00136	.00187	.00054	.00404	-.00164	.09770
36	L9C39	.00235	.00178	.00105	.00442	-.00428	.09885
37	L9C3C	.00096	.00125	.00025	.00632	-.00220	.07954
38	L9C3G	.00166	.00080	.00108	.00554	-.00528	.06882
39	L9C3GP5	.00073	.00076	.00054	.00193	-.00087	.01851
40	L9C3GS	.45208	.44890	.44996	1.7727	1.7906	.54694
41	L9C3GD	.43903	.43597	.44998	1.7420	1.7560	.53775
42	L9C3J	.00160	.00192	.00292	.00588	-.00092	.08172
43	L9C3L	.00140	.00125	.00142	.00418	-.00134	.06474

VOID: autosampler missed sample see rerun RH 11810

Metals Data Reporting Form

Initial Calibration Verification Standar

Instrument: ICPST **Units:** ug/L

Chart Number: T01105A.ARC **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** MET4613-10

Element	WL/ Mass	True Conc	ICV1-1 11/5/2010 8:32 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	250.0	255.83	**102.3**								
Arsenic	189.042	250.0	250.29	**100.1**								
Beryllium	313.042	1000.0	994.96	**99.5**								
Cadmium	226.502	250.0	247.52	**99.0**								
Chromium	267.716	1000.0	1011.73	**101.2**								
Copper	324.753	1000.0	1037.41	**103.7**								
Lead	220.353	250.0	251.27	**100.5**								
Nickel	231.604	1000.0	982.48	**98.2**								
Selenium	220.353	250.0	251.10	**100.4**								
Silver	328.068	500.0	503.68	**100.7**								
Thallium	190.864	500.0	509.77	**102.0**								
Zinc	213.856	1000.0	1021.61	**102.2**								

5.11.0

Form 2A Equivalent

TestAmerica Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standar

Instrument: CVAA **Units:** ug/L

Chart Number: G01103A.PRN **Acceptable Range:** 90% - 110%

Standard Source: Ultra **Standard ID:** MET5874-10

Element	WL/ Mass	True Conc	ICV6-1 11/3/2010 7:57 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.29	91.6								

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST

Units: ug/L

Chart Number: T01105A.ARC

Acceptable Range: 50% - 150%

Standard Source: Inorganic Ventures

Standard ID: MET4384-10

Element	WL/ Mass	True Conc	CRA/RLV 11/5/2010 8:44 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	10.0	10.85	**108.5**								
Arsenic	189.042	10.0	9.17	**91.7**								
Beryllium	313.042	4.0	4.20	**105.0**								
Cadmium	226.502	5.0	4.82	**96.4**								
Chromium	267.716	5.0	5.51	**110.2**								
Copper	324.753	25.0	23.31	**93.2**								
Lead	220.353	3.0	3.45	**115.0**								
Nickel	231.604	40.0	41.50	**103.8**								
Selenium	220.353	5.0	6.08	**121.6**								
Silver	328.068	5.0	5.03	**100.6**								
Thallium	190.864	10.0	11.35	**113.5**								
Zinc	213.856	20.0	21.77	**108.9**								

5.11.0

Form 2B Equivalent

TestAmerica Pittsburgh

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: CVAA **Units:** ug/L

Chart Number: G01103A.PRN **Acceptable Range:** 50% - 150%

Standard Source: Ultra **Standard ID:** MET5875-10

Element	WL/ Mass	True Conc	CRA/RLV 11/3/2010 8:00 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	0.2	0.23	**112.5**								

TestAmerica Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: T01105A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 11/5/2010 8:39 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	10	1.6	U								
Arsenic	189.042	10	2.2	U								
Beryllium	313.042	4	0.2	U								
Cadmium	226.502	5	0.2	U								
Chromium	267.716	5	0.9	U								
Copper	324.753	25	3.4	U								
Lead	220.353	3	1.4	U								
Nickel	231.604	40	3.8	U								
Selenium	220.353	5	2.1	U								
Silver	328.068	200	0.6	U								
Thallium	190.864	10	2.1	U								
Zinc	213.856	20	2.2	U								

5.11.0

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: G01103A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 11/3/2010 7:58 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	B								

5.11.0

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Result

Instrument: ICPST **Units:** ug/L

Chart Number: T01105A.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB1 11/5/2010 9:06 AM		CCB2 11/5/2010 10:01 AM		CCB3 11/5/2010 11:15 AM		CCB4 11/5/2010 12:21 PM		CCB5 11/5/2010 12:39 PM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	10	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Arsenic	189.042	10	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Beryllium	313.042	4	0.2	U	0.2	U	**0.2**	**B**	0.2	U	**0.2**	**B**
Cadmium	226.502	5	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chromium	267.716	5	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U
Copper	324.753	25	3.4	U	**-3.5**	**B**	**-4.2**	**B**	**-4.6**	**B**	**-4.5**	**B**
Lead	220.353	3	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Nickel	231.604	40	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U
Selenium	220.353	5	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U
Silver	328.068	200	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Thallium	190.864	10	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U
Zinc	213.856	20	2.2	U	**2.4**	**B**	**3.1**	**B**	2.2	U	2.2	U

5.11.0

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Result

Instrument: CVAA **Units:** ug/L

Chart Number: G01103A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB1 11/3/2010 8:03 AM		CCB2 11/3/2010 8:23 AM		CCB3 11/3/2010 8:44 AM		CCB4 11/3/2010 9:05 AM		CCB5 11/3/2010 9:26 AM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	B	0.0	B	0.0	B	0.0	B	0.0	U

5.11.0

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

TestAmerica Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Result

Instrument: CVAA **Units:** ug/L

Chart Number: G01103A.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB6 11/3/2010 9:48 AM		CCB7 11/3/2010 10:02 AM							
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	B	0.0	B						

5.11.0

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C0K030000-023 **Prep Batch #...:** 0307023						
Mercury	ND	0.033	mg/kg	SW846 7471A	11/03/10	L9F7F1AA
		Dilution Factor: 1				
		Analysis Time..: 09:20		Analyst ID.....: 031043	Instrument ID..: HGH	
MB Lot-Sample #: C0K030000-214 **Prep Batch #...:** 0307214						
Antimony	ND	0.76	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AK
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Arsenic	ND	0.76	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AC
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Beryllium	ND	0.30	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AD
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Cadmium	ND	0.38	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AE
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Chromium	ND	0.38	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AF
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Copper	ND	1.9	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AG
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Lead	ND	0.23	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AJ
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Nickel	ND	3.0	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AH
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Selenium	ND	0.38	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AL
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	0.38	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AA
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Thallium	ND	0.76	mg/kg	SW846 6010B	11/04-11/05/10	L9GLP1AM
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	
Zinc	**0.34 B**	**1.5**	**mg/kg**	**SW846 6010B**	**11/04-11/05/10**	**L9GLP1AN**
		Dilution Factor: 0.76				
		Analysis Time..: 10:12		Analyst ID.....: 022952	Instrument ID..: TRA	

NOTE(S):

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

B Estimated result. Result is less than RL.

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST **Units:** ug/L

Chart Number: T01105A.ARC **Acceptable Range:** 0% - 0%

Standard Source: Inorganic Ventures **Standard ID:** MET4581-10

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 11/5/2010 8:50 AM Found	Found	Found	Found	Found
Antimony	220.353	10		-1				
Arsenic	189.042	10		-2				
Beryllium	313.042	4		0				
Cadmium	226.502	5		0				
Chromium	267.716	5		0				
Copper	324.753	25		0				
Lead	220.353	3		1				
Nickel	231.604	40		3				
Selenium	220.353	5		-2				
Silver	328.068	200		0				
Thallium	190.864	10		-10				
Zinc	213.856	20		0				

U Result is less than the MDL

B Result is between MDL and RL

Form 4 Equivalent

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: T01105A.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: MET4874-10

Element	WL/ Mass	True Conc	ICSAB 11/5/2010 8:55 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	1000	1028.7	**102.9**								
Arsenic	189.042	1000	1003.4	**100.3**								
Beryllium	313.042	500	492.8	**98.6**								
Cadmium	226.502	1000	942.0	**94.2**								
Chromium	267.716	500	500.7	**100.1**								
Copper	324.753	500	536.9	**107.4**								
Lead	220.353	1000	955.8	**95.6**								
Nickel	231.604	1000	947.0	**94.7**								
Selenium	220.353	1000	983.0	**98.3**								
Silver	328.068	1000	1073.6	**107.4**								
Thallium	190.864	1000	939.7	**94.0**								
Zinc	213.856	1000	1033.7	**103.4**								

U Result is less than the MDL
B Result is between MDL and RL
N Spike recovery failed

Form 4 Equivalent

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C0K030000-023 **Prep Batch #...:** 0307023					
Mercury	100	(80 - 120)	SW846 7471A	11/03/10	L9F7F1AC
		Dilution Factor: 1	Analysis Time..: 09:21	Analyst ID.....: 031043	
		Instrument ID..: HGHYDRA			
LCS Lot-Sample#: C0K030000-214 **Prep Batch #...:** 0307214					
Silver	101	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AP
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Arsenic	95	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AQ
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Beryllium	100	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AR
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Cadmium	99	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AT
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Chromium	100	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AU
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Copper	102	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AV
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Nickel	99	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AW
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Lead	97	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1AX
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Antimony	95	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1A0
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	92	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1A1
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Thallium	96	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1A2
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			
Zinc	104	(75 - 125)	SW846 6010B	11/04-11/05/10	L9GLP1A3
		Dilution Factor: 0.93	Analysis Time..: 10:18	Analyst ID.....: 022952	
		Instrument ID..: TRACEICP			

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C0K030000-023 **Prep Batch #...:** 0307023							
Mercury	0.417	0.415	mg/kg	100	SW846 7471A	11/03/10	L9F7F1AC
			Dilution Factor: 1		Analysis Time..: 09:21	Analyst ID.....: 031043	
			Instrument ID..: HGHYDRA				
LCS Lot-Sample#: C0K030000-214 **Prep Batch #...:** 0307214							
Silver	4.65	4.68	mg/kg	101	SW846 6010B	11/04-11/05/10	L9GLP1AP
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Arsenic	186	176	mg/kg	95	SW846 6010B	11/04-11/05/10	L9GLP1AQ
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Beryllium	4.65	4.65	mg/kg	100	SW846 6010B	11/04-11/05/10	L9GLP1AR
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Cadmium	4.65	4.59	mg/kg	99	SW846 6010B	11/04-11/05/10	L9GLP1AT
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Chromium	18.6	18.7	mg/kg	100	SW846 6010B	11/04-11/05/10	L9GLP1AU
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Copper	23.2	23.6	mg/kg	102	SW846 6010B	11/04-11/05/10	L9GLP1AV
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Nickel	46.5	46.1	mg/kg	99	SW846 6010B	11/04-11/05/10	L9GLP1AW
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Lead	46.5	45.2	mg/kg	97	SW846 6010B	11/04-11/05/10	L9GLP1AX
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Antimony	46.5	44.0	mg/kg	95	SW846 6010B	11/04-11/05/10	L9GLP1A0
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Selenium	186	172	mg/kg	92	SW846 6010B	11/04-11/05/10	L9GLP1A1
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Thallium	186	179	mg/kg	96	SW846 6010B	11/04-11/05/10	L9GLP1A2
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				
Zinc	46.5	48.3	mg/kg	104	SW846 6010B	11/04-11/05/10	L9GLP1A3
			Dilution Factor: 0.93		Analysis Time..: 10:18	Analyst ID.....: 022952	
			Instrument ID..: TRACEICP				

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C0J300446
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10 **Matrix.....:** BIOLOGIC

MS Lot-Sample #: C0J300446-002 **Prep Batch #...:** 0307023

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
						% Moisture.....:	
Mercury	94	(75 - 125)			SW846 7471A	11/03/10	L9C2L1AV
	88	(75 - 125)	5.3	(0-20)	SW846 7471A	11/03/10	L9C2L1AW

Dilution Factor: 1
Analysis Time..: 09:30 Instrument ID..: HGHYDRA Analyst ID.....: 031043
MS Run #.....: 0307013

NOTE(S):

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

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C0J300446
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10 **Matrix.....:** BIOLOGIC

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C0J300446-002 **Prep Batch #...:** 0307023									
								% Moisture.....:	
Mercury									
	0.038	0.167	0.195	mg/kg	94		SW846 7471A	11/03/10	L9C2L1AV
	0.038	0.167	0.185	mg/kg	88	5.3	SW846 7471A	11/03/10	L9C2L1AW

Dilution Factor: 1
Analysis Time..: 09:30 Instrument ID..: HGHYDRA Analyst ID.....: 031043
MS Run #.....: 0307013

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C0J300446-011 **Prep Batch #...:** 0307214							
						% Moisture.....:	
Antimony	90	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1CE
	90	(75 - 125)	3.5	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1CF
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Arsenic	90	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1AX
	88	(75 - 125)	5.8	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1A0
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Beryllium	92	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1A1
	88	(75 - 125)	8.0	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1A2
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Cadmium	91	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1A3
	88	(75 - 125)	6.8	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1A4
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Chromium	92	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1A5
	89	(75 - 125)	6.2	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1A6
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Copper	96	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1A7
	97	(75 - 125)	2.2	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1A8
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Lead	90	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1CC
	87	(75 - 125)	6.4	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1CD
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Nickel	90	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1A9
	88	(75 - 125)	6.4	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1CA
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Selenium	88	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1CG
	87	(75 - 125)	5.2	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1CH
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Silver	95	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1AV
	94	(75 - 125)	4.6	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1AW
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Thallium	90	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1CJ
	88	(75 - 125)	5.4	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1CK
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					
Zinc	95	(75 - 125)			SW846 6010B	11/04-11/05/10	L9C3G1CL
	93	(75 - 125)	5.2	(0-20)	SW846 6010B	11/04-11/05/10	L9C3G1CM
		Dilution Factor: 0.88					
		Analysis Time..: 11:54			Instrument ID..: TRACEICP	Analyst ID.....: 022952	
		MS Run #.....: 0307100					

NOTE(S):

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

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C0J300446
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10 **Matrix.....:** BIOLOGIC

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C0J300446-011 **Prep Batch #...:** 0307214									
Antimony								% Moisture.....:	
	ND	44.0	39.6	mg/kg	90		SW846 6010B	11/04-11/05/10	L9C3G1CE
	ND	42.5	38.2	mg/kg	90	3.5	SW846 6010B	11/04-11/05/10	L9C3G1CF
			Dilution Factor: 0.88						
			Analysis Time..: 11:54				Instrument ID..: TRACEICP	Analyst ID.....: 022952	
			MS Run #.....: 0307100						
Arsenic									
	ND	176	159	mg/kg	90		SW846 6010B	11/04-11/05/10	L9C3G1AX
	ND	170	150	mg/kg	88	5.8	SW846 6010B	11/04-11/05/10	L9C3G1A0
			Dilution Factor: 0.88						
			Analysis Time..: 11:54				Instrument ID..: TRACEICP	Analyst ID.....: 022952	
			MS Run #.....: 0307100						
Beryllium									
	ND	4.40	4.04	mg/kg	92		SW846 6010B	11/04-11/05/10	L9C3G1A1
	ND	4.25	3.73	mg/kg	88	8.0	SW846 6010B	11/04-11/05/10	L9C3G1A2
			Dilution Factor: 0.88						
			Analysis Time..: 11:54				Instrument ID..: TRACEICP	Analyst ID.....: 022952	
			MS Run #.....: 0307100						
Cadmium									
	ND	4.40	3.99	mg/kg	91		SW846 6010B	11/04-11/05/10	L9C3G1A3
	ND	4.25	3.72	mg/kg	88	6.8	SW846 6010B	11/04-11/05/10	L9C3G1A4
			Dilution Factor: 0.88						
			Analysis Time..: 11:54				Instrument ID..: TRACEICP	Analyst ID.....: 022952	
			MS Run #.....: 0307100						
Chromium									
	0.11	17.6	16.2	mg/kg	92		SW846 6010B	11/04-11/05/10	L9C3G1A5
	0.11	17.0	15.3	mg/kg	89	6.2	SW846 6010B	11/04-11/05/10	L9C3G1A6
			Dilution Factor: 0.88						
			Analysis Time..: 11:54				Instrument ID..: TRACEICP	Analyst ID.....: 022952	
			MS Run #.....: 0307100						
Copper									
	0.42	22.0	21.5	mg/kg	96		SW846 6010B	11/04-11/05/10	L9C3G1A7
	0.42	21.2	21.0	mg/kg	97	2.2	SW846 6010B	11/04-11/05/10	L9C3G1A8
			Dilution Factor: 0.88						
			Analysis Time..: 11:54				Instrument ID..: TRACEICP	Analyst ID.....: 022952	
			MS Run #.....: 0307100						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC
Date Sampled...: 10/08/10 **Date Received..:** 10/30/10

