

**FINAL TRIP REPORT
JUNE 2010 SOIL AND SEDIMENT SAMPLING EVENT
METRO CONTAINER SITE
TRAINER, DELAWARE COUNTY, PENNSYLVANIA**

Prepared for:

U.S. Environmental Protection Agency Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19103

Prepared by:

Weston Solutions, Inc.
Edison, New Jersey 08837

EPA Contract No. EP-S3-10-05

Technical Direction Document No. WS03-10-10-001
Document Control No. W0031.1A.00168

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1.0 INTRODUCTION

U.S. Environmental Protection Agency (EPA) Region 3 has tasked Weston Solutions, Inc. (WESTON®) to support EPA's assessment activities at the Metro Container site in Trainer, Delaware County, Pennsylvania under Superfund Technical Assessment and Response Team (START) Contract No. EP-S3-10-05, Technical Direction Document (TDD) No. WS03-10-10-001. Under the previous Region 3 START contract (Eastern Area START Contract No. EP-S3-05-02), Tetra Tech EM Inc. (Tetra Tech) conducted sampling events at the Metro Container site in March 2007 (TDD Nos. E13-008-06-07-008 and E23-014-07-07-011), August 2008 (TDD No. E33-020-08-07-009), and June 2010 (TDD No. E43-030-09-09-004). This trip report summarizes the field activities and laboratory analytical results for the June 2010 sampling event, which included soil and sediment sampling at and near the site (the previous sampling activities were described in trip reports prepared by Tetra Tech on November 7, 2007 and April 14, 2009).

References are listed after the text. Appendix A provides the figures, Appendix B provides analytical data summary tables, Appendix C provides a copy of the field logbook notes, and Appendix D provides the analytical data reports.

2.0 BACKGROUND

This section includes background information on the Metro Container site, including its location, description, and history of site activities and investigations.

2.1 Site Location

The Metro Container site is located in Trainer, Delaware County, Pennsylvania. The approximate geographic coordinates of the center of the site are 39.82642 degrees north latitude and 75.39903 degrees west longitude (U.S. Geological Survey [USGS] 1995). The Metro Container site is located south of the intersection of West 2nd Street and Price Street, in a heavily industrialized area of southeastern Pennsylvania. Industrial facilities surrounding the site include a scrap metal yard and water treatment plant to the east, rail yard to the southeast, and ConocoPhillips, Inc. refinery to the south and west. A mixed commercial and residential area is located north of the Metro Container site, directly across West 2nd Street. The site lies along Stoney Creek, a small tributary, approximately 0.17 mile upstream (north) of the stream's confluence with the Delaware River. The rail yard and a portion of the ConocoPhillips refinery are located along Stoney Creek between the site and the Delaware River. The refinery has a large outfall for non-contact cooling water adjacent to the site, which continuously releases a high volume of water to Stoney Creek. Appendix A, Figure 1 shows the site location (USGS 1995), while Figure 2 shows an aerial view of the site and surrounding area (U.S. Fish & Wildlife Service [USFWS] 2008).

The areas sampled during the June 2010 sampling event are located on the former Metro Container property and in the Delaware River south of the property. This area is characterized by mudflats located northeast of the confluence of Stoney Creek and Delaware River, which is tidal in this region. The mudflats are exposed during low tide and completely submerged during high tide. This area is surrounded by undeveloped land to the northeast and the ConocoPhillips refinery to the southwest. Depositional areas of higher elevation than the surrounding mudflats were observed

along the southern boundary of the sampling area and in a partially grass-covered area to the southwest.

2.2 Site Description

The Metro Container site is a graded, industrial property of approximately 10.41 acres. Two buildings are currently located on the site. The larger building is 40,000 square feet (ft²) and is currently used by Trainer Industries, LLC, the current property occupant, as a chemical storage and painting area. The open area located west of the building is used for sand blasting of pipes and vessels prior to repainting. The smaller building is approximately 6,000 ft² and is currently used for office space. Price Street intersects the property from West 2nd Street to the eastern edge of the property at the rail yard. By agreement with the current property owner, most of the site was graded by neighboring property owner, ConocoPhillips, and was used in 2006 for overflow parking. This parking area is covered with gravel, and wooden telephone poles have been staged in horizontal rows on the gravel surface for parking control.

The northwest portion of the Metro Container site is characterized by trees and shrubs and ground cover vegetation. Some areas of the site, including Price Street and a road between the two structures, are asphalt-covered. An elevated, recently-graded area south of the gravel-covered parking lot is the former location of a concrete holding tank. The southern and western portion of the property is bordered by Stoney Creek, a small tributary to the Delaware River. The ConocoPhillips oil refinery operates the Stoney Creek Guard Basin, which continuously discharges a large volume of non-contact cooling water into Stoney Creek, along the southern boundary of Stoney Creek. Figure 3 in Appendix A presents an aerial view of the site layout and immediate surroundings.

2.3 Site History

The site has a long history of industrial use, primarily in the production of chemicals followed by the recycling and reclamation of drums and containers. At the close of the 19th century, the site was occupied by the Delaware Oil Works. From 1913 to approximately 1920, the site was occupied by the Manufacturers Paraffin Company, which included storage tanks, refinery stills, an agitator house, condensers, storage facilities, and a packing shed and barreling house for production of finished wax products (MWH 2005).

From 1920 to 1959, Stauffer Chemical Company, Inc., (Stauffer) occupied the plant. Stauffer was a manufacturer of carbon disulfide at this facility. The two primary buildings still standing on site were constructed by Stauffer, including the office building and connected "locker room," and the main reclaiming building, referred to by Stauffer as the "oven building". The formerly-used chemical disposal lagoon that is currently filled-in was constructed between 1953 and 1959 during the late stages of Stauffer property ownership (MWH 2005).

From 1963 to 1969, Joseph A. Reis Company owned the property and used it for steel drum recycling (MWH 2005). Sanborn maps list the location of the former disposal lagoon as a pond, and aerial photographs from 1965 and 1970 indicate that the "pond" was filled with a black liquid (MWH 2005). Sometime prior to 1969, Universal Container Corporation assumed ownership of the property, and apparently continued the drum recycling operation (MWH 2005).

In 1983, the property was conveyed to the First Union Commercial Corporation, then to Metro Container Corporation, with drum recycling and reclamation operations continuing through these changes in property ownership (MWH 2005). Metro Container received an estimated 450,000 drums per year for recycling and reclamation, with the waste streams from the process terminating at three locations: (1) the treated wastewater was sent to the Delaware County Regional Water Quality Control Authority (Delcora), (2) the treated sludge was shipped to Sumptor Landfill in Sumptor, Michigan, and (3) other wastes were buried on site (MWH 2005).

A site characterization report that MWH issued on November 11, 2005, provides a detailed history of the environmental regulatory violations committed by the various facility owners, as well as assessments conducted at the site by various parties that included the Pennsylvania Department of Health (PADOH), Delaware River Basin Commission, Pennsylvania Department of Environmental Protection (PADEP; formerly known as Pennsylvania Department of Environmental Resources [PADER]), Delcora, EPA, U.S. Coast Guard, and the U.S. Attorney for the Eastern District (MWH 2005).

Between 1986 and 1989, EPA and PADEP issued at least 23 notices of violations (NOV) and conducted numerous site inspections at the Metro Container site. In July 1991, owners and operators of the Metro Container Corporation pleaded guilty in federal court to toxic waste dumping charges during Metro Container Corporation's ownership of the facility. Some time between 1994 and 1995, a fire destroyed the roof of the main office building at the abandoned site (MWH 2005).

2.4 Previous Investigations

Numerous investigations have been conducted at the Metro Container site. EPA's website provides a summary of the actions taken regarding the site, which includes more than 40 Issue Request Letters (I04e) dated from December 1985 through February 1989, a preliminary assessment completed in September 1986, two removal assessments (September 1988 and July 1994), two removal actions (June 1989 and November 1991) to address surface contamination concerns, and an Administrative Order on Consent (AOC) issued on September 21, 1999.

Beginning in 1965, Metro Container Corporation was ordered by PADOH to cease discharging untreated waste directly into Stoney Creek. Discharges to Stoney Creek occurred unabated into the early 1970s, even after installation of a primary treatment system after 1972. A trench was cut from an on-site lagoon in 1969 allowing wastewater from the lagoon to discharge directly into Stoney Creek. Unpermitted discharges to the creek continued through the 1980s (MWH 2005).