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead									
	ND	44.0	39.5	mg/kg	90		SW846 6010B	11/04-11/05/10	L9C3G1CC
	ND	42.5	37.1	mg/kg	87	6.4	SW846 6010B	11/04-11/05/10	L9C3G1CD
			Dilution Factor: 0.88						
			Analysis Time..: 11:54		Instrument ID..: TRACEICP		Analyst ID.....: 022952		
			MS Run #.....: 0307100						
Nickel									
	ND	44.0	39.8	mg/kg	90		SW846 6010B	11/04-11/05/10	L9C3G1A9
	ND	42.5	37.3	mg/kg	88	6.4	SW846 6010B	11/04-11/05/10	L9C3G1CA
			Dilution Factor: 0.88						
			Analysis Time..: 11:54		Instrument ID..: TRACEICP		Analyst ID.....: 022952		
			MS Run #.....: 0307100						
Selenium									
	0.49	176	156	mg/kg	88		SW846 6010B	11/04-11/05/10	L9C3G1CG
	0.49	170	148	mg/kg	87	5.2	SW846 6010B	11/04-11/05/10	L9C3G1CH
			Dilution Factor: 0.88						
			Analysis Time..: 11:54		Instrument ID..: TRACEICP		Analyst ID.....: 022952		
			MS Run #.....: 0307100						
Silver									
	ND	4.40	4.20	mg/kg	95		SW846 6010B	11/04-11/05/10	L9C3G1AV
	ND	4.25	4.01	mg/kg	94	4.6	SW846 6010B	11/04-11/05/10	L9C3G1AW
			Dilution Factor: 0.88						
			Analysis Time..: 11:54		Instrument ID..: TRACEICP		Analyst ID.....: 022952		
			MS Run #.....: 0307100						
Thallium									
	ND	176	158	mg/kg	90		SW846 6010B	11/04-11/05/10	L9C3G1CJ
	ND	170	149	mg/kg	88	5.4	SW846 6010B	11/04-11/05/10	L9C3G1CK
			Dilution Factor: 0.88						
			Analysis Time..: 11:54		Instrument ID..: TRACEICP		Analyst ID.....: 022952		
			MS Run #.....: 0307100						
Zinc									
	6.1	44.0	48.1	mg/kg	95		SW846 6010B	11/04-11/05/10	L9C3G1CL
	6.1	42.5	45.7	mg/kg	93	5.2	SW846 6010B	11/04-11/05/10	L9C3G1CM
			Dilution Factor: 0.88						
			Analysis Time..: 11:54		Instrument ID..: TRACEICP		Analyst ID.....: 022952		
			MS Run #.....: 0307100						

NOTE(S):

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

TestAmerica Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: L9C3GP

Original Sample ID: L9C3G **Client ID:** MP-FS-CC1P

Matrix: Soil **Units:** mg/kg **Prep Date:** 11/4/2010 **Prep Batch:** 0307214

Weight: 1.12 **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Antimony	220.353	0.15	U	0.73	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Arsenic	189.042	0.20	U	1.0	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Beryllium	313.042	0.013	U	0.067	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Cadmium	226.502	0.021	U	0.11	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Chromium	267.716	0.11	B	0.38	U	100.0	1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Copper	324.753	0.42	B	1.5	U	100.0	1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Lead	220.353	0.13	U	0.65	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Nickel	231.604	0.34	U	1.7	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Selenium	220.353	0.49		0.92	U	100.0	1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Silver	328.068	0.052	U	0.26	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Thallium	190.864	0.18	U	0.92	U		1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48
Zinc	213.856	6.1		8.3	B	34.5	1	5	ICPST	11/5/2010	11:43	11/5/2010	11:48

Comments:

5.11.0

U Result is less than the MDL
B Result is between MDL and RL
E Serial dilution percent difference not within limits

Form 9 Equivalent

TestAmerica Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ppb

Element	Wavelength	Reporting Limit	MDL	Date of MDL
Antimony	220.353	10.0	1.6	4/23/2009
Arsenic	189.042	10.0	2.2	4/23/2009
Beryllium	313.042	4.0	0.15	4/23/2009
Cadmium	226.502	5.0	0.24	4/23/2009
Chromium	267.716	5.0	0.85	4/23/2009
Copper	324.753	25.0	3.4	4/23/2009
Lead	220.353	3.0	1.4	4/23/2009
Nickel	231.604	40.0	3.8	4/23/2009
Selenium	220.353	5.0	2.1	4/23/2009
Silver	328.068	200.0	0.58	4/23/2009
Thallium	190.864	10.0	2.1	4/23/2009
Zinc	213.856	20.0	2.2	4/23/2009

TestAmerica Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA **Units:** ppb

Element	Wavelength	Reporting Limit	MDL	Date of MDL
Mercury	253.700	0.2	0.011	3/23/2009

TestAmerica Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 10/25/2010

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(-0.000344)
Aluminum	308.215	Pb(0.000545)
Chromium	267.716	As(-0.003061), Sb(0.013086)
Chromium	267.716	Sb(0.008957)
Cobalt	228.616	Pb(0.000064), Se(-0.000331)
Cobalt	228.616	Cd(-0.00008), Fe(0.089447), Ni(-0.00041), Pb(-0.000973), Se(0.000371), Tl(0.00294)
Iron	271.441	Pb(0.000043), Sb(0.000025), Se(-0.00029)
Iron	271.441	Cd(0.000087), Cr(-0.00001), Na(-0.012228), Pb(0.000085), Sb(0.000027), Tl(-0.000119), V(-0.000294), Zn(0.000114)
Magnesium	279.078	Fe(-0.000327)
Manganese	257.61	Se(0.000564)
Manganese	257.61	Se(0.000317), Tl(0.001153)
Molybdenum	202.03	Pb(-0.00068), Sb(-0.010269)
Molybdenum	202.03	Al(0.010237), As(-0.001455), Pb(-0.000698), Sb(-0.000832), Tl(-0.008099)
Nickel	231.604	Pb(0.000167)
Nickel	231.604	Pb(0.000277), Sb(-0.001143), Zn(0.004377)
Tin	189.989	Sb(-0.006242)
Titanium	334.941	Co(0.002), Pb(0.000254), Sb(0.001341), Tl(0.000698)
Titanium	334.941	Pb(-0.000607)
Vanadium	292.402	Be(-0.009816), Cr(-0.000098), Fe(0.009352), Pb(-0.000346)
Vanadium	292.402	Al(0.017388), Sb(-0.008385), Se(0.00019), Tl(0.002347)

TestAmerica Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	220.35	5000	7/21/2010
Arsenic	189.04	10000	7/21/2010
Beryllium	313.04	10000	7/21/2010
Cadmium	226.50	5000	7/21/2010
Chromium	267.72	20000	7/21/2010
Copper	324.75	10000	7/21/2010
Lead	220.35	5000	7/21/2010
Nickel	231.60	100000	7/21/2010
Selenium	220.35	10000	7/21/2010
Silver	328.07	2000	7/21/2010
Thallium	190.86	10000	7/21/2010
Zinc	213.86	5000	7/21/2010

TestAmerica Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	10/10/2010

Tetra Tech Middle River, MD

Percent Lipids

Lab Name:	TESTAMERICA PITTSBURGH	**Method:**	SW846 Total Residu
Client Name:	Tetra Tech NUS, Inc	**Report ID:**	C0J300446
Matrix:	BIOLOGIC	**Date/Time Received:**	10/30/2010 10:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
DHC-4-FS-CC3 DUP	004 DUP	L9C2R1AV	3.8	%	0.10	11/3/2010 - 11/4/2010 15:22	0307054	0.34 / 25
BLK - C0K030000054B	054 MB	L9F721AA	ND	%		11/3/2010 - 11/4/2010 15:22	0307054	

Percent Lipids

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Tetra Tech NUS, Inc
Matrix: BIOLOGIC

Method: SW846 Total Residu
Lot Number: C0K030000
Date/Time Received: 10/30/2010 10:30:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	L9F721AC	94	30 - 150	11/3/2010 - 11/4/2010 15:22	0307054	0.0 / 25
DUPLICATE CHECK	LCSD	L9F721AD	92	30 - 150	11/3/2010 - 11/4/2010 15:22	0307054	0.0 / 25

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Lipids		Work Order #: L9F721AA		MB Lot-Sample #:	C0K030000-054	
	ND		%	SW846 Total Resid	11/03-11/04/10	0307054

Dilution Factor: 1

Analysis Time..: 15:22 Analyst ID.....: 5164 Instrument ID..: SPE

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Lipids		WO#:L9F721AC-LCS/L9F721AD-LCSD				LCS Lot-Sample#: C0K030000-054	
	94	(30 - 150)			SW846 Total Resid	11/03-11/04/10	0307054
	92	(30 - 150)	0.0	(0-25)	SW846 Total Resid	11/03-11/04/10	0307054

Dilution Factor: 1 Analysis Time..: 15:22 Analyst ID.....: 005164

Instrument ID..: SPE

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: C0J300446 **Matrix.....:** BIOLOGIC

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Lipids		WO#:L9F721AC-LCS/L9F721AD-LCSD				LCS Lot-Sample#: C0K030000-054		
	9.14	8.55	%	94		SW846 Total Resid	11/03-11/04/10	0307054
	9.25	8.55	%	92	0.0	SW846 Total Resid	11/03-11/04/10	0307054

Dilution Factor: 1 Analysis Time..: 15:22 Analyst ID.....: 005164

Instrument ID..: SPE

NOTE(S):

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

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0J300446 **Work Order #...:** L9C2R-SMP L9C2R-DUP **Matrix.....:** BIOLOGIC

Date Sampled...: 08/25/10 **Date Received..:** 10/30/10

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Lipids						SD Lot-Sample #: C0J300446-004		
	3.8	3.8	%	0.34	(0-25)	SW846 Total Resid	11/03-11/04/10	0307054

Dilution Factor: 1 Analysis Time..: 15:22 Analyst ID.....: 5164

Instrument ID..: SPEEDVAP MS Run Number..: 0307027

Sample Calc

Analysis Report 11/05/10 10:28:54 AM page 1

Method: METTRACE Sample Name: L9C20 Operator: RJG
Run Time: 11/05/10 10:23:29 DHC-2-FS-CCI
Comment: TESTAMERICA PITTSBURGH ICP METALS ANALYSIS-INST TRACEICP
Mode: CONC Corr. Factor: 1

copper reported result: 0.67 mg/kg

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00026	.02038	.00124	.00365	.00225	-.00025	2.1060
SDev	.00031	.00196	.00096	.00013	.00004	.00003	.0041
%RSD	118.24	9.6315	77.809	3.6178	1.8373	10.656	.19516
#1	-.00060	.02171	.00219	.00379	.00221	-.00026	2.1104
#2	-.00001	.01812	.00126	.00364	.00229	-.00026	2.1054
#3	-.00016	.02130	.00026	.00353	.00224	-.00022	2.1022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	500.00	10.000	30.000	10.000	10.000	600.00
Low	-.00500	-.20000	-.01000	-.20000	-.20000	-.00400	-5.0000

Elem	CD	CO	CR	CU	FE	K_	MG
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00000	-.00001	.00134	.00710	.06501	37.947	2.6955
SDev	.00006	.00032	.00033	.00029	.00247	.021	.0072
%RSD	1948.6	4778.1	24.431	4.1121	3.7915	.05622	.26616
#1	.00000	-.00027	.00112	.00729	.06779	37.971	2.6986
#2	-.00007	.00035	.00171	.00725	.06310	37.941	2.7005
#3	.00006	-.00010	.00118	.00676	.06415	37.930	2.6872
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	50.000	20.000	10.000	500.00	400.00	600.00
Low	-.00500	-.05000	-.00500	-.02500	-.10000	-5.0000	-5.0000

Elem	MN	MO	NA	NI	PB/1	PB/2	PB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00235	.00279	7.0762	.00122	.00268	.00025	.00106
SDev	.00001	.00064	.0563	.00043	.00050	.00116	.00067
%RSD	.23582	23.113	.79562	35.451	18.615	471.75	63.385
#1	.00234	.00350	7.0227	.00078	.00217	.00059	.00112
#2	.00235	.00263	7.1349	.00165	.00317	-.00105	.00036
#3	.00235	.00225	7.0710	.00122	.00270	.00119	.00169
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass
High	20.000	20.000	400.00	100.00			5.0000
Low	-.01500	-.04000	-5.0000	-.04000			-.00300

Elem	SB/1	SB/2	SB	SE/1	SE/2	SE	SI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00165	.00275	.00239	.00589	.00614	.00606	.05474
SDev	.00145	.00144	.00051	.00195	.00167	.00175	.00394
%RSD	87.969	52.273	21.438	33.114	27.133	28.915	7.1969
#1	.00329	.00129	.00196	.00755	.00724	.00735	.05748
#2	.00052	.00417	.00295	.00374	.00422	.00406	.05651

$0.0071 \times \frac{0.1\,L}{1.05\,g} \times 1000 = 0.68\ mg/kg$

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **MIKE MARTIN** **DATE:** **DECEMBER 8, 2010**

FROM: **CHERYLE LU** **COPIES:** **DV FILE**

SUBJECT: **DATA VALIDATION – POLYCHLORINATED BIPHENYLS (PCBs)**
LOCKHEED MIDDLE RIVER, MD
SAMPLE DELIVERY GROUP (SDG) – C0J300446

SAMPLES: **15/Fish Tissue**

BQ1-FS-WC1	BQ1-FS-CC1	DHC-3-FS-CC1	DHC-4-FS-CC3
DHC-2-FS-CC1	DHC-4-FS-CC1	DHC-4-FS-CC2	CPC-2-FS-CC1
DHC5-FS-CC1	DHC5-FS-CC2	MP-FS-WC1	MP-FS-CC2
MP-FS-CC1	MR-FS-CC2	MR-FS-CC1	

Overview

The sample set for Lockheed Middle River, MD, SDG C0J300446 consists of 15 fish tissue samples.

The samples were collected by Tetra Tech on August 25-27, September 9 and October 7-8, 2010, and analyzed by Test America, Laboratories, Inc., Pittsburgh, Pennnsylvania. All samples were analyzed for polychlorinated biphenyls (PCBs). All analyses were conducted in accordance with SW-846 Method 8082 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike results, matrix spike/matrix spike duplicate results, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Minor Problems

- The positive results reported below the reporting limit (RL) were qualified as estimated "J", due to uncertainty near the detection limit.

- The relative percent difference (RPD) value for Aroclor-1268 results between column 1 and 2 was greater than 25%. The positive results of Aroclor-1268 were qualified as estimated, "J" for samples DHC-3-FS-CC1, DHC-4-FS-CC2, DHC-4-FS-CC3, MR-FS-CC2, DHC-5-FS-CC1, and DHC-5-FS-CC2.

- As indicated by the laboratory, the surrogate recovery (%R) of decachlorobiphenyl could be calculated in the following samples due to possible matrix interference: BQ1-FS-WC1, BQ1-FS-CC1, DHC-2-FS-CC1, DHC-4-FS-CC1, CPC-2-FS-CC1, DHC5-FS-CC1, DHC5-FS-CC2, MP-FS-WC1, MP-FS-CC2, MP-FS-CC1, MR-FS-CC2, and MR-FS-CC1. The %R of tetrachloro-m-

xylene was acceptable in all of the aforementioned samples.The recoveries (%Rs) of both surrogates in the method blank and laboratory control sample (LCS) were acceptable. The positive results were qualified as estimated, "J" and the nondetected results were qualified as estimated, "UJ" for samples, BQ1-FS-WC1, BQ1-FS-CC1, DHC-2-FS-CC1, DHC-4-FS-CC1, CPC-2-FS-CC1, MP-FS-WC1, MP-FS-CC2, MP-FS-CC1, MR-FS-CC2, MR-FS-CC1, DHC-5-FS-CC1, and DHC-5-FS-CC2.

Notes

The surrogate %Rs of decachlorobiphenyl and tetrachloro-m-xylene were not calculated because the samples DHC-3-FS-CC1 and DHS-4-FS-CC3 were diluted. No qualification was required.