In the early 1970s, PADEP received reports of on-site landfilling of drums and other wastes, oil seeps from the lagoon, black substance seeping from the site to adjacent railroad tracks, and unpermitted discharges from the Metro Container site. PADEP verified these reports during site inspections. PADEP site inspections conducted in the 1980s identified improperly stored drums and wastes; poor housekeeping; liquids flowing into building storm drains and finally to Stoney Creek; filling and dumping in the Stoney Creek floodplain; red material flowing on the ground and into Stoney Creek; drum wastes stored in site buildings overflowing into building drains and discharging into Stoney Creek; black substance leaking into Stoney Creek; leaking drum stored outside on the ground; and various spills. PADEP issued numerous NOVs to the facility for these observed violations. PADEP follow-up inspections indicated that the facility remained in noncompliance with

environmental regulations and that violations described in the NOV's were not mitigated. The facility continued to release wastes to the ground surface and surface water (MWH 2005).

In 1987, a three-alarm fire damaged a portion of the drum reclaiming building after a worker accidentally dropped a torch into a paint bucket. Also in 1987, EPA's Technical Assistance Team (TAT) conducted a visual site inspection of the Metro Container site. The following observations were made during the 1987 inspection: (1) 60,000 unclaimed drums were stored on site; (2) wastewater treatment shutdown resulted in the build-up of untreated sludge, which was stored in a concrete holding tank and thousands of unsecured drums throughout the facility; and (3) many of the stored drums were in poor condition. Limited sampling by TAT revealed ethylene benzene, toluene, chlorinated hydrocarbons, base neutrals, phenols, and lead (MWH 2005).

In 1988, EPA collected waste samples from the site for waste characterization. Results from this investigation revealed numerous volatile organic compounds (VOC) and semivolatile organic compounds (SVOC). In 1988, the U.S. Coast Guard responded to a spill of oil discharged from the Metro Container site into Stoney Creek and ultimately the Delaware River. EPA conducted numerous sampling investigations in 1988 (MWH 2005).

In 1988, in response to Metro Container Corporation's unwillingness to comply with environmental regulations, rectify negligent activities, and address continued discharges from the site to Stoney Creek, EPA obtained funds under CERCLA to control the off-site migration of contamination and to erect a security fence around the site. EPA began negotiations with responsible parties to remediate the site. After a long period of negotiations, the responsible parties contracted MK Environmental to conduct removal activities at the site. The contractor removed and disposed of 6,054.5 tons of waste, including sludge, drums, and contaminated soil. Approximately 1.5 feet of visually contaminated soil was excavated and the excavated area was graded to create sheet flow drainage to Stoney Creek. The location of the excavation and primary references for the excavation are not in available reports for the site. About 6,500 cubic yards of contaminated soil was removed (MWH 2005).

According to the 2005 MWH Site Characterization Report, Pennoni Associates, Inc. (Pennoni), conducted a site investigation in 1999 that included the collection of subsurface soil, surface water, and ground water samples. The number of samples collected by Pennoni is not provided in the MWH Site Characterization Report. In 2005, MWH conducted a comprehensive site characterization including the collection of 130 soil (waste) samples from 130 soil borings, ground water samples, and surface water samples (MWH 2005).

In March 2007, Tetra Tech conducted removal site assessment sampling at the Metro Container site on behalf of EPA. Tetra Tech collected 25 surface soil, 24 subsurface soil, 19 groundwater, 4 soil gas, 9 surface water, and 10 sediment samples at the site (Tetra Tech 2007). The majority of the surface water and sediment samples were collected from Stoney Creek, and one sediment sample was collected from the mudflats at the confluence of Stoney Creek and the Delaware River. Analytical results revealed the presence of VOCs, SVOCs, antimony, arsenic, lead, vanadium, pesticides, and polychlorinated biphenyls (PCB) on site and in Stoney Creek. Specifically, the PCBs Aroclor-1248, Aroclor-1254, and Aroclor-1260 were detected in soil samples collected from the site at individual concentrations up to 62,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$). Two sediment samples collected from Stoney Creek contained the same PCBs at individual concentrations up to 9,500 $\mu\text{g}/\text{kg}$. According to Tetra Tech, a comparison of the PCB congeners reported in the Stoney Creek

sediment samples to the congeners detected in groundwater from on-site monitoring wells demonstrated that the PCBs in the off-site sediment samples had migrated from the site. A full discussion of the results of this sampling event was presented in the November 7, 2007 trip report prepared by Tetra Tech (Tetra Tech 2007). Sample locations for the March 2007 investigation are shown in Appendix A, Figure 4.

In August 2008, Tetra Tech collected 16 additional sediment samples from the Delaware River in the vicinity of the Metro Container site. The samples were collected from an area of concern identified by EPA Region 3's Biological Technical Assistance Group (BTAG) to determine the impact of site contaminants on Delaware River sediments. Analytical results indicated the presence of PCBs in 7 of the 16 sediment samples, at individual concentrations up to 1,600 µg/kg. Polycyclic aromatic hydrocarbons (PAH) and pesticides were reported for 5 of the 16 samples. Maximum concentrations of metals were reported for the same samples that contained PAHs and PCBs. The analytical results obtained from this sampling event indicated that an area of sediments contaminated with PAHs and PCBs is located in the Delaware River in the vicinity of the Metro Container site. A full discussion of the results of this sampling event was presented in the April 14, 2009 trip report prepared by Tetra Tech (Tetra Tech 2009). Sample locations for the August 2008 investigation are shown in Appendix A, Figure 5.

3.0 SAMPLING ACTIVITIES

On June 7, 2010, Tetra Tech, EPA, and PADEP personnel mobilized to the Metro Container site. PADEP representative Sara Pantelidou had conducted historical inspections of the site and was knowledgeable of the locations of pertinent site features such as the formerly-used wastewater lagoon and drum disposal and storage areas. Ms. Pantelidou indicated to EPA and Tetra Tech the location of the formerly-used lagoon. Visual inspection of the area by Tetra Tech revealed that the lagoon is gravel-filled, partially vegetated with grasses and weeds, and very hard at the surface. Upon visual inspection of other proposed on-site sample locations, a determination was made that collecting samples with a hand auger would not be feasible due to the hardness of the surface. After consulting with Tetra Tech, EPA decided to forego collection of the other on-site soil samples proposed in the May 2010 Final Sampling and Analysis Plan (SAP) for the Metro Container Site (Tetra Tech 2010a), with the exception of the formerly-used lagoon area.

From June 7-10, 2010, Tetra Tech collected soil and sediment samples at and in the vicinity of the Metro Container site in accordance with the EPA-approved Final SAP for the Metro Container Site (Tetra Tech 2010a). Deviations from the Final SAP are described in Section 3.4. The areas targeted for sampling included the on-site former lagoon area and the mudflats at the confluence of Stoney Creek and the Delaware River. During the completion of the sampling event, Tetra Tech documented all site activities in site logbooks in accordance with Tetra Tech Standard Operating Procedure (SOP) No. 024, "Recording of Notes in Field Logbook" and logged the sample locations electronically using global positioning system (GPS) equipment (Tetra Tech 2010b). Table 1 provides the sample identifiers, collection times, descriptions, locations, and depths for the soil and sediment samples. The sample locations are shown in Appendix A, Figure 6, and a copy of the field logbook notes is provided in Appendix C.

3.1 Soil Sampling

On June 7, 2010, Tetra Tech collected three surface soil samples (MC-SS-01, MC-SS-02, and MC-SS-03) and two subsurface soil samples (MC-SB-02 and MC-SB-03) from the formerly-used chemical disposal lagoon area. On June 8, 2010, Tetra Tech collected two surface soil samples (MC-SS-04 and MC-SS-05) and one subsurface soil sample (MC-SB-04) from off-site areas to document background conditions. For this sampling event, surface soil samples were collected from 0 to 6 inches below ground surface (bgs) and subsurface soil samples were collected from 6 to 12 inches bgs. All sampling procedures were documented in the field logbook (Appendix C) at the time of sample collection and the sample locations were recorded with a GPS unit.

All soil samples were collected in accordance with Tetra Tech SOP No. 005-2, "Soil Sampling". Tetra Tech collected the soil samples using a hand-held auger decontaminated in accordance with Tetra Tech SOP No. 002-3, "General Equipment Decontamination". Initially, the soil from 0 to 6 inches bgs was collected with a hand auger; placed into a dedicated, disposable aluminum pan; and homogenized with a dedicated, disposable plastic scoop prior to placement into the laboratory containers. The subsurface soil sample was collected from 6 to 12 inches bgs in the same boring as the surface soil sample. The subsurface soil was also placed into a dedicated, disposable aluminum pan from the hand-auger and homogenized with a dedicated, disposable plastic scoop prior to placement into the laboratory containers (Tetra Tech 2010b). Due to refusal of the hand auger, subsurface soil samples were not collected from the borings where surface soil samples MC-SS-01 and MC-SS-05 were collected.