Nondetected results for all compounds were reported down to method detection limits (MDLs) in the database. Results summarized on the hardcopy laboratory form Is were reported to practical quantitation limits. This item is noted for completeness.

In Batch 0307053, the matrix spike and matrix spike duplicate of sample BQ1-FS-CC1 contained high recoveries Aroclor1260. The RPD value was within the QC limit. The blank spike recovery for Aroclor 1260 was within acceptance limits.No qualification was required for the nondetected Aroclor 1260 result.

Executive Summary

Laboratory Performance: The RPD values for Aroclor-1268 results between column 1 and 2 were greater than 25%. The positive results of Aroclor-1268 were qualified as estimated, "J" for several samples. The surrogate %R of decachlorobiphenyl cannot be calculated due to possible matrix interference.

Other Factors Affecting Data Quality: The %Rs of Aroclor1260 in MS/MSD were above the QC limits.

The data for the analysis were reviewed with reference to the "Region III Modifications to National Functional Guidelines for Organic Data Review, Multi-Media, Multi-Concentration, on September 1994".

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech NUS
Cheryle C. Lu
Senior Toxicologist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

PROJ_NO: 02903	NSAMPLE	BQ1-FS-CC1			BQ1-FS-WC1			CPC-2-FS-CC1			DHC-2-FS-CC1		
SDG: C0J300446	LAB_ID	C0J300446002			C0J300446001			C0J300446008			C0J300446005		
FRACTION: PEST/PCB	SAMP_DATE	10/8/2010			8/27/2010			8/26/2010			8/25/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.62	UJ	R	0.12	UJ	R	0.62	UJ	R	0.12	UJ	R
AROCLOR-1221		0.8	UJ	R	0.16	UJ	R	0.79	UJ	R	0.16	UJ	R
AROCLOR-1232		0.71	UJ	R	0.14	UJ	R	0.71	UJ	R	0.14	UJ	R
AROCLOR-1242		0.68	UJ	R	0.13	UJ	R	0.68	UJ	R	0.14	UJ	R
AROCLOR-1248		0.39	UJ	R	0.078	UJ	R	0.39	UJ	R	0.079	UJ	R
AROCLOR-1254		0.59	UJ	R	0.12	UJ	R	0.59	UJ	R	0.12	UJ	R
AROCLOR-1260		0.59	UJ	R	0.12	UJ	R	0.59	UJ	R	0.12	UJ	R
AROCLOR-1262		40	J	R	25	J	R	20	J	R	47	J	R
AROCLOR-1268		20	J	R	14	J	R	12	J	R	19	J	R

PROJ_NO: 02903	NSAMPLE	DHC-3-FS-CC1			DHC-4-FS-CC1			DHC-4-FS-CC2			DHC-4-FS-CC3		
SDG: C0J300446	LAB_ID	C0J300446003			C0J300446006			C0J300446007			C0J300446004		
FRACTION: PEST/PCB	SAMP_DATE	8/26/2010			9/10/2010			9/10/2010			8/25/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		3.1	U		0.12	UJ	R	0.12	U		1.2	U	
AROCLOR-1221		3.9	U		0.16	UJ	R	0.16	U		1.6	U	
AROCLOR-1232		3.5	U		0.14	UJ	R	0.14	U		1.4	U	
AROCLOR-1242		3.4	U		0.14	UJ	R	0.13	U		1.3	U	
AROCLOR-1248		2	U		0.079	UJ	R	0.077	U		0.78	U	
AROCLOR-1254		2.9	U		0.12	UJ	R	0.12	U		1.2	U	
AROCLOR-1260		2.9	U		0.12	UJ	R	0.12	U		1.2	U	
AROCLOR-1262		1500			53	J	R	100			200		
AROCLOR-1268		130	J	U	19	J	R	14	J	U	36	J	U

PROJ_NO: 02903	NSAMPLE	DHC-5-FS-CC1			DHC-5-FS-CC2			MP-FS-CC1			MP-FS-CC2		
SDG: C0J300446	LAB_ID	C0J300446014			C0J300446015			C0J300446011			C0J300446010		
FRACTION: PEST/PCB	SAMP_DATE	9/10/2010			9/10/2010			10/8/2010			8/27/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.62	UJ	R	0.62	UJ	R	0.62	UJ	R	0.62	UJ	R
AROCLOR-1221		0.8	UJ	R	0.8	UJ	R	0.8	UJ	R	0.79	UJ	R
AROCLOR-1232		0.71	UJ	R	0.71	UJ	R	0.71	UJ	R	0.71	UJ	R
AROCLOR-1242		0.68	UJ	R	0.68	UJ	R	0.68	UJ	R	0.67	UJ	R
AROCLOR-1248		0.39	UJ	R	0.39	UJ	R	0.39	UJ	R	0.39	UJ	R
AROCLOR-1254		0.59	UJ	R	0.59	UJ	R	0.59	UJ	R	0.59	UJ	R
AROCLOR-1260		0.59	UJ	R	0.59	UJ	R	0.59	UJ	R	0.59	UJ	R
AROCLOR-1262		400	J	R	310	J	R	110	J	R	140	J	R
AROCLOR-1268		78	J	UR	58	J	UR	62	J	R	77	J	R

PROJ_NO: 02903	NSAMPLE	MP-FS-WC1			MR-FS-CC1			MR-FS-CC2		
SDG: C0J300446	LAB_ID	C0J300446009			C0J300446013			C0J300446012		
FRACTION: PEST/PCB	SAMP_DATE	10/8/2010			10/7/2010			10/7/2010		
MEDIA: TISSUE	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS									
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.62	UJ	R	0.62	UJ	R	0.62	UJ	R
AROCLOR-1221		0.8	UJ	R	0.8	UJ	R	0.8	UJ	R
AROCLOR-1232		0.71	UJ	R	0.71	UJ	R	0.71	UJ	R
AROCLOR-1242		0.68	UJ	R	0.68	UJ	R	0.68	UJ	R
AROCLOR-1248		0.39	UJ	R	0.39	UJ	R	0.39	UJ	R
AROCLOR-1254		0.59	UJ	R	0.59	UJ	R	0.59	UJ	R
AROCLOR-1260		0.59	UJ	R	0.59	UJ	R	0.59	UJ	R
AROCLOR-1262		8.1	J	R	18	J	R	75	J	R
AROCLOR-1268		4.3	J	R	7.6	J	R	14	J	UR

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

Tetra Tech NUS, Inc

Client Sample ID: BQ1-FS-WC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-001	**Work Order #...:**	L9C2F1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	08/27/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	14:10		
Dilution Factor:	0.99	**Initial Wgt/Vol:**	30.2 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.82	ug/kg	0.12
Aroclor 1221	ND	0.82	ug/kg	0.16
Aroclor 1232	ND	0.82	ug/kg	0.14
Aroclor 1242	ND	0.82	ug/kg	0.13
Aroclor 1248	ND	0.82	ug/kg	0.078
Aroclor 1254	ND	0.82	ug/kg	0.12
Aroclor 1260	ND	0.82	ug/kg	0.12
Aroclor 1262	**25**	**0.82**	**ug/kg**	**0.18**
Aroclor 1268	14	**0.82**	**ug/kg**	**0.11**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	72	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: BQ1-FS-CC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-002	**Work Order #...:**	L9C2L1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	10/08/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	14:35		
Dilution Factor:	5	**Initial Wgt/Vol:**	30 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1221	ND	4.2	ug/kg	0.80
Aroclor 1232	ND	4.2	ug/kg	0.71
Aroclor 1016	ND	4.2	ug/kg	0.62
Aroclor 1242	ND	4.2	ug/kg	0.68
Aroclor 1248	ND	4.2	ug/kg	0.39
Aroclor 1254	ND	4.2	ug/kg	0.59
Aroclor 1260	ND	4.2	ug/kg	0.59
Aroclor 1262	**40**	**4.2**	**ug/kg**	**0.91**
Aroclor 1268	**20**	**4.2**	**ug/kg**	**0.54**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: DHC-3-FS-CC1

GC Semivolatiles

Lot-Sample #...: C0J300446-003	**Work Order #...:** L9C2N1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...: 08/26/10	**Date Received..:** 10/30/10	**MS Run #.....:**	0307023
Prep Date.....: 11/03/10	**Analysis Date..:** 11/11/10		
Prep Batch #...: 0307053	**Analysis Time..:** 18:23		
Dilution Factor: 24.83	**Initial Wgt/Vol:** 30.2 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:	**Analyst ID.....:** 402360	**Instrument ID..:**	S/T
	Method.....: SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	21	ug/kg	3.1
Aroclor 1221	ND	21	ug/kg	3.9
Aroclor 1232	ND	21	ug/kg	3.5
Aroclor 1242	ND	21	ug/kg	3.4
Aroclor 1248	ND	21	ug/kg	2.0
Aroclor 1254	ND	21	ug/kg	2.9
Aroclor 1260	ND	21	ug/kg	2.9
Aroclor 1262	**1500**	**21**	**ug/kg**	**4.5**
Aroclor 1268	**130 PG**	**21**	**ug/kg**	**2.7**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	NC,DIL	(40 - 145)
Decachlorobiphenyl	NC,DIL	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC3

GC Semivolatiles

Lot-Sample #...:	C0J300446-004	**Work Order #...:**	L9C2R1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	08/25/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/11/10		
Prep Batch #...:	0307053	**Analysis Time..:**	18:48		
Dilution Factor:	9.93	**Initial Wgt/Vol:**	30.2 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	8.3	ug/kg	1.2
Aroclor 1221	ND	8.3	ug/kg	1.6
Aroclor 1232	ND	8.3	ug/kg	1.4
Aroclor 1242	ND	8.3	ug/kg	1.3
Aroclor 1248	ND	8.3	ug/kg	0.78
Aroclor 1254	ND	8.3	ug/kg	1.2
Aroclor 1260	ND	8.3	ug/kg	1.2
Aroclor 1262	**200**	**8.3**	**ug/kg**	**1.8**
Aroclor 1268	**36 PG**	**8.3**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	NC,DIL	(40 - 145)
Decachlorobiphenyl	NC,DIL	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Tetra Tech NUS, Inc

Client Sample ID: DHC-2-FS-CC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-005	**Work Order #...:**	L9C201AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	08/25/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	16:42		
Dilution Factor:	1	**Initial Wgt/Vol:**	30 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.83	ug/kg	0.12
Aroclor 1221	ND	0.83	ug/kg	0.16
Aroclor 1232	ND	0.83	ug/kg	0.14
Aroclor 1242	ND	0.83	ug/kg	0.14
Aroclor 1248	ND	0.83	ug/kg	0.079
Aroclor 1254	ND	0.83	ug/kg	0.12
Aroclor 1260	ND	0.83	ug/kg	0.12
Aroclor 1262	**47**	**0.83**	**ug/kg**	**0.18**
Aroclor 1268	**19**	**0.83**	**ug/kg**	**0.11**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	100	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: DHC-4-FS-CC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-006	Work Order #...:	L9C231AA	Matrix.....:	BIOLOGIC
Date Sampled...:	09/10/10	Date Received..:	10/30/10	MS Run #.....:	0307023
Prep Date.....:	11/03/10	Analysis Date..:	11/10/10		
Prep Batch #...:	0307053	Analysis Time..:	17:08		
Dilution Factor:	1	Initial Wgt/Vol:	30 g	Final Wgt/Vol..:	1 mL
% Moisture.....:		Analyst ID.....:	402360	Instrument ID..:	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.83	ug/kg	0.12
Aroclor 1221	ND	0.83	ug/kg	0.16
Aroclor 1232	ND	0.83	ug/kg	0.14
Aroclor 1242	ND	0.83	ug/kg	0.14
Aroclor 1248	ND	0.83	ug/kg	0.079
Aroclor 1254	ND	0.83	ug/kg	0.12
Aroclor 1260	ND	0.83	ug/kg	0.12
Aroclor 1262	53	0.83	ug/kg	0.18
Aroclor 1268	19	0.83	ug/kg	0.11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: DHC-4-PS-CC2

GC Semivolatiles

Lot-Sample #...: C0J300446-007	Work Order #...: L9C261AA	Matrix.....: BIOLOGIC
Date Sampled...: 09/10/10	Date Received..: 10/30/10	MS Run #.....: 0307023
Prep Date.....: 11/03/10	Analysis Date..: 11/10/10	
Prep Batch #...: 0307053	Analysis Time..: 17:33	
Dilution Factor: 0.98	Initial Wgt/Vol: 30.3 g	Final Wgt/Vol..: 1 mL
% Moisture.....:	Analyst ID.....: 402360	Instrument ID..: S/T
	Method.....: SW846 8082 Low Le	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	0.82	ug/kg	0.12
Aroclor 1221	ND	0.82	ug/kg	0.16
Aroclor 1232	ND	0.82	ug/kg	0.14
Aroclor 1242	ND	0.82	ug/kg	0.13
Aroclor 1248	ND	0.82	ug/kg	0.077
Aroclor 1254	ND	0.82	ug/kg	0.12
Aroclor 1260	ND	0.82	ug/kg	0.12
Aroclor 1262	100	0.82	ug/kg	0.18
Aroclor 1268	14 PG	0.82	ug/kg	0.10

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	65	(40 - 145)
Decachlorobiphenyl	150	(35 - 150)

NOTE(S):

PG The percent difference between the original and confirmation analyses is greater than 40%.

Tetra Tech NUS, Inc

Client Sample ID: CPC-2-FS-CC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-008	**Work Order #...:**	L9C271AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	08/26/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	17:59		
Dilution Factor:	4.98	**Initial Wgt/Vol:**	30.1 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.1	ug/kg	0.62
Aroclor 1221	ND	4.1	ug/kg	0.79
Aroclor 1232	ND	4.1	ug/kg	0.71
Aroclor 1242	ND	4.1	ug/kg	0.68
Aroclor 1248	ND	4.1	ug/kg	0.39
Aroclor 1254	ND	4.1	ug/kg	0.59
Aroclor 1260	ND	4.1	ug/kg	0.59
Aroclor 1262	**20**	**4.1**	**ug/kg**	**0.91**
Aroclor 1268	**12**	**4.1**	**ug/kg**	**0.53**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: MP-FS-WC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-009	**Work Order #...:**	L9C291AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	10/08/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	18:24		
Dilution Factor:	5	**Initial Wgt/Vol:**	30 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.2	ug/kg	0.62
Aroclor 1221	ND	4.2	ug/kg	0.80
Aroclor 1232	ND	4.2	ug/kg	0.71
Aroclor 1242	ND	4.2	ug/kg	0.68
Aroclor 1248	ND	4.2	ug/kg	0.39
Aroclor 1254	ND	4.2	ug/kg	0.59
Aroclor 1260	ND	4.2	ug/kg	0.59
Aroclor 1262	**8.1**	**4.2**	**ug/kg**	**0.91**
Aroclor 1268	4.3	4.2	**ug/kg**	**0.54**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	70	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: MP-FS-CC2

GC Semivolatiles

Lot-Sample #...:	C0J300446-010	**Work Order #...:**	L9C3C1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	08/27/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	18:49		
Dilution Factor:	4.97	**Initial Wgt/Vol:**	30.2 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.1	ug/kg	0.62
Aroclor 1221	ND	4.1	ug/kg	0.79
Aroclor 1232	ND	4.1	ug/kg	0.71
Aroclor 1242	ND	4.1	ug/kg	0.67
Aroclor 1248	ND	4.1	ug/kg	0.39
Aroclor 1254	ND	4.1	ug/kg	0.59
Aroclor 1260	ND	4.1	ug/kg	0.59
Aroclor 1262	**140**	**4.1**	**ug/kg**	**0.91**
Aroclor 1268	**77**	**4.1**	**ug/kg**	**0.53**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	103	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: MP-FS-CC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-011	**Work Order #...:**	L9C3G1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	10/08/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	19:15		
Dilution Factor:	5	**Initial Wgt/Vol:**	30 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.2	ug/kg	0.62
Aroclor 1221	ND	4.2	ug/kg	0.80
Aroclor 1232	ND	4.2	ug/kg	0.71
Aroclor 1242	ND	4.2	ug/kg	0.68
Aroclor 1248	ND	4.2	ug/kg	0.39
Aroclor 1254	ND	4.2	ug/kg	0.59
Aroclor 1260	ND	4.2	ug/kg	0.59
Aroclor 1262	**110**	**4.2**	**ug/kg**	**0.91**
Aroclor 1268	**62**	**4.2**	**ug/kg**	**0.54**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: MR-FS-CC2

GC Semivolatiles

Lot-Sample #...:	C0J300446-012	**Work Order #...:**	L9C3J1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	10/07/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	19:40		
Dilution Factor:	5	**Initial Wgt/Vol:**	15 g	**Final Wgt/Vol..:**	0.5 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.2	ug/kg	0.62
Aroclor 1221	ND	4.2	ug/kg	0.80
Aroclor 1232	ND	4.2	ug/kg	0.71
Aroclor 1242	ND	4.2	ug/kg	0.68
Aroclor 1248	ND	4.2	ug/kg	0.39
Aroclor 1254	ND	4.2	ug/kg	0.59
Aroclor 1260	ND	4.2	ug/kg	0.59
Aroclor 1262	**75**	**4.2**	**ug/kg**	**0.91**
Aroclor 1268	**14 PG**	**4.2**	**ug/kg**	**0.54**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	141	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Tetra Tech NUS, Inc

Client Sample ID: MR-FS-CC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-013	**Work Order #...:**	L9C3L1AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	10/07/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	20:06		
Dilution Factor:	5	**Initial Wgt/Vol:**	15 g	**Final Wgt/Vol..:**	0.5 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.2	ug/kg	0.62
Aroclor 1221	ND	4.2	ug/kg	0.80
Aroclor 1232	ND	4.2	ug/kg	0.71
Aroclor 1242	ND	4.2	ug/kg	0.68
Aroclor 1248	ND	4.2	ug/kg	0.39
Aroclor 1254	ND	4.2	ug/kg	0.59
Aroclor 1260	ND	4.2	ug/kg	0.59
Aroclor 1262	**18**	**4.2**	**ug/kg**	**0.91**
Aroclor 1268	7.6	**4.2**	**ug/kg**	**0.54**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	95	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

Tetra Tech NUS, Inc

Client Sample ID: DHC5-FS-CC1

GC Semivolatiles

Lot-Sample #...:	C0J300446-014	**Work Order #...:**	L9C351AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	09/10/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	20:31		
Dilution Factor:	5	**Initial Wgt/Vol:**	15 g	**Final Wgt/Vol..:**	0.5 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.2	ug/kg	0.62
Aroclor 1221	ND	4.2	ug/kg	0.80
Aroclor 1232	ND	4.2	ug/kg	0.71
Aroclor 1242	ND	4.2	ug/kg	0.68
Aroclor 1248	ND	4.2	ug/kg	0.39
Aroclor 1254	ND	4.2	ug/kg	0.59
Aroclor 1260	ND	4.2	ug/kg	0.59
Aroclor 1262	**400**	**4.2**	**ug/kg**	**0.91**
Aroclor 1268	**78 PG**	**4.2**	**ug/kg**	**0.54**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

PG The percent difference between the original and confirmation analyses is greater than 40%.

Tetra Tech NUS, Inc

Client Sample ID: DHC5-FS-CC2

GC Semivolatiles

Lot-Sample #...:	C0J300446-015	**Work Order #...:**	L9C391AA	**Matrix.....:**	BIOLOGIC
Date Sampled...:	09/10/10	**Date Received..:**	10/30/10	**MS Run #.....:**	0307023
Prep Date.....:	11/03/10	**Analysis Date..:**	11/10/10		
Prep Batch #...:	0307053	**Analysis Time..:**	20:56		
Dilution Factor:	5	**Initial Wgt/Vol:**	15 g	**Final Wgt/Vol..:**	0.5 mL
% Moisture.....:		**Analyst ID.....:**	402360	**Instrument ID..:**	S/T
		Method.....:	SW846 8082 Low Le		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	4.2	ug/kg	0.62
Aroclor 1221	ND	4.2	ug/kg	0.80
Aroclor 1232	ND	4.2	ug/kg	0.71
Aroclor 1242	ND	4.2	ug/kg	0.68
Aroclor 1248	ND	4.2	ug/kg	0.39
Aroclor 1254	ND	4.2	ug/kg	0.59
Aroclor 1260	ND	4.2	ug/kg	0.59
Aroclor 1262	**310**	4.2	**ug/kg**	**0.91**
Aroclor 1268	**58 PG**	**4.2**	**ug/kg**	**0.54**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	107	(40 - 145)
Decachlorobiphenyl	NC,I	(35 - 150)

NOTE(S):

NC The recovery and/or RPD were not calculated.

I Matrix interference.

PG The percent difference between the original and confirmation analyses is greater than 40%.

APPENDIX C
SUPPORT DOCUMENTATION

CASE NARRATIVE
TETRA TECH NUS, INC.
Middle River, MD

Lot #: C0J300446

Sample Receiving:
TestAmerica's Pittsburgh laboratory received samples on October 30, 2010. The coolers were received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

PCBs:
Due to limited sample volume, several samples were digested using 15-grams of sample instead of 30-grams. The amount of surrogate spiked and the final extract volumes were adjusted accordingly.

Due to the concentration of PCBs detected, several samples were analyzed at a dilution.

The recovery of decachlorobiphenyl surrogate was not calculated for several samples due to matrix interference.

Samples DHC-3-FS-CC1 and DHC-4-FS-CC3 had the surrogates diluted out.

The matrix spike and matrix spike duplicate recovered outside of the control limits for AR1260.

Metals:
The method blanks had analytes detected at concentrations between the MDL and the reporting limit. The results were flagged with a "B" qualifier. Any sample associated with a method blank that had the same analyte detected had the result flagged with a "J" qualifier.

General Chemistry:
There were no problems associated with the analysis.

MANUAL INTEGRATION SUMMARY REPORT

Sample Name	Data File	Lot No.	Compound	Code
M1660	09220.b/T1100260.D	SDGa05064	No Manual Integrations	
L9C2F1AA	09220.b/T1100261.D	C0J300446	No Manual Integrations	
L9C2L1AA	09220.b/T1100262.D	C0J300446	No Manual Integrations	
L9C2L1AX	09220.b/T1100263.D	C0J300446	No Manual Integrations	
L9C2L1A0	09220.b/T1100264.D	C0J300446	No Manual Integrations	
L9C201AA	09220.b/T1100267.D	C0J300446	No Manual Integrations	
L9C231AA	09220.b/T1100268.D	C0J300446	No Manual Integrations	
L9C261AA	09220.b/T1100269.D	C0J300446	No Manual Integrations	
L9C271AA	09220.b/T1100270.D	C0J300446	No Manual Integrations	
L9C291AA	09220.b/T1100271.D	C0J300446	No Manual Integrations	
L9C3C1AA	09220.b/T1100272.D	C0J300446	No Manual Integrations	
L9C3G1AA	09220.b/T1100273.D	C0J300446	No Manual Integrations	
L9C3J1AA	09220.b/T1100274.D	C0J300446	No Manual Integrations	
L9C3L1AA	09220.b/T1100275.D	C0J300446	No Manual Integrations	
L9C351AA	09220.b/T1100276.D	C0J300446	No Manual Integrations	
L9C391AA	09220.b/T1100277.D	C0J300446	No Manual Integrations	
L9F7W1AA	09220.b/T1100279.D	C0J300446	No Manual Integrations	
L9F7W1AC	09220.b/T1100280.D	C0J300446	No Manual Integrations	
MH1660	09220.b/T1100281.D	SDGa05064	Aroclor-1260	PC
MH1660	09220.b/T1100281.D	SDGa05064	Aroclor-1016	PC
M1660	09220.b/T1100320.D	SDGa05064	No Manual Integrations	
L9C2N1AA	09220.b/T1100322.D	C0J300446	No Manual Integrations	
L9C2R1AA	09220.b/T1100323.D	C0J300446	No Manual Integrations	
MH1660	09220.b/T1100341.D	SDGa05064	No Manual Integrations	

Legend

BAS - Baseline Event
SP - Split Peak
TAIL - Peak Tailing or Fronting
NOID - Analyte not Identified by the Data System
MSID - Analyte Misidentified by the Data System
PNF - Peak Not Found
PC - Poor Chromatography
WI - Wrong Isomer
SN - Other See Narrative
PFS - Peak Split
WFP - Peak Identified Incorrectly
WFI - Peak Integrated Incorrectly
PFT - Peak Tailing
PFF - Peak Fronting
PAB - Peak Added Back

MANUAL INTEGRATION SUMMARY REPORT

Sample Name	Data File	Lot No.	Compound	Code
M1660	09220.b/S1100260.D	SDGa05064	No Manual Integrations	
L9C2F1AA	09220.b/S1100261.D	C0J300446	No Manual Integrations	
L9C2L1AA	09220.b/S1100262.D	C0J300446	No Manual Integrations	
L9C2L1AX	09220.b/S1100263.D	C0J300446	No Manual Integrations	
L9C2L1A0	09220.b/S1100264.D	C0J300446	No Manual Integrations	
L9C201AA	09220.b/S1100267.D	C0J300446	No Manual Integrations	
L9C231AA	09220.b/S1100268.D	C0J300446	No Manual Integrations	
L9C261AA	09220.b/S1100269.D	C0J300446	No Manual Integrations	
L9C271AA	09220.b/S1100270.D	C0J300446	No Manual Integrations	
L9C291AA	09220.b/S1100271.D	C0J300446	No Manual Integrations	
L9C3C1AA	09220.b/S1100272.D	C0J300446	No Manual Integrations	
L9C3G1AA	09220.b/S1100273.D	C0J300446	No Manual Integrations	
L9C3J1AA	09220.b/S1100274.D	C0J300446	No Manual Integrations	
L9C3L1AA	09220.b/S1100275.D	C0J300446	No Manual Integrations	
L9C351AA	09220.b/S1100276.D	C0J300446	No Manual Integrations	
L9C391AA	09220.b/S1100277.D	C0J300446	No Manual Integrations	
L9F7W1AA	09220.b/S1100279.D	C0K030446	No Manual Integrations	
L9F7W1AC	09220.b/S1100280.D	C0J300446	Aroclor-1260	PC
L9F7W1AC	09220.b/S1100280.D	C0J300446	Aroclor-1016	PC
MH1660	09220.b/S1100281.D	SDGa05064	Aroclor-1260	PC
MH1660	09220.b/S1100281.D	SDGa05064	Aroclor-1016	PC
M1660	09220.b/S1100320.D	SDGa05064	No Manual Integrations	
L9C2N1AA	09220.b/S1100322.D	C0J300446	No Manual Integrations	
L9C2R1AA	09220.b/S1100323.D	C0J300446	No Manual Integrations	
MH1660	09220.b/S1100341.D	SDGa05064	Aroclor-1016	PC

Legend

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PNF - Peak Not Found
PC - Poor Chromatography
WI - Wrong Isomer
SN - Other See Narrative
PFS - Peak Split
WFP - Peak Identified Incorrectly
WFI - Peak Integrated Incorrectly
PFT - Peak Tailing
PFF - Peak Fronting
PAB - Peak Added Back

MANUAL INTEGRATION SUMMARY REPORT

Sample Name	Data File	Lot No.	Compound	Code
M2154	09220.b/S1100220.D	SDGa05064	No Manual Integrations	
M1232	09220.b/S1100221.D	SDGa05064	No Manual Integrations	
M1248	09220.b/S1100223.D	SDGa05064	Aroclor-1248	PC
M1262	09220.b/S1100224.D	SDGa05064	No Manual Integrations	
M1268	09220.b/S1100225.D	SDGa05064	No Manual Integrations	
M1242	09220.b/S1100226.D	SDGa05064	No Manual Integrations	
M1660	09220.b/S1100227.D	SDGa05064	No Manual Integrations	
M2154	09220.b/T1100220.D	SDGa05064	No Manual Integrations	
M1232	09220.b/T1100221.D	SDGa05064	No Manual Integrations	
M1242	09220.b/T1100222.D	SDGa05064	No Manual Integrations	
M1248	09220.b/T1100223.D	SDGa05064	No Manual Integrations	
M1262	09220.b/T1100224.D	SDGa05064	No Manual Integrations	
M1268	09220.b/T1100225.D	SDGa05064	No Manual Integrations	
M1660	09220.b/T1100227.D	SDGa05064	Aroclor-1260	PC

Legend

BAS - Baseline Event
SP - Split Peak
TAIL - Peak Tailing or Fronting
NOID - Analyte not Identified by the Data System
MSID - Analyte Misidentified by the Data System
PNF - Peak Not Found
PC - Poor Chromatography
WI - Wrong Isomer
SN - Other See Narrative
PFS - Peak Split
WFP - Peak Identified Incorrectly
WFI - Peak Integrated Incorrectly
PFT - Peak Tailing
PFF - Peak Fronting
PAB - Peak Added Back

MANUAL INTEGRATION SUMMARY REPORT

HP6890 Sec-1D MR-1

Sample Name	Data File	Lot No.	Compound	Code
M1242	09220.b/T0900800.D	methods	Aroclor-1242	PC
M1242	09220.b/T0900801.D	methods	No Manual Integrations	
M1242	09220.b/T0900802.D	methods	No Manual Integrations	
M1242	09220.b/T0900803.D	methods	No Manual Integrations	
M1242	09220.b/T0900804.D	methods	No Manual Integrations	
M2154	09220.b/T0900805.D	methods	No Manual Integrations	
M1232	09220.b/T0900806.D	methods	No Manual Integrations	
M1248	09220.b/T0900807.D	methods	No Manual Integrations	
M1262	09220.b/T0900808.D	methods	No Manual Integrations	
M1268	09220.b/T0900809.D	methods	No Manual Integrations	
XL1660	09220.b/T0900810.D	methods	No Manual Integrations	
ML1660	09220.b/T0900811.D	methods	No Manual Integrations	
L1660	09220.b/T0900812.D	methods	No Manual Integrations	
M1660	09220.b/T0900813.D	methods	No Manual Integrations	
MH1660	09220.b/T0900814.D	methods	No Manual Integrations	
H1660	09220.b/T0900815.D	methods	No Manual Integrations	
XH1660	09220.b/T0900816.D	methods	Aroclor-1260	PC
XH1660	09220.b/T0900816.D	methods	Aroclor-1016	PC
2M2154	09220.b/T0900817.D	methods	No Manual Integrations	
2M1232	09220.b/T0900818.D	methods	No Manual Integrations	
2M1242	09220.b/T0900819.D	methods	No Manual Integrations	
2M1248	09220.b/T0900820.D	methods	No Manual Integrations	
2M1262	09220.b/T0900821.D	methods	No Manual Integrations	
2M1268	09220.b/T0900822.D	methods	No Manual Integrations	
2M1660	09220.b/T0900823.D	methods	No Manual Integrations	

Legend

BAS - Baseline Event
SP - Split Peak
TAIL - Peak Tailing or Fronting
NOID - Analyte not Identified by the Data System
MSID - Analyte Misidentified by the Data System
PNF - Peak Not Found
PC - Poor Chromatography
WI - Wrong Isomer
SN - Other See Narrative
PFS - Peak Split
WFP - Peak Identified Incorrectly
WFI - Peak Integrated Incorrectly
PFT - Peak Tailing
PFF - Peak Fronting
PAB - Peak Added Back

MANUAL INTEGRATION SUMMARY REPORT

HP6890 GC-10 MR-1

Sample Name	Data File	Lot No.	Compound	Code
M1242	09220.b/S0900800.D	SDGa05064	No Manual Integrations	
M1242	09220.b/S0900801.D	methods	No Manual Integrations	
M1242	09220.b/S0900802.D	methods	No Manual Integrations	
M1242	09220.b/S0900803.D	methods	No Manual Integrations	
M1242	09220.b/S0900804.D	methods	No Manual Integrations	
M2154	09220.b/S0900805.D	methods	No Manual Integrations	
M1232	09220.b/S0900806.D	methods	Aroclor-1232	PC
M1248	09220.b/S0900807.D	methods	No Manual Integrations	
M1262	09220.b/S0900808.D	methods	No Manual Integrations	
M1268	09220.b/S0900809.D	methods	No Manual Integrations	
XL1660	09220.b/S0900810.D	methods	Aroclor-1260	PC
XL1660	09220.b/S0900810.D	methods	Aroclor-1016	PC
ML1660	09220.b/S0900811.D	methods	No Manual Integrations	
L1660	09220.b/S0900812.D	methods	No Manual Integrations	
M1660	09220.b/S0900813.D	methods	Aroclor-1260	PC
M1660	09220.b/S0900813.D	methods	Aroclor-1016	PC
MH1660	09220.b/S0900814.D	methods	No Manual Integrations	
H1660	09220.b/S0900815.D	methods	No Manual Integrations	
XH1660	09220.b/S0900816.D	methods	No Manual Integrations	
2M2154	09220.b/S0900817.D	methods	No Manual Integrations	
2M1232	09220.b/S0900818.D	methods	No Manual Integrations	
2M1242	09220.b/S0900819.D	methods	No Manual Integrations	
2M1248	09220.b/S0900820.D	methods	No Manual Integrations	
2M1262	09220.b/S0900821.D	methods	No Manual Integrations	
2M1268	09220.b/S0900822.D	methods	No Manual Integrations	
2M1660	09220.b/S0900823.D	methods	No Manual Integrations	