3.2 Sediment Sampling

On June 7, 8, and 10, 2010, Tetra Tech collected a total of 15 sediment samples at and in the vicinity of the Metro Container site. Sediment samples MC-SD-05, MC-SD-06 and MC-SD-07 were collected from submerged locations within Stoney Creek directly adjacent to the site. A strong petroleum odor and black staining was observed in these sediment samples. Sample MC-SD-07 was collected directly upstream of the ConocoPhillips refinery outfall for non-contact cooling water. The surface water in the location of the outfall was noted to be significantly warmer than the water located upstream of this outfall.

Three sediment samples were collected from Stoney Creek upstream of the Metro Container site to document background conditions. Samples MC-SD-02 and MC-SD-03 were collected adjacent to the Stoney Creek Technologies site, where there is an ongoing EPA removal action. Sediment sample MC-SD-01 was collected upstream of both sites (Stoney Creek Technologies and Metro Container).

**TABLE 1
SAMPLING SUMMARY**

Sample Identifier	Sample Date	Collection Time	Sample Description	Sample Location and Depth
SOIL SAMPLES				
MC-SS-01	06/07/10	1120	dry, brown to dark-brown, silty, fine sand	On-site surface soil sample from the former chemical disposal lagoon, west/southwest of monitoring well MW-6. Depth: 0-6 inches below ground surface (bgs).
MC-SS-02	06/07/10	1202	silty, fine sand with brick, rock, and wood debris	On-site surface soil sample from the former chemical disposal lagoon, south of MW-6. Depth: 0-6 inches bgs.
MC-SB-02	06/07/10	1211	dry, brown, silty, fine sand with brick, glass, wood, and rock	On-site subsurface soil sample from the same location as surface sample MC-SS-02. Depth: 6-12 inches bgs.
MC-SS-03	06/07/10	1240	dry, silty fine sand with rocks	On-site surface soil sample from the former chemical disposal lagoon, north/northeast of MW-6. Depth: 0-6 inches bgs.
MC-SB-03	06/07/10	1248	dry, brown, silty, fine sand with wood, rock, and brick fragments.	On-site subsurface soil sample from the same location as surface sample MC-SS-03. Depth: 6-12 inches bgs.
MC-SS-04	06/08/20	1500	dry, gray-brown, organic soil, silty fine sand	Background surface soil sample from vegetated industrial land north of the Amtrak/SEPTA railroad tracks. Depth: 0-6 inches bgs.
MC-SB-04	06/08/10	1510	dry, brown, silt with some fine sand and clay.	Background subsurface soil sample from the same location as surface sample MC-SS-04. Depth: 6-12 inches bgs.
MC-SS-05	06/08/10	1724	brown, sandy soil with silt	Background soil sample from Market Square Memorial Park (community park). Depth: 0-6 inches bgs.
SEDIMENT SAMPLES				
MC-SD-01	06/10/10	1600	wet, black, sandy silt	Background sediment sample from submerged location in the northern end of Stoney Creek, upstream of the Metro Container and Stoney Creek Technologies sites. Depth: 0-8 inches bgs.
MC-SD-02	06/08/10	1430	black, sandy silt with gravel; petroleum odor noted	Sediment sample from submerged location in Stoney Creek, adjacent to Stoney Creek Technologies site and upstream of Metro Container site. Depth: 0-6 inches bgs.

**TABLE 1 (continued)
SAMPLING SUMMARY**

Sample Identifier	Sample Date	Collection Time	Sample Description	Sample Location and Depth
MC-SD-03	06/08/10	1401	black, sandy silt with gravel, some organic matter; petroleum odor noted	Sediment sample from submerged location in Stoney Creek, approximately 20 feet south of elevated railroad tracks, adjacent to Stoney Creek Technologies site, and upstream of Metro Container site. Depth: 0-6 inches bgs.
MC-SD-05	06/07/10	1235	black silt, clay, and gravel; very strong petroleum odor	Sediment sample from submerged location along the east side of Stoney Creek that receives drainage from Metro Container site. Waste material was observed in the nearby stream bank. Depth: 0-6 inches bgs.
MC-SD-06	06/07/10	1205	gray, silty sediment	Sediment sample from submerged location along the east side of Stoney Creek, approximately 1 foot downstream of the drainage ditch that drains the Metro Container site, in an area where rubble forms the banks of Stoney Creek. Depth: 0-6 inches bgs.
MC-SD-07	06/07/10	1140	black sand and silt with large amount of organic material; strong petroleum odor and elevated temperature noted	Sediment sample from submerged location along the east side of Stoney Creek approximately 20 feet upstream of the ConocoPhillips cooling water discharge. Depth: 0-6 inches bgs.
MC-SD-10	06/07/10	1616	wet, dark-brown to brown sand with organic material; petroleum odor noted	Sediment sample from exposed Delaware River mudflat, collected during low tide while the location was exposed; location is submerged during high tide. Depth: 6-8 inches bgs.
MC-SD-13	06/07/10	1619	wet, dark-brown to brown sand with organic material; petroleum odor noted	Duplicate of sample MC-SD-10 for quality assurance/quality control (QA/QC) purposes.
MC-SD-11	06/07/10	1608	wet, dark-brown to brown sand with organic material; petroleum odor noted	Sediment sample from Delaware River mudflat, collected during low tide while the location was exposed; location is submerged during high tide. Depth: 4-6 inches bgs.

**TABLE 1 (continued)
SAMPLING SUMMARY**

Sample Identifier	Sample Date	Collection Time	Sample Description	Sample Location and Depth
MC-SD-12	06/07/10	1600	moist to wet, dark-brown sand with organic material; petroleum odor noted.	Sediment sample from Delaware River mudflat, collected during low tide while the location was exposed; location is submerged during high tide. Depth: 4-6 inches bgs.
MC-SD-15	06/07/10	1600	dark-gray to black silty sand with small amount of organic matter.	Sediment sample from Delaware River mudflat adjacent to a small, undeveloped peninsula located upstream of the Stoney Creek/Delaware River confluence. Collected during low tide while the location was exposed; location is submerged during high tide. Depth: 0-6 inches bgs.
MC-SD-16	06/07/10	1630	dark-gray to black, silty sand with small amount of organic material	Sediment sample from Delaware River mudflat adjacent to a small, undeveloped peninsula located upstream of the Stoney Creek/Delaware River confluence. Collected during low tide while the location was exposed; location is submerged during high tide. Depth: 0-6 inches bgs.
MC-SD-17	06/08/10	1624	gray clay with some organic matter	Sediment sample from Stoney Creek at its confluence with the Delaware River. Location is submerged by the Delaware River during high tide.
MC-SD-18	06/08/10	1614	gray clay with some organic matter	Sediment sample from Stoney Creek at its confluence with the Delaware River upstream of sample MC-SD-17. Location is submerged by the Delaware River during high tide.
MC-SD-19	06/08/10	1602	gray clay with some organic matter	Sediment sample from Stoney Creek at its confluence with the Delaware River upstream of sample MC-SD-18. Location is submerged by the Delaware River during high tide.
MC-FB-01	06/08/10	1330	field blank	Field blank for QA/QC purposes.
MC-RB-01	06/08/10	1741	rinsate blank (hand auger)	Rinsate blank for QA/QC purposes.

Notes:

MC = Metro Container site
 SS = Surface soil
 SB = Subsurface soil

SD = Sediment
 FB = Field blank
 RB = Rinsate blank

Tetra Tech collected sediment samples MC-SD-17, MC-SD-18, and MC-SD-19 from Stoney Creek downstream of the Metro Container site, within the stream portion that forms the confluence with the Delaware River. These three samples were collected along the bank of Stoney Creek during low tide, in areas that are submerged by the Delaware River during high tide. Tetra Tech also collected four sediment samples (MC-SD-10, MC-SD-13 [duplicate of MC-SD-10], MC-SD-11, and MC-SD-12) from the Delaware River in the confluence area, which is characterized by tidal wetlands including mudflats, and two additional sediment samples (MC-SD-15 and MC-SD-16) from mudflats located further east (upstream) along the Delaware River. The mudflats are exposed during low tide and submerged during high tide.

All sediment samples were collected in accordance with Tetra Tech SOP No. 006-4, "Sediment and Sludge Sampling". At each location, sediment was collected from 0 to 6 inches bgs using a hand-held auger decontaminated in accordance with Tetra Tech SOP No. 002-3, "General Equipment Decontamination". The sediment was placed into a dedicated aluminum pan and homogenized using a dedicated plastic scoop prior to placement into the laboratory containers. All sampling procedures were documented in the field logbook (Appendix C) at the time of sample collection and the sample locations were recorded with a GPS unit (Tetra Tech 2010b).

3.3 Sample Management

The samples collected during this sampling event were submitted to an EPA-assigned Contract Laboratory Program (CLP) laboratory for Target Compound List (TCL) semivolatile organic compound (SVOC) and pesticide/PCB analysis and Target Analyte List (TAL) metals analysis. In addition, a portion of each sample was submitted to the EPA Region 3 Laboratory for Total Organic Carbon (TOC) analysis. Samples were handled and packaged in accordance with the Tetra Tech SOP No. 019, "Packaging and Shipping Samples" and with the Tetra Tech "Quality Assurance Project Plan (QAPP) for START". All shipping containers were properly labeled with EPA custody seals and were delivered with signed chain-of-custody forms and appropriate hazard warnings for laboratory personnel (Tetra Tech 2010b). Table 2 provides the sample shipment summary for this sampling event.

**TABLE 2
SAMPLE SHIPMENT SUMMARY**

Sample Matrix	Analyses	Laboratory
Soil/Sediment	CLP TCL SVOCs CLP TCL Pesticides/PCBs	KAP Technologies 9391 Grogans Mill Road, Suite A-2 The Woodlands, TX 77380
Soil/Sediment	CLP TAL Metals	ChemTech Consulting Group (CHEM) 284 Sheffield Street Mountainside, NJ 07092
Soil/Sediment	Total Organic Carbon	EPA Region 3 Laboratory 701 Mapes Road Ft. Meade, MD 20755-5350

3.4 Deviations from Sampling and Analysis Plan

The June 2010 sampling event was completed in accordance with Tetra Tech's May 2010 Final SAP for the Metro Container Site (Tetra Tech 2010a). The SAP proposed the collection of seven on-site surface and subsurface soil samples. As discussed in Section 3.0, the number of on-site soil samples was revised on June 7, 2010 following the initial site walk-through of proposed on-site sampling locations. The on-site areas proposed for sampling had all been regraded and filled in with gravel; therefore, the field team made a determination that a hand auger would not be capable of penetrating the surface sufficiently to collect samples. Because analytical results are available from numerous investigations that have been completed on the site, the collection of these samples was deemed unnecessary. Therefore, the only on-site samples collected during this investigation (three surface soil and two subsurface soil) were obtained from the former chemical disposal lagoon area.

The Final SAP proposed the collection of 21 sediment samples. A total of 15 sediment samples were collected during this sampling event. The reduction in the number of sediment samples collected was due to issues regarding the accessibility of some proposed sampling locations.

There were no other deviations from the May 2010 Final SAP.

3.5 Personnel

The following people were present during the June 2010 Metro Container field activities:

June 7, 2010

[REDACTED]	Project Manager	Tetra Tech
[REDACTED]	Environmental Scientist	Tetra Tech
[REDACTED]	Environmental Scientist	Tetra Tech
[REDACTED]	Environmental Scientist	Tetra Tech
Charlene Creamer	Site Assessment Manager	EPA Region 3
Dustin Armstrong	Environmental Protection Specialist	PADEP
Sara Pantelidou	Geologist	PADEP

June 8, 2010

[REDACTED]	Project Manager	Tetra Tech
[REDACTED]	Environmental Scientist	Tetra Tech
[REDACTED]	Environmental Scientist	Tetra Tech
[REDACTED]	Environmental Scientist	Tetra Tech

June 10, 2010

[REDACTED]	Chemist	Tetra Tech
[REDACTED]	Environmental Scientist	Tetra Tech

4.0 ANALYTICAL RESULTS

The soil and sediment samples collected during this sampling event were analyzed by an EPA CLP laboratory in accordance with the EPA CLP Statement of Work for TCL SVOCs and PCBs, as well as TAL metals. In addition, a portion of each sample was analyzed for TOC by the EPA Region 3 laboratory. Analytical data summary tables for the soil, sediment, and QA/QC samples collected during this sampling event are provided in Appendix B. The analytical data reports are included in Appendix D.

4.1 Soil Sample Analytical Results

The analytical results for on-site soil samples are compared to the results for the off-site background samples. As shown in Table B-1, the SVOCs reported in the soil samples consisted predominantly of polycyclic aromatic hydrocarbons (PAH). PAHs were detected above CRQLs in all soil samples including background, with the maximum background concentrations in sample MC-SS-05. Several PAHs were detected at concentrations significantly above background in soil sample MC-SB-02, which was collected within the former disposal lagoon. One PAH, benzo(g,h,i)perylene, was also detected in sample MC-SB-03 at a concentration greater than three times background. Total PAHs for soil sample MC-SS-05 was reported at 20,005 µg/kg, compared with the maximum background total of 4,367 µg/kg in soil sample MC-SS-05.

Table B-2 summarizes the PCBs detected in the soil samples. Aroclor-1260 was detected in the background soil samples at concentrations up to 230 µg/kg. In comparison, Aroclor-1260 was detected in on-site soil samples MC-SS-02, MC-SB-02, and MC-SS-03 at concentrations ranging from 750 µg/kg to 1,100 µg/kg, with the highest concentration reported for sample MC-SS-02.

As shown in Table C-3, the metals cadmium, chromium, and mercury were detected at significant concentrations in on-site soil samples. The maximum background concentrations of cadmium, chromium, and mercury were 3.3, 36.8, and 0.75 milligrams per kilogram (mg/kg), respectively. Cadmium was detected significantly above background in soil samples MC-SS-01 (13.9 mg/kg) and MC-SB-02 (18.2 mg/kg). Chromium was detected at concentrations ranging from 143 mg/kg to 184 mg/kg in soil samples MC-SS-01, MC-SS-02, and MC-SB-02. Mercury was detected significantly above background in samples MC-SS-01 (2.6 mg/kg) and MC-SB-02 (3.1 mg/kg).

4.2 Sediment Sample Analytical Results

The analytical results for sediment samples collected from Stoney Creek at or downstream of the site are compared to the results for upstream sediment samples MC-SD-01, MC-SD-02, and MC-SD-03. The results for samples collected from the Delaware River downstream of the site are compared to upstream sediment samples MC-SD-15 and MC-SD-16. As shown in Table B-4, SVOCs were not detected significantly above background in any of the sediment samples. Although Aroclor-1260 was detected above background in sediment sample MC-SD-11, the result might be biased high and cannot be used to show an observed release concentration. Table B-5 shows the relative Aroclor concentrations in the sediment samples.

As shown in Table B-6, chromium and mercury were detected at concentrations significantly above background in Stoney Creek and Delaware River sediments. The chromium and mercury

concentrations of 239 mg/kg and 0.81 mg/kg in sediment sample MC-SD-05 exceeded the maximum Stoney Creek background concentrations (66.9 mg/kg in MC-SD-03 and 0.1 mg/kg in MC-SD-02, respectively). Tetra Tech collected sediment sample MC-SD-05 from a submerged portion of Stoney Creek adjacent to the Metro Container site. Mercury was detected at concentrations of 2.0 mg/kg and 1.2 mg/kg in sediment samples MC-SD-10 and MC-SD-11, respectively, significantly above the maximum background concentration of 0.21 mg/kg in upstream sediment sample MC-SD-15. Tetra Tech collected samples MC-SD-10 and MC-SD-11 from a tidal wetland within the Delaware River, at the confluence with Stoney Creek.

5.0 SUMMARY AND CONCLUSIONS

The analytical results for soil samples show that several hazardous substances are present within the former disposal lagoon area and are attributable to that source at the Metro Container site. Hazardous substances detected significantly above background in source soil samples include several PAHs, Aroclor-1260, cadmium, chromium, and mercury. The sediment sample analytical results document an observed release to Stoney Creek adjacent to the site and to Delaware River downstream of the site. The hazardous substances shown at observed release concentrations and attributable to the Metro Container site include chromium and mercury.

6.0 REFERENCES

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U.S. Geological Survey (USGS). 1995. 7.5-Minute Series Topographic Quadrangle Map, Marcus Hook, PA-NJ-DE.

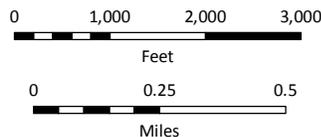
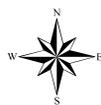
APPENDIX A
FIGURES



Legend

 Approximate Site Boundary

Data Sources:
 Basemap - USGS 7.5-Minute Series Topographic Map:
 Marcus Hook, PA.-N.J.-Del. Quadrangles, 1993.



Metro Container Corporation
 Trainer, Delaware County, Pennsylvania

FIGURE 1
 Site Location Map

TDD#: WS03-10-10-001
 Contract: EP-S3-10-05

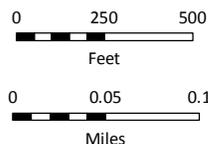
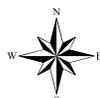




Legend

-  Approximate Site Boundary
-  HRS Eligible Wetlands
-  Stream
-  Railroad Tracks

Data Sources:
 Basemap - PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey.
 Wetlands data available from:
<http://www.fws.gov/wetlands/Data/DataDownload.html>



Metro Container Corporation
 Trainer, Delaware County, Pennsylvania

FIGURE 2
 Site Vicinity Map

TDD#: WS03-10-10-001
 Contract: EP-S3-10-05



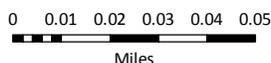
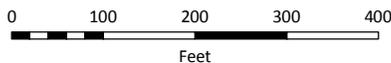


Legend

- Approximate Site Boundary
- HRS Eligible Wetlands
- Stream
- Railroad Tracks

Note: Locations of site features are approximate.