Legend

BAS - Baseline Event
SP - Split Peak
TAIL - Peak Tailing or Fronting
NOID - Analyte not Identified by the Data System
MSID - Analyte Misidentified by the Data System
PNF - Peak Not Found
PC - Poor Chromatography
WI - Wrong Isomer
SN - Other See Narrative
PFS - Peak Split
WFP - Peak Identified Incorrectly
WFI - Peak Integrated Incorrectly
PFT - Peak Tailing
PFF - Peak Fronting
PAB - Peak Added Back

METHODS SUMMARY

C0J300446

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Lipids	SW846 Total Res	
PCBs by SW-846 8082 PCBs (8082) Low Level	SW846 8082 Low	SW846 3541
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C0J300446

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L9C2F	001	BQ1-FS-WC1	08/27/10	
L9C2L	002	BQ1-FS-CC1	10/08/10	
L9C2N	003	DHC-3-FS-CC1	08/26/10	
L9C2R	004	DHC-4-FS-CC3	08/25/10	
L9C20	005	DHC-2-FS-CC1	08/25/10	
L9C23	006	DHC-4-FS-CC1	09/10/10	
L9C26	007	DHC-4-FS-CC2	09/10/10	
L9C27	008	CPC-2-FS-CC1	08/26/10	
L9C29	009	MP-FS-WC1	10/08/10	
L9C3C	010	MP-FS-CC2	08/27/10	
L9C3G	011	MP-FS-CC1	10/08/10	
L9C3J	012	MR-FS-CC2	10/07/10	
L9C3L	013	MR-FS-CC1	10/07/10	
L9C35	014	DHC5-FS-CC1	09/10/10	
L9C39	015	DHC5-FS-CC2	09/10/10	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

C0J300446

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Tetra Tech, Inc. | Biological Research Facility

CHAIN-OF-CUSTODY RECORD

Project Manager or Client Contact: Test America - Pittsburgh

Address/Phone: 301 Alpha Rc. RIC Park Pittsburgh PA 15238

Contact Name/Phone: Marcus Barrosso 410-356-8993

Project Number: 112IC02639 Project Name: Middle River

Page 1 of 1 Sample Location: Middle River

Date	Time	Sample Identification/Station	Preservative (Y/N) Dry Ice	Number of Containers	8082 PCB Aroclors (7 Aroclors)	6020 Metals (PPL list)	7471 + Mercury	% lipids	Filleting	Homogenization		
8/27/10	—	BQ-1 (white catfish, 395mm)	Y	1	✓	✓	✓	✓	✓	✓		
10/8/10	—	BQ-1 (Channel catfish, 444mm)	Y	1	✓	✓	✓	✓	✓	✓		
8/26/10	—	DHC-3 (Channel Catfish, 507mm)	Y	1	✓	✓	✓	✓	✓	✓		
8/25/10	—	DHC-4 (Channel Catfish, 536mm)	Y	1	✓	✓	✓	✓	✓	✓		
8/25/10	—	DHC-2 (Channel Catfish, 388mm)	Y	1	✓	✓	✓	✓	✓	✓		
[illegible]/10/10	—	DHC-4 (Channel Catfish, 290mm)	Y	1	✓	✓	✓	✓	✓	✓		
9/10/10	—	DHC-2 (Channel Catfish, 308mm)	Y	1	✓	✓	✓	✓	✓	✓		
9/10/10	—	DHC-2 (Channel Catfish, 295mm)	Y	1	✓	✓	✓	✓	✓	✓		
9/10/10	—	DHC-4 (Channel Catfish, 318mm	Y	1	✓	✓	✓	✓	✓	✓		

Sampled by: (signature)	Date/Time:	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
[signature]	10/29/10				
Received by: (signature)	**Date/Time:**	**Received by: (signature)**	**Date/Time:**	**Received by: (signature)**	**Date/Time:**
				[signature]	10/30/10 1030

FORM DISTRIBUTION: White - Tt BRF Yellow - Report Pink - Sampler

C0J300446

Tetra Tech, Inc. | Biological Research Facility — ***CHAIN-OF-CUSTODY RECORD***

Project Manager or Client Contact: Test American Pittsburgh
Address/Phone: 301 Alpha Dr. RIC Park Pittsburgh PA 15238
Contact Name/Phone: Marcus Bowden 410-356-8993
Project Number: 112IC02659 Project Name: Middle River
Page 1 of 1 Sample Location: Middle River

Date	Time	Sample Identification/Station	Preservative (Y/N) Dry Ice	Number of Containers	Type of Analyses Requested: 8082 PCB Aroclors (Tweeder)	6020 Metals (PPL List)	7471A Mercury	% Lipids	Fish Filleting	Homogenization	
8/26/10	—	CPC-2 (Channel Catfish, 430mm)	Y	1	✓	✓	✓	✓	✓	✓	
10/8/10	—	Marshy Point (White Catfish, 272mm)	Y	1	✓	✓	✓	✓	✓	✓	✓
10/8/10	—	Marshy Point (White Catfish, 372mm)	Y	1	✓	✓	✓	✓	✓	✓	✓
8/27/10	—	MP-1 (Channel Catfish, 409mm) Marshy Point	Y	1	✓	✓	✓	✓	✓	✓	✓
10/8/10	—	Marshy Point (Channel Catfish, 515mm)	Y	1	✓	✓	✓	✓	✓	✓	✓
10/8/10	—	Marshy Point (White Catfish, ~~444mm~~ 300mm)	Y	1	✓	✓	✓	✓	✓	✓	✓
10/7/10	—	Middle River (Channel Catfish, 304mm)	Y	1	✓	✓	✓	✓	✓	✓	✓
10/7/10	—	Middle River (Channel Catfish, 290mm)	Y	1	✓	✓	✓	✓	✓	✓	✓
9/10/10	—	DHC-5 (Channel Catfish, 266mm)	Y	1	✓	✓	✓	✓	✓	✓	✓
9/10/10	—	DHC-5 (Channel Catfish, 282mm)	Y	1	✓	✓	✓	✓	✓	✓	✓

Sampled by (signature)	Date/Time: 10/29/10	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
Received by: (signature)	Date/Time:	Received by: (signature)	Date/Time:	Received by: (signature)	Date/Time: 10/30/10

FORM DISTRIBUTION: White - Tt BRF Yellow - Report Pink - Sampler

10 3d

TestAmerica Pittsburgh

Cooler Receipt Form

Client: TETRA TECH Project: _____ Quote: 86823

Cooler Rec'd & Opened for Temp. Check on: 10 | 30 | 10

Coolers Opened and Unpacked on: 10 | 30 | 10 By: JC (Signature)

TestAmerica Pittsburgh Lot Number: COJ300446

		Yes	No	NA
1.	Were custody seals on the outside of the cooler?		✓	
	If YES, how many and where? Quantity __ Location			
	Were signatures and date correct?			
2.	Were custody papers included inside the cooler?	✓		
3.	Were custody papers properly filled out (ink, signed, match labels)?	✓		
4.	Did you sign the custody papers in the appropriate place?	✓		
5.	Was shippers packing slip attached to this form?	✓		
6.	Were packing materials used?		✓	
	If YES, what type?			
7.	Were the samples received within the acceptable temperature range?	✓		
8.	Were the samples appropriately preserved?			✓
9.	Were all bottles sealed in separate plastic bags?	✓		
10.	Did all bottles arrive in good condition (unbroken)?	✓		
11.	Were all bottle labels complete (sample ID, preservatives, etc.)?	✓		
12.	Did all bottle labels and/or tags agree with custody papers?	✓		
13.	Were correct bottles used for tests indicated?	✓		
14.	Were all VOA vials checked for the presence of air bubbles?			✓
15.	Was a sufficient amount of sample sent in each bottle?	✓		

16. Samples received by: (FEDEX) UPS CLIENT DROP-OFF OTHER DHL US CARGO

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

Rev. 1, 01/20/2010
X:\Forms\Cooler Receipt Form_updated 102010.DOC

TestAmerica Pittsburgh

Cooler Receipt Form

P: Preserved

UP: Unpreserved

Sample ID	TMET PH<2	DMET PH<2	HG PH<2	NUT(1) PH<2	CN PH ≥12	OG TPHC PH<2	PHEN PH<2	SULF PH ≥12	TOC PH<2	TOX PH<2	VOA P/UP	hardness PH<2	Residual CL	

(1) "NUT" could include sample bottles for ammonia, chemical oxygen demand, nitrate/nitrite, TKN, or total phosphorus

Comments: _____

_____

_____

Cooler Number	Temperature*	Thermometer ID
1	0.0	8
2	0.0	8

Sample	Lot Number**

*Acceptable Temperature Range: < 0-6 °C

**Please use an asterisk if bottle lot number was covered by the label

If samples required preservation in the laboratory, the following lot number(s) was/were used:

Nitric Acid _____ Hydrochloric Acid _____

Sulfuric Acid _____ Sodium Hydroxide _____

X:\Forms\Cooler Receipt Form_updated 102010.DOC
Rev. 1, 01/20/2010

From: Origin ID: MTNA (410) 356-8993
Tara Cyr
TETRA TECH, INC
400 Red Brook Blvd.
Suite 200
Owings Mills, MD 21117

FedEx Express

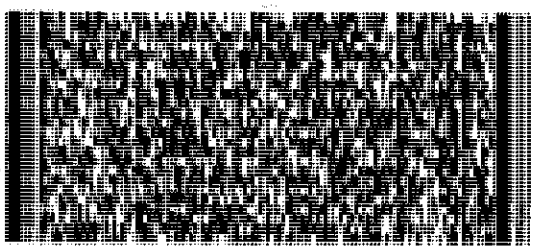
Ship Date: 29OCT10
ActWgt: 50.0 LB
CAD: 2470478/INET3090

Delivery Address Bar Code

Ref # 100-blt-t26249
Invoice #
PO #
Dept #

SHIP TO: (412) 963-7058 **BILL SENDER**

Sample Receiving
TestAmerica Pittsburgh
301 ALPHA DR
RIDC PARK
PITTSBURGH, PA 15238



1 of 2

TRK# 0201 7940 6408 1773

SATURDAY ### A2
PRIORITY OVERNIGHT

MASTER

15238
PA-US
PIT

X0 AGCA

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic valueof the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

From: Origin ID: MTNA (410) 356-8993
Tara Cyr
TETRA TECH, INC
400 Red Brook Blvd.
Suite 200
Owings Mills, MD 21117

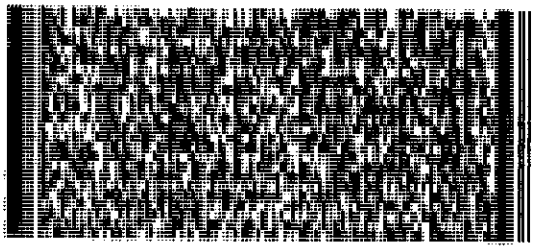
FedEx Express

Ship Date: 29OCT10
ActWgt: 50.0 LB
CAD: 2470478/INET3090

Delivery Address Bar Code

SHIP TO: (412) 963-7058 BILL SENDER
Sample Receiving
TestAmerica Pittsburgh
301 ALPHA DR
RIDC PARK
PITTSBURGH, PA 15238

Ref # 100-blt-t26249
Invoice #
PO #
Dept #



2 of 2
MPS# 0263 7940 6408 1865
Mstr# 7940 6408 1773 0201

SATURDAY ### A2
PRIORITY OVERNIGHT

15238
PA-US
PIT

X0 AGCA

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SW846 8082 Low Level SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc. Client: Tetra Tech NUS, Inc

Lab Code: TALPIT SDG No:

Lot #: C0J300446

Extraction: XXT4F6W8G

	CLIENT ID.	SRG01	SRG02	TOT OUT
01	BQ1-FS-WC1	72	0 *	01
02	BQ1-FS-CC1	76	0 *	01
03	DHC-3-FS-CC1	0 D	0 D	02
04	DHC-4-FS-CC3	0 D	0 D	02
05	DHC-2-FS-CC1	100	0 *	01
06	DHC-4-FS-CC1	85	0 *	01
07	DHC-4-FS-CC2	65	150	00
08	CPC-2-FS-CC1	86	0 *	01
09	MP-FS-WC1	70	0 *	01
10	MP-FS-CC2	103	0 *	01
11	MP-FS-CC1	83	0 *	01
12	MR-FS-CC2	141	0 *	01
13	MR-FS-CC1	95	0 *	01
14	DHC5-FS-CC1	113	0 *	01
15	DHC5-FS-CC2	107	0 *	01
16	METHOD BLK. L9F7W1AA	94	78	00
17	LCS L9F7W1AC	107	95	00
18	BQ1-FS-CC1 D	88	0 *	01
19	BQ1-FS-CC1 S	88	0 *	01

✓ → J(+), UJ(ND)

SURROGATES		QC LIMITS
SRG01	= Tetrachloro-m-xylene	(40-145)
SRG02	= Decachlorobiphenyl	(35-150)

\# Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

SW846 8082 Low Level CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc. Client: Tetra Tech NUS, Inc

Lab Code: TALPIT SDG No:

Lot #: C0K030000 WO #: L9F7W1AC
BATCH: 0307053

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	33.3	25.1	75	49- 130	
Aroclor 1260	33.3	25.2	76	51- 130	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 Low Level MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc. Client: Tetra Tech NUS, Inc

Lab Code: TALPIT SDG No:

Matrix Spike ID: BQ1-FS-CC1

Lot #: C0J300446 WO #: L9C2L1AX
BATCH: 0307053

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Aroclor 1016	33.3	ND	26.9	81	49- 130	
Aroclor 1260	33.3	ND	54.6	164*	51- 130	a

NOTES(S):

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 Low Level MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc. Client: Tetra Tech NUS, Inc

Lab Code: TALPIT SDG No:

Matrix Spike ID: BQ1-FS-CC1

Lot #: C0J300446 WO #: L9C2L1A0
BATCH: 0307053

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Aroclor 1016	33.3	25.4	76	5.5	39	49- 130	
Aroclor 1260	33.3	72.3	217*	28	33	51- 130	a

NOTES(S):

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 2 outside limits
Spike Recovery: 1 out of 2 outside limits

COMMENTS:

FORM III

SW846 8082 Low Level METHOD BLANK SUMMARY

BLANK WORKORDER NO.: L9F7W1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: S1100279.