Data Sources:
 Basemap - PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey.
 Wetlands data available from:
<http://www.fws.gov/wetlands/Data/DataDownload.html>



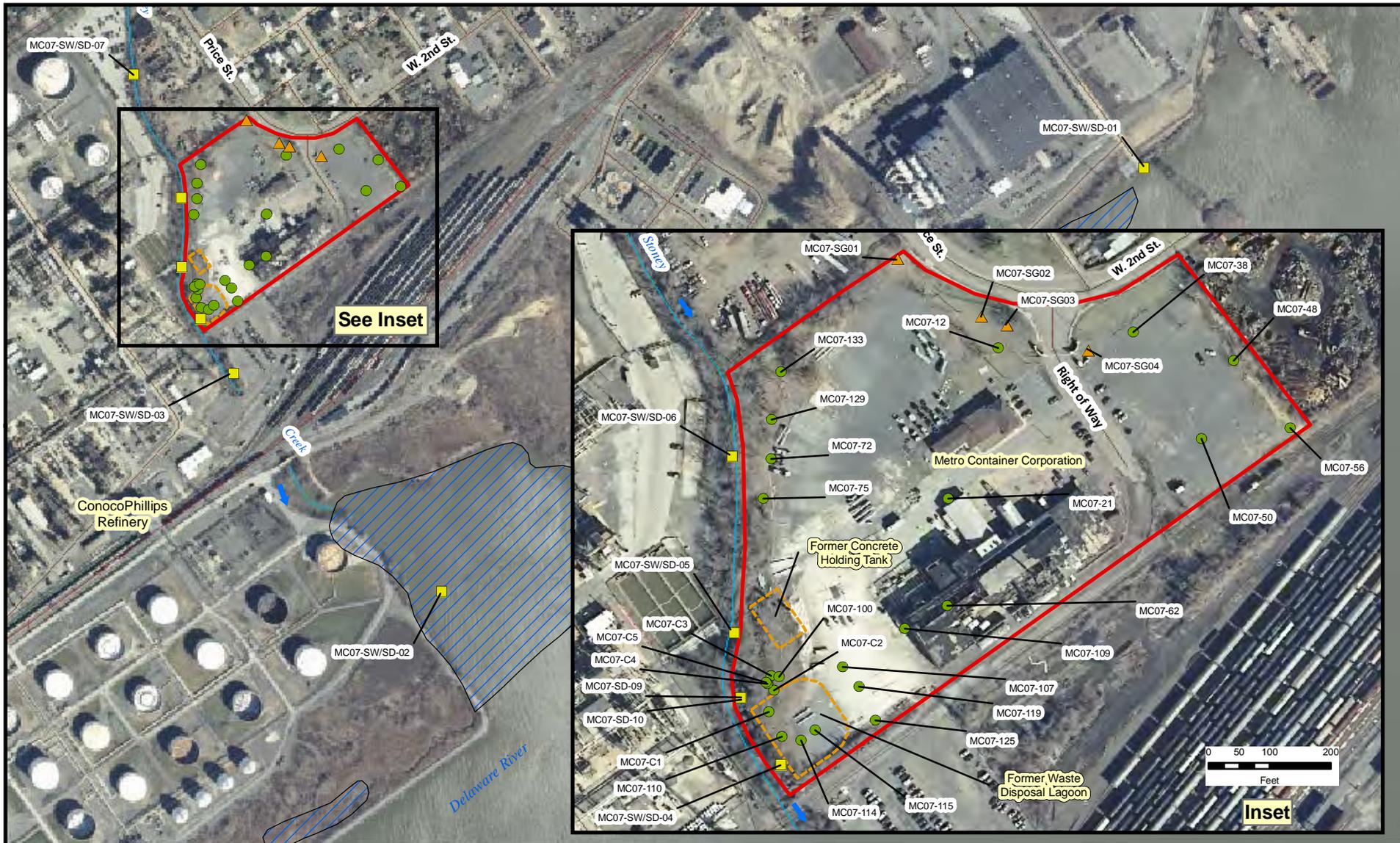
Metro Container Corporation
 Trainer, Delaware County, Pennsylvania

FIGURE 3
 Site Layout Map

TDD#: WS03-10-10-001
 Contract: EP-S3-10-05



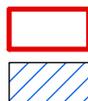
AR103484



Legend

Sample Locations

- Surface Water/Sediment
- Soil/Groundwater
- ▲ Soil Gas



Approximate Site Boundary



HRS-Eligible Wetlands

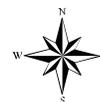
— Road

— Stream

— Railroad Tracks

Data Sources:
 Basemap - PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey.

Tetra Tech, Eastern Area START, Region 3. Field Logbook for the Metro Container Site. November 27, 2006 to September 4, 2007.



0 200 400 600
 Feet

0 0.05 0.1
 Miles

Metro Container Corporation
 Trainer, Delaware County, Pennsylvania

FIGURE 4
March 2007
Sample Location Map

TDD#: WS03-10-10-001
 Contract: EP-S3-10-05



AR103485

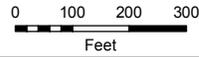
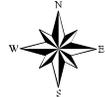


Legend

- Sediment Sample Location
- Composite Sampling Line
- Road
- Stream
- Railroad Tracks
- HRS-Eligible Wetlands
- Oil-Stained Area
- Approximate Site Boundary

Note: Locations of site features are approximate.

Data Sources:
 Basemap - PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey.
 Wetlands data available from: <http://www.fws.gov/wetlands/Data/DataDownload.html>.
 Tetra Tech, Eastern Area START, Region 3. Field Logbook for the Metro Container Site, No. 020-08-07-009. August 18 - 19, 2008.



Metro Container Corporation
 Trainer, Delaware County, Pennsylvania

FIGURE 5
August 2008
Sample Location Map

TDD#: WS03-11-01-001
 Contract: EP-53-10-05



AR103486

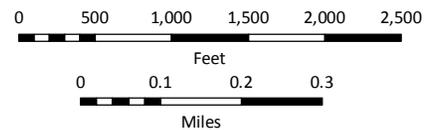


Legend

- Sediment Sample Location
- Soil Sample Location
- Stream
- Approximate Site Boundary

Note: Locations of site features are approximate.

Data Sources:
 Basemap - PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey.
 Tetra Tech, Eastern Area START, Region 3. Field Logbooks for the Metro Container Site, June 2010.



Metro Container Corporation
 Trainer, Delaware County, Pennsylvania

FIGURE 6
 June 2010
 Sample Location Map

TDD#: WS03-10-10-001
 Contract: EP-S3-10-05



AR103487

APPENDIX B
ANALYTICAL DATA SUMMARY TABLES

TABLE B-1, page 1 of 2
SOIL ANALYTICAL RESULTS - SVOCs
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:		C45A9		C45B0		C4598		C45B1		C4599		C45B5		C45B2		C45B9	
Sampling Location:		MC-SS-01		MC-SS-02		MC-SB-02		MC-SS-03		MC-SB-03		MC-SS-04		MC-SB-04		MC-SS-05	
Date Sampled:		6/7/2010		6/7/2010		6/7/2010		6/7/2010		6/7/2010		6/8/2010		6/8/2010		6/8/2010	
%Moisture:		3		5		6		4		6		5		6		6	
Dilution Factor:		1.0		1.0		1.0/4.98		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Benzaldehyde	170		UJ		UJ				UJ								
Phenol	170	400	J		UJ				UJ								
Bis(2-chloroethyl)ether	170		UJ		UJ				UJ								
2-Chlorophenol	170		UJ		UJ				UJ								
2-Methylphenol	170		UJ		UJ				UJ								
2,2'-Oxybis(1-chloropropane)	170		UJ		UJ				UJ								
Acetophenone	170	130	J		UJ				UJ								
4-Methylphenol	170		UJ		UJ				UJ								
N-Nitroso-di-n-propylamine	170		UJ		UJ				UJ								
Hexachloroethane	170		UJ		UJ				UJ								
Nitrobenzene	170		UJ														
Isophorone	170		UJ														
2-Nitrophenol	170		UJ														
2,4-Dimethylphenol	170		UJ														
Bis(2-chloroethoxy)methane	170		UJ														
2,4-Dichlorophenol	170		UJ														
Naphthalene	170	88	J														
4-Chloroaniline	170		UJ														
Hexachlorobutadiene	170		UJ														
Caprolactam	170		UJ														
4-Chloro-3-methylphenol	170		UJ														
2-Methylnaphthalene	170	71	J											81	J		
Hexachlorocyclopentadiene	170																
2,4,6-Trichlorophenol	170																
2,4,5-Trichlorophenol	170																
1,1'-Biphenyl	170																
2-Chloronaphthalene	170																
2-Nitroaniline	330																
Dimethylphthalate	170							100	J								
2,6-Dinitrotoluene	170																
Acenaphthylene	170					110	J										
3-Nitroaniline	330																
Acenaphthene	170					120	J										
2,4-Dinitrophenol	330																
4-Nitrophenol	330																
Dibenzofuran	170					95	J										
2,4-Dinitrotoluene	170																