Lot Number: C0J300446

Matrix: BIOLOGIC

Extraction Method: 3541

Date Extracted: 11/03/10

Date Analyzed(1): 11/10/10

Date Analyzed(2): N/A

Time Analyzed(1): 21:47

Time Analyzed(2): N/A

Instrument ID(1): S/T

Instrument ID(2): N/A

GC Column(1): MR1/MR2 ID: 053 GC Column(2): N/A ID: N/A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED(1)	DATE ANALYZED(2)
01	BQ1-FS-WC1	L9C2F1AA	11/10/10	N/A
02	BQ1-FS-CC1	L9C2L1AA	11/10/10	N/A
03	BQ1-FS-CC1	L9C2L1AX S	11/10/10	N/A
04	BQ1-FS-CC1	L9C2L1A0 D	11/10/10	N/A
05	DHC-3-FS-CC1	L9C2N1AA	11/11/10	N/A
06	DHC-4-FS-CC3	L9C2R1AA	11/11/10	N/A
07	DHC-2-FS-CC1	L9C201AA	11/10/10	N/A
08	DHC-4-FS-CC1	L9C231AA	11/10/10	N/A
09	DHC-4-FS-CC2	L9C261AA	11/10/10	N/A
10	CPC-2-FS-CC1	L9C271AA	11/10/10	N/A
11	MP-FS-WC1	L9C291AA	11/10/10	N/A
12	MP-FS-CC2	L9C3C1AA	11/10/10	N/A
13	MP-FS-CC1	L9C3G1AA	11/10/10	N/A
14	MR-FS-CC2	L9C3J1AA	11/10/10	N/A
15	MR-FS-CC1	L9C3L1AA	11/10/10	N/A
16	DHC5-FS-CC1	L9C351AA	11/10/10	N/A
17	DHC5-FS-CC2	L9C391AA	11/10/10	N/A
18	CHECK SAMPLE	L9F7W1AC C	11/10/10	N/A
19				
20				

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: C0J300446	**Work Order #...:** L9F7W1AA	**Matrix.....:** BIOLOGIC
MB Lot-Sample #: C0K030000-053		
	Prep Date.....: 11/03/10	**Analysis Time..:** 21:47
Analysis Date..: 11/10/10	**Prep Batch #...:** 0307053	**Final Wgt/Vol..:** 1 mL
Dilution Factor: 1	**Initial Wgt/Vol:** 30 g	**Instrument ID..:** S/T
	Analyst ID.....: 402360	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	0.83	ug/kg	SW846 8082 Low Le
Aroclor 1221	ND	0.83	ug/kg	SW846 8082 Low Le
Aroclor 1232	ND	0.83	ug/kg	SW846 8082 Low Le
Aroclor 1242	ND	0.83	ug/kg	SW846 8082 Low Le
Aroclor 1248	ND	0.83	ug/kg	SW846 8082 Low Le
Aroclor 1254	ND	0.83	ug/kg	SW846 8082 Low Le
Aroclor 1260	ND	0.83	ug/kg	SW846 8082 Low Le

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(40 - 145)
Decachlorobiphenyl	78	(35 - 150)

NOTE(S):

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

Report Date : 24-Sep-2010 11:26

TestAmerica Pittsburgh

INITIAL CALIBRATION DATA

6E
HP6890 Gec-10
MR-1

Start Cal Date : 22-SEP-2010 18:42
End Cal Date : 23-SEP-2010 09:17
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m
Last Edit : 24-Sep-2010 10:16 gc10.i
Curve Type : Average

Calibration File Names:
Level 1: \\PITSVR06\D\chem\gc10.i\09220.b\S0900800.D
Level 2: \\PITSVR06\D\chem\gc10.i\09220.b\S0900812.D
Level 3: \\PITSVR06\D\chem\gc10.i\09220.b\S0900813.D
Level 4: \\PITSVR06\D\chem\gc10.i\09220.b\S0900814.D
Level 5: \\PITSVR06\D\chem\gc10.i\09220.b\S0900815.D
Level 6: \\PITSVR06\D\chem\gc10.i\09220.b\S0900816.D
Level 7: \\PITSVR06\D\chem\gc10.i\09220.b\S0900810.D

Compound	0.05000 Level 1 / 0.01000 Level 7	0.20000 Level 2	0.50000 Level 3	1.000 Level 4	2.000 Level 5	4.000 Level 6	RRF	% RSD	
1 Aroclor-1221(1)	+++++ / +++++	+++++	384292	+++++	+++++	+++++	384292	0.000	
(2)	+++++ / +++++	+++++	247566	+++++	+++++	+++++	247566	0.000	<-
(3)	+++++ / +++++	+++++	780488	+++++	+++++	+++++	780488	0.000	<-
3 Aroclor-1232(1)	+++++ / +++++	+++++	287342	+++++	+++++	+++++	287342	0.000	
(2)	+++++ / +++++	+++++	311094	+++++	+++++	+++++	311094	0.000	<-
(3)	+++++ / +++++	+++++	297218	+++++	+++++	+++++	297218	0.000	<-
(4)	+++++ / +++++	+++++	275696	+++++	+++++	+++++	275696	0.000	<-
(5)	+++++ / +++++	+++++	363752	+++++	+++++	+++++	363752	0.000	<-

Report Date : 24-Sep-2010 11:26

TestAmerica Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 22-SEP-2010 18:42
End Cal Date : 23-SEP-2010 09:17
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m
Last Edit : 24-Sep-2010 10:16 gc10.i
Curve Type : Average

Compound	0.05000 Level 1	0.20000 Level 2	0.50000 Level 3	1.000 Level 4	2.000 Level 5	4.000 Level 6	RRF	% RSD
	0.01000 Level 7							
4 Aroclor-1016(1)	932580	913095	816532	738606	709538	615190		
	1061600						826734	18.488
(2)	586060	588095	524256	489344	466215	398831		
	705700						536929	18.626
(3)	764040	767380	696636	663279	642481	559930		
	938200						718849	16.769
(4)	632660	631960	571334	532029	533120	451231		
	741400						584819	15.997
(5)	768020	771100	706572	657205	634420	540374		
	885500						709027	15.787
5 Aroclor-1242(1)	865200	912110	723550	766300	707428	+++++		
	+++++						794918	11.294
(2)	656400	733630	589330	623104	602124	+++++		
	+++++						640918	9.003
(3)	626600	672200	535364	580992	549419	+++++		
	+++++						592915	9.528
(4)	773600	788640	659060	683180	657927	+++++		
	+++++						712481	8.939
(5)	490800	517420	437182	465516	449917	+++++		
	+++++						472167	6.829
6 Aroclor-1248(1)	+++++	+++++	998116	+++++	+++++	+++++		
	+++++						998116	0.000

Report Date : 24-Sep-2010 11:26

TestAmerica Pittsburgh

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End Cal Date : 23-SEP-2010 09:17
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Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m
Last Edit : 24-Sep-2010 10:16 gc10.i
Curve Type : Average

Compound	0.05000 Level 1 / 0.01000 Level 7	0.20000 Level 2	0.50000 Level 3	1.000 Level 4	2.000 Level 5	4.000 Level 6	RRF	% RSD	
(2)	+++++	+++++	258562	+++++	+++++	+++++			
	+++++						258562	0.000	<-
(3)	+++++	+++++	933072	+++++	+++++	+++++			
	+++++						933072	0.000	<-
(4)	+++++	+++++	548890	+++++	+++++	+++++			
	+++++						548890	0.000	<-
(5)	+++++	+++++	302436	+++++	+++++	+++++			
	+++++						302436	0.000	<-
7 Aroclor-1254 (1)	+++++	+++++	1290056	+++++	+++++	+++++			
	+++++						1290056	0.000	
(2)	+++++	+++++	1097978	+++++	+++++	+++++			
	+++++						1097978	0.000	<-
(3)	+++++	+++++	1815246	+++++	+++++	+++++			
	+++++						1815246	0.000	<-
(4)	+++++	+++++	1157646	+++++	+++++	+++++			
	+++++						1157646	0.000	<-
(5)	+++++	+++++	569474	+++++	+++++	+++++			
	+++++						569474	0.000	<-
8 Aroclor-1260 (1)	1428080	1635700	1493390	1375350	1340078	1154280			
	1986200						1487583	17.777	
(2)	818100	825465	768636	724891	704647	607940			
	962500						773168	14.455	

Report Date : 24-Sep-2010 11:26

TestAmerica Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 22-SEP-2010 18:42
End Cal Date : 23-SEP-2010 09:17
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m
Last Edit : 24-Sep-2010 10:16 gc10.i
Curve Type : Average

Compound	0.05000 Level 1	0.20000 Level 2	0.50000 Level 3	1.000 Level 4	2.000 Level 5	4.000 Level 6	RRF	% RSD	
	0.01000 Level 7								
(3)	1740880	1715740	1577132	1494214	1456190	1227983			
	2119300						1618777	17.312	
(4)	1315280	1326435	1181016	1126706	1077960	921945			
	1576000						1217906	17.300	
(5)	1436900	1431580	1280660	1208966	1180111	1016410			
	1694400						1321290	16.693	
9 Aroclor-1262(1)	+++++	+++++	1175738	+++++	+++++	+++++			
	+++++						1175738	0.000	
(2)	+++++	+++++	1962628	+++++	+++++	+++++			
	+++++						1962628	0.000	<-
(3)	+++++	+++++	1177348	+++++	+++++	+++++			
	+++++						1177348	0.000	<-
(4)	+++++	+++++	581374	+++++	+++++	+++++			
	+++++						581374	0.000	<-
(5)	+++++	+++++	1355072	+++++	+++++	+++++			
	+++++						1355072	0.000	<-
10 Aroclor-1268(1)	+++++	+++++	4056726	+++++	+++++	+++++			
	+++++						4056726	0.000	
(2)	+++++	+++++	3500740	+++++	+++++	+++++			
	+++++						3500740	0.000	<-
(3)	+++++	+++++	3377316	+++++	+++++	+++++			
	+++++						3377316	0.000	<-

Report Date : 24-Sep-2010 11:26

TestAmerica Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 22-SEP-2010 18:42
End Cal Date : 23-SEP-2010 09:17
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m
Last Edit : 24-Sep-2010 10:16 gc10.i
Curve Type : Average

Compound	0.05000 Level 1	0.20000 Level 2	0.50000 Level 3	1.000 Level 4	2.000 Level 5	4.000 Level 6	0.01000 Level 7	RRF	% RSD	
(4)	+++++	+++++	2138620	+++++	+++++	+++++	+++++	2138620	0.000	<-
$ 2 Tetrachloro-m-xylene	36292000	36639200	35336520	32608720	31922440	27348280	44632000	34968451	15.266	
$ 11 Decachlorobiphenyl	29297200	29294600	27968880	26791880	27304140	23661070	34366000	28383396	11.473	

Data File: \\PITSVR06\D\chem\gc10.i\09220.b\S0900823.D
Report Date: 24-Sep-2010 09:25

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TestAmerica Pittsburgh

HP6890 Cec-10

CONTINUING CALIBRATION COMPOUNDS

MR-1

Instrument ID: gc10.i
Lab File ID: S0900823.D
Analysis Type:
Lab Sample ID: 2M1660
Method: \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m

Injection Date: 23-SEP-2010 04:01
Init. Cal. Date(s): 22-SEP-2010 23-SEP-2010
Init. Cal. Times: 18:42 09:17
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
4 Aroclor-1016 (1)	826734	853550	0.010	-3.24356	15.00000	Averaged	
(2)	536929	546156	0.010	-1.71856	15.00000	Averaged	
(3)	718849	715974	0.010	0.39999	15.00000	Averaged	
(4)	584819	550200	0.010	5.91962	15.00000	Averaged	
(5)	709027	679882	0.010	4.11059	15.00000	Averaged	
$ 2 Tetrachloro-m-xylene	34968451	1556480	0.000	95.54890	15.00000	Averaged	<- NA
$ 11 Decachlorobiphenyl	28383396	646760	0.010	97.72134	15.00000	Averaged	<- NA
8 Aroclor-1260 (1)	1487583	1367616	0.010	8.06453	15.00000	Averaged	
(2)	773168	794280	0.010	-2.73053	15.00000	Averaged	
(3)	1618777	1734982	0.010	-7.17857	15.00000	Averaged	
(4)	1217906	1052416	0.010	13.58807	15.00000	Averaged	
(5)	1321290	1192812	0.010	9.72365	15.00000	Averaged	

Data File: \\PITSVR06\D\chem\gc10.i\09220.b\S1100227.D
Report Date: 10-Nov-2010 08:18

7E
HP6890 GC-10

TestAmerica Pittsburgh

CONTINUING CALIBRATION COMPOUNDS MR-1

Instrument ID: gc10.i
Lab File ID: S1100227.D
Analysis Type:
Lab Sample ID: M1660
Method: \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m

Injection Date: 09-NOV-2010 18:17
Init. Cal. Date(s): 22-SEP-2010 23-SEP-2010
Init. Cal. Times: 18:42 09:17
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Aroclor-1016 (1)	826734	807890	0.010	2.27938	15.00000	Averaged
(2)	536929	524154	0.010	2.37919	15.00000	Averaged
(3)	718849	626506	0.010	12.84600	15.00000	Averaged
(4)	584819	558020	0.010	4.58246	15.00000	Averaged
(5)	709027	672152	0.010	5.20082	15.00000	Averaged
$ 2 Tetrachloro-m-xylene	34968451	34071800	0.000	2.56417	15.00000	Averaged
$ 11 Decachlorobiphenyl	28383396	28674120	0.010	-1.02428	15.00000	Averaged
8 Aroclor-1260 (1)	1487583	1478782	0.010	0.59160	15.00000	Averaged
(2)	773168	755880	0.010	2.23605	15.00000	Averaged
(3)	1618777	1513682	0.010	6.49225	15.00000	Averaged
(4)	1217906	1176724	0.010	3.38137	15.00000	Averaged
(5)	1321290	1290246	0.010	2.34949	15.00000	Averaged

Data File: \\PITSVR06\D\chem\gc10.i\09220.b\S1100260.D
Report Date: 11-Nov-2010 11:24

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TestAmerica Pittsburgh

HP6890 GC-10

CONTINUING CALIBRATION COMPOUNDS

MR-1

Instrument ID: gc10.i
Lab File ID: S1100260.D
Analysis Type:
Lab Sample ID: M1660
Method: \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m

Injection Date: 10-NOV-2010 13:44
Init. Cal. Date(s): 22-SEP-2010 23-SEP-2010
Init. Cal. Times: 18:42 09:17
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
4 Aroclor-1016(1)	826734	694852	0.010	15.95221	15.00000	Averaged	<-
(2)	536929	496262	0.010	7.57393	15.00000	Averaged	
(3)	718849	606364	0.010	15.64797	15.00000	Averaged	<-
(4)	584819	525418	0.010	10.15717	15.00000	Averaged	
(5)	709027	638834	0.010	9.89993	15.00000	Averaged	
$ 2 Tetrachloro-m-xylene	34968451	33785960	0.000	3.38160	15.00000	Averaged	
$ 11 Decachlorobiphenyl	28383396	27352160	0.010	3.63324	15.00000	Averaged	
8 Aroclor-1260(1)	1487583	1402500	0.010	5.71952	15.00000	Averaged	
(2)	773168	722864	0.010	6.50627	15.00000	Averaged	
(3)	1618777	1453920	0.010	10.18405	15.00000	Averaged	
(4)	1217906	1066086	0.010	12.46566	15.00000	Averaged	
(5)	1321290	1180274	0.010	10.67257	15.00000	Averaged	

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11/11/10

Data File: \\PITSVR06\D\chem\gc10.i\09220.b\S1100281.D
Report Date: 11-Nov-2010 15:17

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TestAmerica Pittsburgh HP6890 GC-10

CONTINUING CALIBRATION COMPOUNDS MR-1

Instrument ID: gc10.i Injection Date: 10-NOV-2010 22:38
Lab File ID: S1100281.D Init. Cal. Date(s): 22-SEP-2010 23-SEP-2010
Analysis Type: Init. Cal. Times: 18:42 09:17
Lab Sample ID: MH1660 Quant Type: ESTD
Method: \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m

COMPOUND	RRF / AMOUNT	RF1	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
4 Aroclor-1016 (1)	826734	739252	0.010	10.58168	15.00000	Averaged	
(2)	536929	481488	0.010	10.32550	15.00000	Averaged	
(3)	718849	621948	0.010	13.48006	15.00000	Averaged	
(4)	584819	521762	0.010	10.78232	15.00000	Averaged	
(5)	709027	647769	0.010	8.63976	15.00000	Averaged	
$ 2 Tetrachloro-m-xylene	34968451	32062140	0.000	8.31124	15.00000	Averaged	
$ 11 Decachlorobiphenyl	28383396	24402200	0.010	14.02650	15.00000	Averaged	
8 Aroclor-1260 (1)	1487583	1357341	0.010	8.75525	15.00000	Averaged	
(2)	773168	714151	0.010	7.63319	15.00000	Averaged	
(3)	1618777	1400514	0.010	13.48320	15.00000	Averaged	
(4)	1217906	1027367	0.010	15.64480	15.00000	Averaged	<-
(5)	1321290	1093030	0.010	17.27551	15.00000	Averaged	<-

12.6 %
11/11/10

Data File: \\PITSVR06\D\chem\gc10.i\09220.b\S1100320.D
Report Date: 12-Nov-2010 15:32

TestAmerica Pittsburgh

7E
HP6890 GC-10
MR-1

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc10.i
Lab File ID: S1100320.D
Analysis Type:
Lab Sample ID: M1660
Method: \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m

Injection Date: 11-NOV-2010 17:32
Init. Cal. Date(s): 22-SEP-2010 23-SEP-2010
Init. Cal. Times: 18:42 09:17
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF0.500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Aroclor-1016 (1)	826734	782160	0.010	5.39162	15.00000	Averaged
(2)	536929	521842	0.010	2.80979	15.00000	Averaged
(3)	718849	619182	0.010	13.86485	15.00000	Averaged
(4)	584819	546418	0.010	6.56632	15.00000	Averaged
(5)	709027	656058	0.010	7.47069	15.00000	Averaged
$ 2 Tetrachloro-m-xylene	34968451	33470440	0.000	4.28389	15.00000	Averaged
$ 11 Decachlorobiphenyl	28383396	26643800	0.010	6.12892	15.00000	Averaged
8 Aroclor-1260 (1)	1487583	1416882	0.010	4.75271	15.00000	Averaged
(2)	773168	726368	0.010	6.05307	15.00000	Averaged
(3)	1618777	1434260	0.010	11.39854	15.00000	Averaged
(4)	1217906	1120000	0.010	8.03888	15.00000	Averaged
(5)	1321290	1272998	0.010	3.65488	15.00000	Averaged

Data File: \\PITSVR06\D\chem\gc10.i\09220.b\S1100341.D
Report Date: 12-Nov-2010 15:34

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HP6890 GC-10
MR-1

TestAmerica Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc10.i
Lab File ID: S1100341.D
Analysis Type:
Lab Sample ID: MH1660
Method: \\PITSVR06\D\chem\gc10.i\09220.b\PCBA.m

Injection Date: 12-NOV-2010 02:25
Init. Cal. Date(s): 22-SEP-2010 23-SEP-2010
Init. Cal. Times: 18:42 09:17
Quant Type: ESTD

COMPOUND	RRF / AMOUNT	RF1	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
4 Aroclor-1016 (1)	826734	716672	0.010	13.31291	15.00000	Averaged	
(2)	536929	475867	0.010	11.37238	15.00000	Averaged	
(3)	718849	612677	0.010	14.76976	15.00000	Averaged	
(4)	584819	506652	0.010	13.36603	15.00000	Averaged	
(5)	709027	613381	0.010	13.48978	15.00000	Averaged	
$ 2 Tetrachloro-m-xylene	34968451	30717560	0.000	12.15636	15.00000	Averaged	
$ 11 Decachlorobiphenyl	28383396	24726700	0.010	12.88322	15.00000	Averaged	
8 Aroclor-1260 (1)	1487583	1364493	0.010	8.27447	15.00000	Averaged	
(2)	773168	685230	0.010	11.37377	15.00000	Averaged	
(3)	1618777	1354033	0.010	16.35457	15.00000	Averaged	<-
(4)	1217906	1002210	0.010	17.71040	15.00000	Averaged	<-
(5)	1321290	1092208	0.010	17.33772	15.00000	Averaged	<-

10B

EPA SAMPLE NO.