TABLE B-1, page 2 of 2
SOIL ANALYTICAL RESULTS - SVOCs
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:	C45A9	C45B0	C4598	C45B1	C4599	C45B5	C45B2	C45B9								
Sampling Location:	MC-SS-01	MC-SS-02	MC-SB-02	MC-SS-03	MC-SB-03	MC-SS-04	MC-SB-04	MC-SS-05								
Date Sampled:	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010	6/8/2010	6/8/2010								
%Moisture:	3	5	6	4	6	5	6	6								
Dilution Factor:	1.0	1.0	1.0/4.98	1.0	1.0	1.0	1.0	1.0								
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
Diethylphthalate	170															
Fluorene	170					200	J									
4-Chlorophenyl-phenylether	170															
4-Nitroaniline	330															
4,6-Dinitro-2-methylphenol	330		R													
N-Nitrosodiphenylamine	170															
1,2,4,5-Tetrachlorobenzene	170															
4-Bromophenyl-phenylether	170															
Hexachlorobenzene	170							72	J							
Atrazine	170															
Pentachlorophenol	330															
Phenanthrene	170	420		360	J	2,100		170	J	380		120	J	140	J	440
Anthracene	170	130	J			580				110	J					90
Carbazole	170	80	J			180	J			74	J					
Di-n-butylphthalate	170															
Fluoranthene	170	770		750	J	3,100	+	240	J	620		450		230	J	830
Pyrene	170	680		550		2,700	+	200		590		340		210		650
Butylbenzylphthalate	170			82	J					88	J					
3,3'-Dichlorobenzidine	170															
Benzo(a)anthracene	170	430		280	J	1,700		96	J	420		200		120	J	370
Chrysene	170	480		380	J	1,600		120	J	500		290	J	190	J	400
Bis(2-ethylhexyl)phthalate	170	390		300		520		87	J	210		80	J			
Di-n-octylphthalate	170															
Benzo(b)fluoranthene	170	390		340	J	1,400		99	J	380		270		190	J	300
Benzo(k)fluoranthene	170	380		290	J	1,600		100	J	370		220	J	140	J	320
Benzo(a)pyrene	170	500		310	J	1,700		110	J	600		170	J	120	J	350
Indeno(1,2,3-cd)pyrene	170	340		250	J	1,100		77	J			150	J	110	J	230
Dibenzo(a,h)anthracene	170	170	J	97	J							77	J			120
Benzo(g,h,i)perylene	170	490		290		1,200		90	J	790		160	J	120	J	260
2,3,4,6-Tetrachlorophenol	170															
TOTAL PAHs		6,343		4,285		20,005		1,494		5,204		2,533		1,658		4,367

Notes:

All CRQLs and results are in micrograms per kilogram (µg/kg)
 CRQL = Contract Required Quantitation Limit
 Sample quantitation limit = (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]
 PAHs = Polycyclic aromatic hydrocarbons
 Empty cell indicates substance not reported above detection limit
Bold indicates that value significantly exceeds background
Italics indicates maximum background concentrations

Data Qualifiers (Q):

UJ = Not detected, quantitation limit may be inaccurate or imprecise.
 J = Analyte present. Reported value may not be accurate or precise.
 R = Unusable result. Analyte may not be present in the sample.
 Supporting data necessary to confirm result.
 + = Result reported from dilution analysis.

TABLE B-2
SOIL ANALYTICAL RESULTS - AROCLORS
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:		C45A9		C45B0		C4598		C45B1		C4599		C45B5		C45B2		C45B9	
Sampling Location:		MC-SS-01		MC-SS-02		MC-SB-02		MC-SS-03		MC-SB-03		MC-SS-04		MC-SB-04		MC-SS-05	
Date Sampled:		6/7/2010		6/7/2010		6/7/2010		6/7/2010		6/7/2010		6/8/2010		6/8/2010		6/8/2010	
%Moisture:		3		5		6		4		6		5		6		6	
Dilution Factor:		1.0		0.99/4.97		1.0/10		0.99/4.98		1.0		1.0		0.99		1.0	
Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aroclor-1016	33												UJ			8.5	J
Aroclor-1221	33												UJ				UJ
Aroclor-1232	33												UJ				UJ
Aroclor-1242	33												UJ				UJ
Aroclor-1248	33												UJ				UJ
Aroclor-1254	33												UJ				UJ
Aroclor-1260	33			1,100	J +	930	J +	750	+			61	J	230		4.9	J
Aroclor-1262	33												UJ				UJ
Aroclor-1268	33												UJ				UJ

Notes:

All CRQLs and results are in micrograms per kilogram (µg/kg)

CRQL = Contract Required Quantitation Limit

Sample quantitation limit = (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]

Empty cell indicates substance not reported above detection limit

Bold indicates that value significantly exceeds background

Italics indicates maximum background concentrations

Data Qualifiers (Q):

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

J = Analyte present. Reported value may not be accurate or precise.

+ = Result reported from dilution analysis.

TABLE B-3
SOIL ANALYTICAL RESULTS - METALS AND TOTAL ORGANIC CARBON
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:		MC45A9	MC45B0	MC4598	MC45B1	MC4599	MC45B5	MC45B2	MC45B9								
Sampling Location:		MC-SS-01	MC-SS-02	MC-SB-02	MC-SS-03	MC-SB-03	MC-SS-04	MC-SB-04	MC-SS-05								
Date Sampled:		6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010	6/8/2010	6/8/2010								
%Solids:		96.1	93.9	92.7	94.9	93.6	92.4	92.8	93.8								
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
Analyte	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	20	6,640		6,100		6,340		5,590		6,130		5,780		6,610		7,980	
Antimony	6	4.1	J	2.6	J	5.7	L	0.87	J	0.93	J	13.3		13.2		0.43	J
Arsenic	1	3.7		5.1		3		6.9		7.2		18.3	J	22.5	J	8.6	
Barium	20	339		210		366		140		144		118		134		118	
Beryllium	0.5	1.5		1		1.5		0.36	J	0.65		0.52	J	0.73		0.49	
Cadmium	0.5	13.9		7.3		18.2		3.4		3.1		2.6		3.3		0.82	
Calcium	500	10,900		9,460		17,000		9,390		16,000		2,530		5,930		4,610	
Chromium	1	143		184		184		64.4		53.5		36.8		35.6		24.6	
Cobalt	5	15.3		11.3		17.3		7		7.2		25.2		45		7.3	
Copper	2.5	167	J	114	J	158	J	52.8	J	56.1	J	317		494		33.3	J
Iron	10	26,800	J	25,600	J	23,800	J	20,600	J	19,700	J	83,800	J	68,600	J	14,000	J
Lead	1	665		445		851		191		183		522	J	592	J	158	
Magnesium	500	5,290	J	5,260	J	8,320	J	4,720	J	8,250	J	1,320		3,310		3,200	J
Manganese	1.5	377	K	481	K	312	K	294	K	273	K	616		1,320		401	K
Mercury	0.1	2.6		1.6		3.1		0.9		0.89		0.35		0.22		<i>0.75</i>	
Nickel	4	33.5		28		29.9		19.3		19.6		29.4		39.3		17.5	
Potassium	500	1,810		1,360		1,680		1,130		990		967		928		1,250	
Selenium	3.5	3.9		3.4		3.5		3.3		2.6	J	11.3	L	9.3	L	2.2	J
Silver	1	1.6		1.1		2		0.57	J	0.43	J	1.8		1.9		0.3	J
Sodium	500	238	B	193	B	274	B	185	B	189	B	143	J	136	J	103	B
Thallium	2.5		UL		UL		UL		UL		UL	0.52	B	0.43	B		UL
Vanadium	5	26.7		35.8		24.7		28.2		28.4		31		26.9		33.4	
Zinc	6	1,220	J	803	J	1,160	J	626	J	543	J	465		564		153	J
Total Organic Carbon	N/A	42,900		63,200		52,600		47,800		26,000		89,900		184,000		35,300	

Notes:

All CRQLs and results are in milligrams per kilogram (mg/kg)
 CRQL = Contract Required Quantitation Limit
 Sample quantitation limit = (CRQL * Dilution Factor) / (%Solids/ 100)
 Empty cell indicates substance not reported above detection limit
Bold indicates that value significantly exceeds background
Italics indicates maximum background concentrations

Data qualifiers (Q):

J = Analyte present. Reported value may not be accurate or precise.
 L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.
 K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.
 B = Not detected substantially above the level reported in laboratory or field blanks.
 UL = Not detected, quantitation limit is probably higher.