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

DHC5-FS-CC2

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C391AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.54	10.52	10.62	224.85		
Aroclor-1262	2	13.22	13.19	13.29	299.76		
	3	13.63	13.60	13.70	341.91		
COLUMN 1	4	13.97	13.94	14.04	297.61		
	5					291.03	
	1	10.67	10.65	10.75	291.41		
	2	12.22	12.19	12.29	249.75		
	3	13.23	13.20	13.30	286.78		
COLUMN 2	4	13.32	13.30	13.40	397.58		
	5	14.09	14.05	14.15	326.63	310.43	6.7
						RPD= 6.5	
	1	13.14	13.06	13.16	36.278		
Aroclor-1268	2	13.22	13.19	13.29	100.82		
	3	13.47	13.44	13.54	35.548		
COLUMN 1	4						
	5					57.547	
	1	13.23	13.20	13.30	99.554		
	2	13.32	13.30	13.40	199.80		
	3	13.62	13.58	13.68	35.026		
COLUMN 2	4						
	5					111.46	93.7
						RPD= 63.8	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

DHC5-FS-CC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C351AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.08	13.06	13.16	493.94		
Aroclor-1262	2	13.22	13.19	13.29	298.00		
	3	13.63	13.60	13.70	399.44		
COLUMN 1	4	13.97	13.94	14.04	397.40		
	5					397.20	
	1	12.22	12.19	12.29	294.50		
	2	13.23	13.20	13.30	325.03		
	3	13.32	13.30	13.40	411.80		
COLUMN 2	4	14.09	14.05	14.15	446.40		
	5					369.43	7.5
						RPD= 7.2	
	1	13.22	13.19	13.29	100.22		
Aroclor-1268	2	13.47	13.44	13.54	33.453		
	3	14.57	14.54	14.64	101.01		
COLUMN 1	4						
	5					78.230	
	1	13.23	13.20	13.30	112.83		
	2	13.32	13.30	13.40	206.94		
	3	13.62	13.58	13.68	32.758		
COLUMN 2	4						
	5					117.51	50.2
						RPD= 40.1	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

MR-FS-CC2

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C3J1AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.54	10.52	10.62	91.256		
Aroclor-1262	2	13.08	13.06	13.16	90.270		
	3	13.22	13.19	13.29	62.718		
COLUMN 1	4	13.63	13.60	13.70	69.462		
	5	13.97	13.94	14.04	62.112	75.164	
	1	12.23	12.19	12.29	46.445		
	2	13.24	13.20	13.30	56.393		
	3	13.33	13.30	13.40	69.830		
COLUMN 2	4	14.09	14.05	14.15	61.139		
	5					58.452	28.6
						RPD= 25.0	
	1	13.15	13.06	13.16	7.0859		
Aroclor-1268	2	13.22	13.19	13.29	21.093		
	3	13.47	13.44	13.54	12.556		
COLUMN 1	4						
	5					13.578	
	1	13.24	13.20	13.30	19.577		
	2	13.33	13.30	13.40	35.091		
	3	13.62	13.58	13.68	12.316		
COLUMN 2	4						
	5					22.328	64.4
						RPD= 48.7	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

DHC-4-FS-CC2

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C261AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.54	10.52	10.62	98.899		
Aroclor-1262	2	13.22	13.19	13.29	88.778		
	3	13.63	13.60	13.70	107.75		
COLUMN 1	4	13.98	13.94	14.04	111.01		
	5					101.61	
	1	12.22	12.19	12.29	71.915		
	2	13.23	13.20	13.30	75.606		
	3	13.33	13.30	13.40	114.90		
COLUMN 2	4	14.09	14.05	14.15	98.446		
	5					90.216	12.6
						RPD= 11.9	
	1	13.14	13.06	13.16	11.178		
Aroclor-1268	2	13.22	13.19	13.29	29.857		
	3	13.47	13.44	13.54	3.4996		
COLUMN 1	4	14.57	14.54	14.64	13.146		
	5					14.420	
	1	13.23	13.20	13.30	26.246		
	2	13.33	13.30	13.40	57.738		
	3	13.62	13.58	13.68	3.1301		
COLUMN 2	4						
	5					29.038	101.4
						RPD= 67.3	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

DHC-4-FS-CC3

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C2R1AA Date(s) Analyzed: 11/11/10 11/11/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.08	13.06	13.16	238.27		
Aroclor-1262	2	13.21	13.19	13.29	156.99		
	3	13.63	13.60	13.70	190.36		
COLUMN 1	4	13.97	13.94	14.04	163.43		
	5					187.26	
	1	12.22	12.19	12.29	160.25		
	2	13.23	13.20	13.30	169.63		
	3	13.33	13.30	13.40	257.93		
COLUMN 2	4	14.09	14.05	14.15	201.58		
	5					197.35	5.4
						RPD= 5.2	
	1	13.15	13.06	13.16	23.983		
Aroclor-1268	2	13.21	13.19	13.29	52.798		
	3	13.47	13.44	13.54	18.288		
COLUMN 1	4	14.56	14.54	14.64	50.793		
	5					36.466	
	1	13.23	13.20	13.30	58.887		
	2	13.33	13.30	13.40	129.62		
	3	13.62	13.58	13.68	20.753		
COLUMN 2	4						
	5					69.752	91.3
						RPD= 62.7	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

DHC-3-FS-CC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C2N1AA Date(s) Analyzed: 11/11/10 11/11/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.08	13.06	13.16	1833.2		
Aroclor-1262	2	13.21	13.19	13.29	1164.1		
	3	13.63	13.60	13.70	1494.7		
COLUMN 1	4	13.97	13.94	14.04	1464.4		
	5					1489.1	
	1	12.22	12.19	12.29	992.01		
	2	13.23	13.20	13.30	1175.4		
	3	13.32	13.30	13.40	1819.8		
COLUMN 2	4	14.09	14.05	14.15	1688.6		
	5					1418.9	4.9
						RPD= 4.8	
	1	13.14	13.06	13.16	176.47		
Aroclor-1268	2	13.47	13.44	13.54	59.562		
	3	14.57	14.54	14.64	158.29		
COLUMN 1	4						
	5					131.44	
	1	13.23	13.20	13.30	408.03		
	2	13.32	13.30	13.40	914.51		
	3	13.62	13.58	13.68	61.125		
COLUMN 2	4	14.09	14.05	14.15	1578.1		
	5					740.44	463.3
						RPD=139.7	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

EPA SAMPLE NO.

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

MR-FS-CC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C3L1AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.09	13.06	13.16	22.393		
Aroclor-1262	2	13.21	13.19	13.29	16.201		
	3	13.62	13.60	13.70	19.112		
COLUMN 1	4	13.98	13.94	14.04	15.543		
	5					18.312	
	1	12.22	12.19	12.29	13.087		
	2	13.24	13.20	13.30	18.069		
	3	13.33	13.30	13.40	18.083		
COLUMN 2	4	14.09	14.05	14.15	15.210		
	5					16.112	13.6
						RPD= 12.8	
	1	13.09	13.06	13.16	10.834		
Aroclor-1268	2	13.21	13.19	13.29	5.4487		
	3	13.47	13.44	13.54	6.5243		
COLUMN 1	4						
	5					7.6023	
	1	13.24	13.20	13.30	6.2725		
	2	13.33	13.30	13.40	9.0871		
	3	13.62	13.58	13.68	6.1580		
COLUMN 2	4						
	5					7.1726	6.0
						RPD= 5.8	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

MP-FS-CC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C3G1AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.09	13.06	13.16	128.92		
Aroclor-1262	2	13.22	13.19	13.29	109.28		
	3	13.60	13.60	13.70	157.31		
COLUMN 1	4	13.97	13.94	14.04	57.470		
	5					113.24	
	1	12.23	12.19	12.29	70.340		
	2	13.23	13.20	13.30	145.54		
	3	13.33	13.30	13.40	108.32		
COLUMN 2	4	14.09	14.05	14.15	47.184		
	5					92.844	22.0
						RPD= 19.8	
	1	13.09	13.06	13.16	62.373		
Aroclor-1268	2	13.22	13.19	13.29	36.752		
	3	13.47	13.44	13.54	86.158		
COLUMN 1	4						
	5					61.761	
	1	13.23	13.20	13.30	50.522		
	2	13.33	13.30	13.40	54.431		
	3	13.62	13.58	13.68	87.642		
COLUMN 2	4	14.09	14.05	14.15	44.097		
	5					59.173	4.4
						RPD= 4.3	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

EPA SAMPLE NO.

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

MP-FS-CC2

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C3C1AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.09	13.06	13.16	157.09		
Aroclor-1262	2	13.22	13.19	13.29	134.49		
	3	13.60	13.60	13.70	191.35		
COLUMN 1	4	13.98	13.94	14.04	70.535		
	5					138.36	
	1	12.22	12.19	12.29	86.438		
	2	13.23	13.20	13.30	177.66		
	3	13.33	13.30	13.40	133.68		
COLUMN 2	4	14.09	14.05	14.15	74.962		
	5					118.19	17.1
						RPD= 15.7	
	1	13.09	13.06	13.16	75.998		
Aroclor-1268	2	13.22	13.19	13.29	45.232		
	3	13.47	13.44	13.54	105.58		
COLUMN 1	4						
	5					75.603	
	1	13.23	13.20	13.30	61.675		
	2	13.33	13.30	13.40	67.179		
	3	13.62	13.58	13.68	108.38		
COLUMN 2	4	14.09	14.05	14.15	70.059		
	5					76.824	1.6
						RPD= 1.6	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

MP-FS-WC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C291AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.55	10.52	10.62	11.566		
Aroclor-1262	2	13.09	13.06	13.16	8.9141		
	3	13.22	13.19	13.29	7.8262		
COLUMN 1	4	13.98	13.94	14.04	4.2032		
	5					8.1274	
	1	10.68	10.65	10.75	10.238		
	2	12.23	12.19	12.29	4.6867		
	3	13.24	13.20	13.30	9.3260		
COLUMN 2	4	13.33	13.30	13.40	7.3259		
	5	14.09	14.05	14.15	3.8112	7.0776	14.8
						RPD= 13.8	
	1	13.09	13.06	13.16	4.3126		
Aroclor-1268	2	13.22	13.19	13.29	2.6321		
	3	13.47	13.44	13.54	6.0070		
COLUMN 1	4						
	5					4.3172	
	1	13.24	13.20	13.30	3.2375		
	2	13.33	13.30	13.40	3.6814		
	3	13.62	13.58	13.68	5.8316		
COLUMN 2	4	14.09	14.05	14.15	3.5619		
	5					4.0781	5.9
						RPD= 5.7	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

EPA SAMPLE NO.

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

CPC-2-FS-CC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C271AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.09	13.06	13.16	26.052		
Aroclor-1262	2	13.22	13.19	13.29	22.206		
	3	13.97	13.94	14.04	12.456		
COLUMN 1	4						
	5					20.238	
	1	12.22	12.19	12.29	13.275		
	2	13.23	13.20	13.30	24.134		
	3	13.33	13.30	13.40	19.875		
COLUMN 2	4	14.09	14.05	14.15	10.237		
	5					16.880	19.9
						RPD= 18.1	
	1	13.09	13.06	13.16	12.604		
Aroclor-1268	2	13.22	13.19	13.29	7.4680		
	3	13.47	13.44	13.54	16.379		
COLUMN 1	4						
	5					12.150	
	1	13.23	13.20	13.30	8.3780		
	2	13.33	13.30	13.40	9.9874		
	3	13.62	13.58	13.68	15.008		
COLUMN 2	4	14.09	14.05	14.15	9.5676		
	5					10.735	13.2
						RPD= 12.4	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

DHC-2-FS-CC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C201AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.22	13.19	13.29	44.574		
Aroclor-1262	2	13.63	13.60	13.70	49.959		
	3	13.98	13.94	14.04	46.407		
COLUMN 1	4						
	5					46.980	
	1	12.22	12.19	12.29	32.974		
	2	13.23	13.20	13.30	44.445		
	3	13.33	13.30	13.40	50.411		
COLUMN 2	4	14.09	14.05	14.15	41.443		
	5					42.318	11.0
						RPD= 10.4	
	1	13.08	13.06	13.16	30.055		
Aroclor-1268	2	13.22	13.19	13.29	14.991		
	3	13.47	13.44	13.54	13.227		
COLUMN 1	4						
	5					19.424	
	1	13.23	13.20	13.30	15.429		
	2	13.33	13.30	13.40	25.333		
	3	13.62	13.58	13.68	12.143		
COLUMN 2	4						
	5					17.635	10.1
						RPD= 9.7	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

DHC-4-FS-CC1

Lab Name: TESTAMERICA PITTSBURGH Contract:

Lab Code: TA Case No.: SAS No.: 40325 SDG No.: C0J300446

Lab Sample ID: L9C231AA Date(s) Analyzed: 11/10/10 11/10/10

Instrument ID (1): GC10 Instrument ID (2): GC10

GC Column(1): MR-1 ID: 0.53(mm) GC Column(2): MR-2 ID: 0.53(mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.22	13.19	13.29	51.035		
Aroclor-1262	2	13.63	13.60	13.70	51.207		
	3	13.98	13.94	14.04	56.665		
COLUMN 1	4						
	5					52.969	
	1	12.23	12.19	12.29	40.005		
	2	13.23	13.20	13.30	50.568		
	3	13.33	13.30	13.40	57.436		
COLUMN 2	4	14.09	14.05	14.15	49.758		
	5					49.442	7.1
						RPD= 6.9	
	1	13.22	13.19	13.29	17.164		
Aroclor-1268	2	13.47	13.44	13.54	7.9836		
	3	14.57	14.54	14.64	31.613		
COLUMN 1	4						
	5					18.920	
	1	13.23	13.20	13.30	17.554		
	2	13.33	13.30	13.40	28.863		
	3	13.62	13.58	13.68	7.2980		
COLUMN 2	4						
	5					17.905	5.7
						RPD= 5.5	
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes.

Sequence: E:\HPCHEM\1\SEQUENCE\S11100.S

Sequence Table (Front Injector):

No entries - empty table!

Sequence Table (Back Injector):

Sample Information Part:

T09220.PDF
Ag 11-10-2010
HP6890 Gc-10
MR-2

	Line	Location	Sample Information
T11002600	1	Vial 100	RINSE
	2	Vial 2	GC0785-10
	3	Vial 3	C0J300446-001
	4	Vial 4	C0J300446-002 5x
	5	Vial 5	C0J300446-002 5x ms
	6	Vial 6	C0J300446-002 5x msd
265	7	Vial 7	C0J300446-003 5x
	8	Vial 8	C0J300446-004 5x
	9	Vial 9	C0J300446-005
	10	Vial 10	C0J300446-006
	11	Vial 11	C0J300446-007
270	12	Vial 12	C0J300446-008 5x
	13	Vial 13	C0J300446-009 5x
	14	Vial 14	C0J300446-010 5x
	15	Vial 15	C0J300446-011 5x
	16	Vial 16	C0J300446-012 5x
275	17	Vial 17	C0J300446-013 5x
	18	Vial 18	C0J300446-014 5x
	19	Vial 19	C0J300446-015 5x
	20	Vial 20	RINSE
	21	Vial 21	C0J300446-BLK
280	22	Vial 22	C0J300446-LCS
281	23	Vial 23	GC0786-10
	24	Vial 54	C0K50561-021
	25	Vial 55	C0K50561-022
	26	Vial 56	C0K50561-023
285	27	Vial 57	C0K50561-024

APPENDIX B—DATA TABLES

TABLE B-1

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM SITE
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Frequency of Detection	Minimum Detection		Maximum Detection		Sample with Maximum Detection	Minimum Nondetect	Maximum Nondetect	Average of Positive Results	Overall Average
Pesticides (ug/kg)										
AROCLOR-1016	0/8	--		--		--	0.12	3.1	--	0.41
AROCLOR-1221	0/8	--		--		--	0.16	3.9	--	0.52
AROCLOR-1232	0/8	--		--		--	0.14	3.5	--	0.47
AROCLOR-1242	0/8	--		--		--	0.13	3.4	--	0.45
AROCLOR-1248	0/8	--		--		--	0.077	2	--	0.26
AROCLOR-1254	0/8	--		--		--	0.12	2.9	--	0.39
AROCLOR-1260	0/8	--		--		--	0.12	2.9	--	0.39
AROCLOR-1262	8/8	20	J	1500		DHC-3-FS-CC1	--	--	329	329
AROCLOR-1268	8/8	12	J	130	J	DHC-3-FS-CC1	--	--	45.8	45.8
TOTAL AROCLOR	8/8	32		1630		DHC-3-FS-CC1	--	--	375	375
Inorganics (mg/kg)										
ANTIMONY	1/8	0.23	J	0.23	J	DHC-2-FS-CC1	0.13	0.16	0.23	0.10
ARSENIC	0/8	--		--		--	0.18	0.22	--	0.11
BERYLLIUM	0/8	--		--		--	0.012	0.015	--	0.01
CADMIUM	0/8	--		--		--	0.019	0.024	--	0.01
CHROMIUM	8/8	0.09	J	0.41	J	DHC-5-FS-CC2	--	--	0.16	0.16
COPPER	8/8	0.51	J	2	J	DHC-5-FS-CC2	--	--	1.0	1.0
LEAD	2/8	0.17	J	0.19	J	DHC-5-FS-CC1	0.12	0.14	0.18	0.10
MERCURY	8/8	0.027	J	0.12	J	DHC-3-FS-CC1	--	--	0.05	0.05
NICKEL	0/8	--		--		--	0.31	0.38	--	0.18
SELENIUM	8/8	0.3	J	0.68	K	CPC-2-FS-CC1	--	--	0.46	0.46
SILVER	0/8	--		--		--	0.047	0.058	--	0.03
THALLIUM	0/8	--		--		--	0.17	0.21	--	0.10
ZINC	8/8	6		9.8		DHC-5-FS-CC1	--	--	7.8	7.8
Miscellaneous (%)										
LIPIDS	8/8	0.27		3.8		DHC-4-FS-CC3	--	--	1.2	1.2

Footnotes:
1 Not a separate analytical measurement; summation of individual detected Aroclors.

Abbreviations:
J Estimated value
K Biased high
PCB Polychlorinated Biphenyls

TABLE B-1

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM SITE
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Associated Samples:
CPC-2-FS-CC1
DHC-2-FS-CC1
DHC-3-FS-CC1
DHC-4-FS-CC1
DHC-4-FS-CC2
DHC-4-FS-CC3
DHC-5-FS-CC1
DHC-5-FS-CC2

TABLE B-2

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE LOCATIONS
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Frequency of Detection	Minimum Detection		Maximum Detection		Sample with Maximum Detection	Minimum Nondetect	Maximum Nondetect	Average of Positive Results	Overall Average
Pesticides (ug/kg)										
AROCLOR-1016	0/7	--		--		--	0.12	0.62	--	0.27
AROCLOR-1221	0/7	--		--		--	0.16	0.8	--	0.35
AROCLOR-1232	0/7	--		--		--	0.14	0.71	--	0.31
AROCLOR-1242	0/7	--		--		--	0.13	0.68	--	0.30
AROCLOR-1248	0/7	--		--		--	0.078	0.39	--	0.17
AROCLOR-1254	0/7	--		--		--	0.12	0.59	--	0.26
AROCLOR-1260	0/7	--		--		--	0.12	0.59	--	0.26
AROCLOR-1262	7/7	8.1	J	140	J	MP-FS-CC2	--	--	59.4	59.4
AROCLOR-1268	7/7	4.3	J	77	J	MP-FS-CC2	--	--	28.4	28.4
TOTAL AROCLOR	7/7	12.4		217		MP-FS-CC2	--	--	87.9	87.9
Inorganics (mg/kg)										
ANTIMONY	1/7	0.27	J	0.27	J	MR-FS-CC2	0.14	0.16	0.27	0.10
ARSENIC	0/7	--		--		--	0.19	0.22	--	0.10
BERYLLIUM	0/7	--		--		--	0.012	0.015	--	0.01
CADMIUM	0/7	--		--		--	0.02	0.024	--	0.01
CHROMIUM	7/7	0.092	J	2		MR-FS-CC2	--	--	0.39	0.39
COPPER	7/7	0.42	J	1.7	J	MR-FS-CC2	--	--	1.1	1.09
LEAD	2/7	0.16	J	0.17	J	MR-FS-CC2	0.12	0.13	0.17	0.09
MERCURY	7/7	0.029	J	0.055		MR-FS-CC1	--	--	0.04	0.04
NICKEL	0/7	--		--		--	0.32	0.38		0.17
SELENIUM	7/7	0.36	J	0.57	K	BQ1-FS-WC1	--	--	0.49	0.49
SELENIUM	7/7	0.36	J	0.57	K	MP-FS-CC2	--	--	0.49	0.49
SILVER	0/7	--		--		--	0.048	0.057	--	0.03
THALLIUM	0/7	--		--		--	0.17	0.2	--	0.09
ZINC	7/7	6		7.6		BQ1-FS-WC1	--	--	6.9	6.9
Miscellaneous (%)										
LIPIDS	7/7	0.17		3.2		MP-FS-CC1	--	--	1.2	1.2

Footnotes:
1 Not a separate analytical measurement; summation of individual detected Aroclors.

Abbreviations:
J Estimated value
K Biased high
PCB Polychlorinated Biphenyls

TABLE B-2

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE LOCATIONS
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Associated Samples:
BQ1-FS-CC1
BQ1-FS-WC1
MP-FS-CC1
MP-FS-CC2
MP-FS-WC1
MR-FS-CC1
MR-FS-CC2

TABLE B-3

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE LOCATIONS - NO SHORELINE DEVELOPMENT
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Frequency of Detection	Minimum Detection		Maximum Detection		Sample with Maximum Detection	Minimum Nondetect	Maximum Nondetect	Average of Positive Results	Overall Average
Pesticides (ug/kg)										
AROCLOR-1016	0/3	--		--		--	0.62	0.62	--	0.31
AROCLOR-1221	0/3	--		--		--	0.79	0.8	--	0.40
AROCLOR-1232	0/3	--		--		--	0.71	0.71	--	0.36
AROCLOR-1242	0/3	--		--		--	0.67	0.68	--	0.34
AROCLOR-1248	0/3	--		--		--	0.39	0.39	--	0.20
AROCLOR-1254	0/3	--		--		--	0.59	0.59	--	0.30
AROCLOR-1260	0/3	--		--		--	0.59	0.59	--	0.30
AROCLOR-1262	3/3	8.1	J	140	J	MP-FS-CC2	--	--	86.0	86.0
AROCLOR-1268	3/3	4.3	J	77	J	MP-FS-CC2	--	--	47.8	47.8
TOTAL AROCLOR	3/3	12.4		217		MP-FS-CC2	--	--	134	134
Inorganics (mg/kg)										
ANTIMONY	0/3	--		--		--	0.15	0.16	--	0.08
ARSENIC	0/3	--		--		--	0.2	0.22	--	0.10
BERYLLIUM	0/3	--		--		--	0.013	0.015	--	0.01
CADMIUM	0/3	--		--		--	0.021	0.024	--	0.01
CHROMIUM	3/3	0.092	J	0.13	J	MP-FS-WC1	--	--	0.11	0.11
COPPER	3/3	0.42	J	1.5	J	MP-FS-CC2	--	--	1.1	1.1
COPPER	3/3	0.42	J	1.5	J	MP-FS-WC1	--	--	1.1	1.1
LEAD	1/3	0.16	J	0.16	J	MP-FS-WC1	0.13	0.13	0.16	0.10
MERCURY	3/3	0.029	J	0.044	J	MP-FS-CC2	--	--	0.04	0.04
NICKEL	0/3	--		--		--	0.34	0.38	--	0.18
SELENIUM	3/3	0.36	J	0.57	K	MP-FS-CC2	--	--	0.47	0.47
SILVER	0/3	--		--		--	0.052	0.057	--	0.03
THALLIUM	0/3	--		--		--	0.18	0.2	--	0.10
ZINC	3/3	6.1		7.2		MP-FS-CC2	--	--	6.6	6.6
Miscellaneous (%)										
LIPIDS	3/3	0.4		3.2		MP-FS-CC1	--	--	1.8	1.8

Footnotes:
1 Not a separate analytical measurement; summation of individual detected Aroclors.

Abbreviations:
J Estimated value
K Biased high
PCB Polychlorinated Biphenyls

TABLE B-3

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE LOCATIONS - NO SHORELINE DEVELOPMENT
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Associated Samples:
MP-FS-CC1
MP-FS-CC2
MP-FS-WC1

TABLE B-4

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE - SHORELINE DEVELOPMENT
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Frequency of Detection	Minimum Detection		Maximum Detection		Sample with Maximum Detection	Minimum Nondetect	Maximum Nondetect	Average of Positive Results	Overall Average
Pesticides (ug/kg)										
AROCLOR-1016	0/4	--		--		--	0.12	0.62	--	0.25
AROCLOR-1221	0/4	--		--		--	0.16	0.8	--	0.32
AROCLOR-1232	0/4	--		--		--	0.14	0.71	--	0.28
AROCLOR-1242	0/4	--		--		--	0.13	0.68	--	0.27
AROCLOR-1248	0/4	--		--		--	0.078	0.39	--	0.16
AROCLOR-1254	0/4	--		--		--	0.12	0.59	--	0.24
AROCLOR-1260	0/4	--		--		--	0.12	0.59	--	0.24
AROCLOR-1262	4/4	18	J	75	J	MR-FS-CC2	--	--	39.5	39.5
AROCLOR-1268	4/4	7.6	J	20	J	BQ1-FS-CC1	--	--	13.9	13.9
TOTAL AROCLOR	4/4	25.6		89		MR-FS-CC2	--	--	53.4	53.4
Inorganics (mg/kg)										
ANTIMONY	1/4	0.27	J	0.27	J	MR-FS-CC2	0.14	0.15	0.27	0.12
ARSENIC	0/4	--		--		--	0.19	0.21	--	0.10
BERYLLIUM	0/4	--		--		--	0.012	0.014	--	0.007
CADMIUM	0/4	--		--		--	0.02	0.022	--	0.01
CHROMIUM	4/4	0.11	J	2		MR-FS-CC2	--	--	0.61	0.61
COPPER	4/4	0.6	J	1.7	J	MR-FS-CC2	--	--	1.1	1.1
LEAD	1/4	0.17	J	0.17	J	MR-FS-CC2	0.12	0.13	0.17	0.09
MERCURY	4/4	0.038		0.055		MR-FS-CC1	--	--	0.04	0.04
NICKEL	0/4	--		--		--	0.32	0.36		0.17
SELENIUM	4/4	0.39	J	0.57	K	BQ1-FS-WC1	--	--	0.51	0.51
SILVER	0/4	--		--		--	0.048	0.054	--	0.03
THALLIUM	0/4	--		--		--	0.17	0.19	--	0.09
ZINC	4/4	6		7.6		BQ1-FS-WC1	--	--	7.1	7.1
Miscellaneous (%)										
LIPIDS	4/4	0.17		1.5		BQ1-FS-CC1	--	--	0.71	0.71

Footnotes:
1 Not a separate analytical measurement; summation of individual detected Aroclors.

Abbreviations:
J Estimated value
K Biased high
PCB Polychlorinated Biphenyls

TABLE B-4

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE - SHORELINE DEVELOPMENT
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Associated Samples:
BQ1-FS-CC1
BQ1-FS-WC1
MR-FS-CC1
MR-FS-CC2

TABLE B-5

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE - SHORELINE DEVELOPMENT
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Parameter	Frequency of Detection	Minimum Detection		Maximum Detection		Sample with Maximum Detection	Minimum Nondetect	Maximum Nondetect	Average of Positive Results	Overall Average
Pesticides (ug/kg)										
AROCLOR-1016	0/4	--		--		--	0.12	0.62	--	0.25
AROCLOR-1221	0/4	--		--		--	0.16	0.8	--	0.32
AROCLOR-1232	0/4	--		--		--	0.14	0.71	--	0.28
AROCLOR-1242	0/4	--		--		--	0.13	0.68	--	0.27
AROCLOR-1248	0/4	--		--		--	0.078	0.39	--	0.16
AROCLOR-1254	0/4	--		--		--	0.12	0.59	--	0.24
AROCLOR-1260	0/4	--		--		--	0.12	0.59	--	0.24
AROCLOR-1262	4/4	18	J	75	J	MR-FS-CC2	--	--	39.5	39.5
AROCLOR-1268	4/4	7.6	J	20	J	BQ1-FS-CC1	--	--	13.9	13.9
TOTAL AROCLOR	4/4	25.6		89		MR-FS-CC2	--	--	53.4	53.4
Inorganics (mg/kg)										
ANTIMONY	1/4	0.27	J	0.27	J	MR-FS-CC2	0.14	0.15	0.27	0.12
ARSENIC	0/4	--		--		--	0.19	0.21	--	0.10
BERYLLIUM	0/4	--		--		--	0.012	0.014	--	0.007
CADMIUM	0/4	--		--		--	0.02	0.022	--	0.01
CHROMIUM	4/4	0.11	J	2		MR-FS-CC2	--	--	0.61	0.61
COPPER	4/4	0.6	J	1.7	J	MR-FS-CC2	--	--	1.1	1.1
LEAD	1/4	0.17	J	0.17	J	MR-FS-CC2	0.12	0.13	0.17	0.09
MERCURY	4/4	0.038		0.055		MR-FS-CC1	--	--	0.04	0.04
NICKEL	0/4	--		--		--	0.32	0.36		0.17
SELENIUM	4/4	0.39	J	0.57	K	BQ1-FS-WC1	--	--	0.51	0.51
SILVER	0/4	--		--		--	0.048	0.054	--	0.03
THALLIUM	0/4	--		--		--	0.17	0.19	--	0.09
ZINC	4/4	6		7.6		BQ1-FS-WC1	--	--	7.1	7.1
Miscellaneous (%)										
LIPIDS	4/4	0.17		1.5		BQ1-FS-CC1	--	--	0.71	0.71

Footnotes:
1 Not a separate analytical measurement; summation of individual detected Aroclors.

Abbreviations:
J Estimated value
K Biased high
PCB Polychlorinated Biphenyls

TABLE B-5

SUMMARY STATISTICS FOR FISH TISSUE DATA FROM REFERENCE - SHORELINE DEVELOPMENT
LOCKHEED MARTIN - MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

Associated Samples:
BQ1-FS-CC1
BQ1-FS-WC1
MR-FS-CC1
MR-FS-CC2