TABLE B-4, page 1 of 4
SOIL ANALYTICAL RESULTS - SVOCs
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:	C45C5	C45B3	C45B4	C45A0	C45A1	C45A2	C45A3	C45A6										
Sampling Location:	MC-SD-01	MC-SD-02	MC-SD-03	MC-SD-05	MC-SD-06	MC-SD-07	MC-SD-10	MC-SD-13										
Date Sampled:	6/10/2010	6/8/2010	6/8/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010										
%Moisture:	28	35	26	19	33	21	39	39										
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	0.99	0.99										
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
Benzaldehyde	170																	
Phenol	170			300		210	J											
Bis(2-chloroethyl)ether	170																	
2-Chlorophenol	170																	
2-Methylphenol	170																	
2,2'-Oxybis(1-chloropropane)	170																	
Acetophenone	170																	
4-Methylphenol	170																	
N-Nitroso-di-n-propylamine	170																	
Hexachloroethane	170																	
Nitrobenzene	170																	
Isophorone	170																	
2-Nitrophenol	170																	
2,4-Dimethylphenol	170																	
Bis(2-chloroethoxy)methane	170																	
2,4-Dichlorophenol	170																	
Naphthalene	170			120	J					100	J							
4-Chloroaniline	170																	
Hexachlorobutadiene	170																	
Caprolactam	170																	
4-Chloro-3-methylphenol	170																	
2-Methylnaphthalene	170							110	J	160	J			150	J			
Hexachlorocyclopentadiene	170																	
2,4,6-Trichlorophenol	170																	
2,4,5-Trichlorophenol	170																	
1,1'-Biphenyl	170																	
2-Chloronaphthalene	170																	
2-Nitroaniline	330																	
Dimethylphthalate	170																	
2,6-Dinitrotoluene	170																	
Acenaphthylene	170	120	J			140	J					91	J					
3-Nitroaniline	330																	
Acenaphthene	170																	
2,4-Dinitrophenol	330																	
4-Nitrophenol	330																	
Dibenzofuran	170																	
2,4-Dinitrotoluene	170																	

TABLE B-4, page 2 of 4
SOIL ANALYTICAL RESULTS - SVOCs
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:	C45C5	C45B3	C45B4	C45A0	C45A1	C45A2	C45A3	C45A6										
Sampling Location:	MC-SD-01	MC-SD-02	MC-SD-03	MC-SD-05	MC-SD-06	MC-SD-07	MC-SD-10	MC-SD-13										
Date Sampled:	6/10/2010	6/8/2010	6/8/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010										
%Moisture:	28	35	26	19	33	21	39	39										
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	0.99	0.99										
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
Diethylphthalate	170																	
Fluorene	170																	
4-Chlorophenyl-phenylether	170																	
4-Nitroaniline	330							R										
4,6-Dinitro-2-methylphenol	330																	
N-Nitrosodiphenylamine	170																	
1,2,4,5-Tetrachlorobenzene	170																	
4-Bromophenyl-phenylether	170																	
Hexachlorobenzene	170																	
Atrazine	170																	
Pentachlorophenol	330																	
Phenanthrene	170	360		640	J	650		250		300		580		360		190	J	
Anthracene	170			170	J	200	J			100	J	140	J					
Carbazole	170			110	J	130	J											
Di-n-butylphthalate	170	93	J			110	J											
Fluoranthene	170	1,200		1,200	J	2,100		430		460		1,100		180	J	390		
Pyrene	170	770		1,000		1,200		360		410		800		210	J	320		
Butylbenzylphthalate	170					120	J											
3,3'-Dichlorobenzidine	170											88	J					
Benzo(a)anthracene	170	490		640	J	820		140	J	270		450		130	J	210	J	
Chrysene	170	520	J	720	J	930	J	140	J	300		480		160	J	220	J	
Bis(2-ethylhexyl)phthalate	170	690		580		410						300		350		220	J	
Di-n-octylphthalate	170																	
Benzo(b)fluoranthene	170	420		610	J	790				280		410		130	J	150	J	
Benzo(k)fluoranthene	170	510	J	570	J	640	J			210	J	370				170	J	
Benzo(a)pyrene	170	500	J	740	J	850	J	91	J	380		290		150	J	210	J	
Indeno(1,2,3-cd)pyrene	170	350		510	J	560						300				120	J	
Dibenzo(a,h)anthracene	170	130	J	290	J	280												
Benzo(g,h,i)perylene	170	360		810		730				460		300		120	J	150	J	
2,3,4,6-Tetrachlorophenol	170																	
TOTAL PAHs		6,063		9,046		10,897		1,521		3,430		5,699		1,940		2,350		

Notes:

All CRQLs and results are in micrograms per kilogram (µg/kg)
 CRQL = Contract Required Quantitation Limit
 Sample quantitation limit = (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]
 PAHs = Polycyclic aromatic hydrocarbons
 Empty cell indicates substance not reported above detection limit

Data Qualifiers (Q):

UJ = Not detected, quantitation limit may be inaccurate or imprecise.
 J = Analyte present. Reported value may not be accurate or precise.
 R = Unusable result. Analyte may not be present in the sample.
 Supporting data necessary to confirm result.

TABLE B-4, page 3 of 4
SOIL ANALYTICAL RESULTS - SVOCs
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:	C45A4	C45A5	C45A7	C45A8	C45B6	C45B7	C45B8						
Sampling Location:	MC-SD-11	MC-SD-12	MC-SD-15	MC-SD-16	MC-SD-17	MC-SD-18	MC-SD-19						
Date Sampled:	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010	6/8/2010	6/8/2010						
%Moisture:	44	35	43	51	43	48	40						
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	0.99	1.0						
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Benzaldehyde	170						UJ						
Phenol	170						UJ						
Bis(2-chloroethyl)ether	170						UJ						
2-Chlorophenol	170						UJ						
2-Methylphenol	170						UJ						
2,2'-Oxybis(1-chloropropane)	170						UJ						
Acetophenone	170						UJ						
4-Methylphenol	170						UJ						
N-Nitroso-di-n-propylamine	170						UJ						
Hexachloroethane	170						UJ						
Nitrobenzene	170												
Isophorone	170												
2-Nitrophenol	170												
2,4-Dimethylphenol	170												
Bis(2-chloroethoxy)methane	170												
2,4-Dichlorophenol	170												
Naphthalene	170												
4-Chloroaniline	170												
Hexachlorobutadiene	170												
Caprolactam	170												
4-Chloro-3-methylphenol	170												
2-Methylnaphthalene	170												
Hexachlorocyclopentadiene	170												
2,4,6-Trichlorophenol	170												
2,4,5-Trichlorophenol	170												
1,1'-Biphenyl	170												
2-Chloronaphthalene	170												
2-Nitroaniline	330												
Dimethylphthalate	170												
2,6-Dinitrotoluene	170												
Acenaphthylene	170												
3-Nitroaniline	330												
Acenaphthene	170												
2,4-Dinitrophenol	330												
4-Nitrophenol	330												
Dibenzofuran	170												
2,4-Dinitrotoluene	170												

TABLE B-4, page 4 of 4
SOIL ANALYTICAL RESULTS - SVOCs
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:	C45A4	C45A5	C45A7	C45A8	C45B6	C45B7	C45B8								
Sampling Location:	MC-SD-11	MC-SD-12	MC-SD-15	MC-SD-16	MC-SD-17	MC-SD-18	MC-SD-19								
Date Sampled:	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010	6/8/2010	6/8/2010								
%Moisture:	44	35	43	51	43	48	40								
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	0.99	1.0								
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Diethylphthalate	170														
Fluorene	170														
4-Chlorophenyl-phenylether	170														
4-Nitroaniline	330														
4,6-Dinitro-2-methylphenol	330														
N-Nitrosodiphenylamine	170														
1,2,4,5-Tetrachlorobenzene	170														
4-Bromophenyl-phenylether	170														
Hexachlorobenzene	170														
Atrazine	170														
Pentachlorophenol	330														
Phenanthrene	170	550				210	J								
Anthracene	170														
Carbazole	170														
Di-n-butylphthalate	170					120	J								
Fluoranthene	170	560				270	J								
Pyrene	170	430				240	J								
Butylbenzylphthalate	170														
3,3'-Dichlorobenzidine	170														
Benzo(a)anthracene	170	320				160	J								
Chrysene	170	370				180	J								
Bis(2-ethylhexyl)phthalate	170	370		2,300		180	J	150	J						
Di-n-octylphthalate	170														
Benzo(b)fluoranthene	170	250	J			120	J								
Benzo(k)fluoranthene	170	280	J			150	J								
Benzo(a)pyrene	170	320		110	J	170	J								
Indeno(1,2,3-cd)pyrene	170	190	J												
Dibenzo(a,h)anthracene	170	130	J												
Benzo(g,h,i)perylene	170	230	J			160	J								
2,3,4,6-Tetrachlorophenol	170														
TOTAL PAHs		4,000		2,410		2,004		202		44		49		41	

Notes:

All CRQLs and results are in micrograms per kilogram (µg/kg)
 CRQL = Contract Required Quantitation Limit
 Sample quantitation limit = (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]
 PAHs = Polycyclic aromatic hydrocarbons
 Empty cell indicates substance not reported above detection limit

Data Qualifiers (Q):

UJ = Not detected, quantitation limit may be inaccurate or imprecise.
 J = Analyte present. Reported value may not be accurate or precise.
 R = Unusable result. Analyte may not be present in the sample.
 Supporting data necessary to confirm result.

TABLE B-5
SEDIMENT ANALYTICAL RESULTS - AROCLORS
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:		C45C5		C45B3		C45B4		C45A0		C45A1		C45A2		C45A3		C45A6	
Sampling Location:		MC-SD-01		MC-SD-02		MC-SD-03		MC-SD-05		MC-SD-06		MC-SD-07		MC-SD-10		MC-SD-13	
Date Sampled:		6/10/2010		6/8/2010		6/8/2010		6/7/2010		6/7/2010		6/7/2010		6/7/2010		6/7/2010	
%Moisture:		28		35		26		19		33		21		39		39	
Dilution Factor:		1.0		1.0		0.99		0.99		0.99		1.0		1.0		1.0	
Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aroclor-1016	33																
Aroclor-1221	33																
Aroclor-1232	33																
Aroclor-1242	33																
Aroclor-1248	33																
Aroclor-1254	33																
Aroclor-1260	33													64	J	27	J
Aroclor-1262	33																
Aroclor-1268	33																

Sample Number:		C45A4		C45A5		C45A7		C45A8		C45B6		C45B7		C45B8	
Sampling Location:		MC-SD-11		MC-SD-12		MC-SD-15		MC-SD-16		MC-SD-17		MC-SD-18		MC-SD-19	
Date Sampled:		6/7/2010		6/7/2010		6/7/2010		6/7/2010		6/8/2010		6/8/2010		6/8/2010	
%Moisture:		44		35		43		51		43		48		40	
Dilution Factor:		1.0		1.0		0.99		1.0		1.0		1.0		0.99	
Compound	CRQL	Result	Q												
Aroclor-1016	33														
Aroclor-1221	33														
Aroclor-1232	33														
Aroclor-1242	33														
Aroclor-1248	33														
Aroclor-1254	33														
Aroclor-1260	33	140	J	27	J			37	J						
Aroclor-1262	33														
Aroclor-1268	33														

Notes:
All CRQLs and results are in micrograms per kilogram (µg/kg)
CRQL = Contract Required Quantitation Limit
Sample quantitation limit = (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]
Empty cell indicates substance not reported above detection limit
Italics indicates maximum background concentrations

Data Qualifiers (Q):
J = Analyte present. Reported value may not be accurate or precise.

TABLE B-6, page 1 of 2
SEDIMENT ANALYTICAL RESULTS - METALS AND TOTAL ORGANIC CARBON
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:		MC45C5	MC45B3	MC45B4	MC45A0	MC45A1	MC45A2	MC45A3	MC45A6								
Sampling Location:		MC-SD-01	MC-SD-02	MC-SD-03	MC-SD-05	MC-SD-06	MC-SD-07	MC-SD-10	MC-SD-13								
Date Sampled:		6/10/2010	6/8/2010	6/8/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010								
%Solids:		76.7	70.0	70.0	76.7	73.5	79.3	58.3	53.5								
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
Analyte	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	20	6,430		6,600		6,390		7,480		5,140		4,030		8,860		11,900	
Antimony	6	0.42	J	0.96	J	0.89	J	0.57	J		UL	0.29	J	0.55	J		UL
Arsenic	1	4.2	J	2.7	J	5.9	J	9.2		2.7		3		7.6		10.1	
Barium	20	99.7		101		173		3750		66.7		412		147		94.1	
Beryllium	0.5	0.68		0.57	J	0.37	J	2.1		0.53	J	0.6		0.6		0.84	
Cadmium	0.5	0.95		0.97		<i>1.1</i>		2.7		0.2	J	0.67		1.5		0.55	J
Calcium	500	9,770		4,030		5,830		21,100		863		9,940		3,180		2,520	
Chromium	1	36.1		34.1		66.9		239		17.5		50.2		37.8		67.8	
Cobalt	5	5.7		8.8		6	J	7.8		7.6		3.9	J	8.6		10.4	
Copper	2.5	54		58		66.4		1080	J	9.3	J	41.9	J	126	J	31.2	J
Iron	10	18,200	J	16,600	J	17,700	J	20,100	J	8,630	J	13,900	J	17,300	J	18,300	J
Lead	1	89.3	J	99.1	J	82.4	J	283		18.3		56.6		106		54.7	
Magnesium	500	6,540		4,290		5,340		4,800	J	1,540	J	5,440	J	2,780	J	3,580	J
Manganese	1.5	194		292		210		653	K	76	K	260	K	461	K	295	K
Mercury	0.1			<i>0.1</i>	J	0.054	J	0.81		0.082	J	0.16		2.0		0.49	
Nickel	4	39.3		36.7		33.8		54.7		30.8		16.2		31		22.9	
Potassium	500	1,800		1,770		1,490		962		584		729		724		880	
Selenium	3.5	3.1	J	2.9	J	4.4	J	3.4		1.5	J	2.2	J	2.6	J	3.1	J
Silver	1	0.31	J	0.45	J	0.27	J	0.68	J	0.12	J	0.22	J	1.5		0.25	J
Sodium	500	229	J	158	J	214	J	500	B	219	B	171	B	244	B	321	B
Thallium	2.5								UL		UL		UL		UL		UL
Vanadium	5	26.5		28.4		30		62.5		17.8		19.7		42.5		31.3	
Zinc	6	287		277		263		546	J	33.3	J	143	J	255	J	97.7	J
Total Organic Carbon	N/A	54,200		56,400		68,700		74,600		11,600		38,300		9,200		13,000	

Notes:

All CRQLs and results are in milligrams per kilogram (mg/kg)

CRQL = Contract Required Quantitation Limit

Sample quantitation limit = (CRQL * Dilution Factor) / (%Solids/ 100)

Empty cell indicates substance not reported above detection limit

Bold indicates that value significantly exceeds background

Italics indicates maximum background concentrations

Data qualifiers (Q):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

B = Not detected substantially above the level reported in laboratory or field blanks.

UL = Not detected, quantitation limit is probably higher.

TABLE B-6, page 2 of 2
SEDIMENT ANALYTICAL RESULTS - METALS AND TOTAL ORGANIC CARBON
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

Sample Number:		MC45A4	MC45A5	MC45A7	MC45A8	MC45B6	MC45B7	MC45B8							
Sampling Location:		MC-SD-11	MC-SD-12	MC-SD-15	MC-SD-16	MC-SD-17	MC-SD-18	MC-SD-19							
Date Sampled:		6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010	6/8/2010	6/8/2010							
%Solids:		49.0	64.2	72.0	48.3	56.5	51.7	60.5							
Dilution Factor:		1.0	1.0	1.0	1.0	1.0	1.0	1.0							
Analyte	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
Aluminum	20	11,000		12,100		5,500		6,940		10,800		14,600		12,800	
Antimony	6	1.3	J	0.33	J	0.64	J	0.33	J		UL		UL		UL
Arsenic	1	13.1		4.6		5.6		6.5		5.4		6.4		5.9	
Barium	20	203		104		66.5		95.4		138		104		103	
Beryllium	0.5	0.87		0.77		0.36	J	0.66	J	0.98		0.82	J	0.81	
Cadmium	0.5	2.1		0.81		<i>0.86</i>		0.061	J	0.54	J	0.62	J	0.49	J
Calcium	500	3,220		2,020		1,890		3,010		2,430		2,240		1,840	
Chromium	1	49.1		35.2		17		27.2		31.8		41		36.5	
Cobalt	5	11.8		11.1		5.4	J	8.3	J	8.8		11.3		9.7	
Copper	2.5	137	J	32.2	J	54.1	J	33.3	J	18.2	J	9.1	J	8.8	J
Iron	10	20,600	J	25,900	J	9,900	J	16,500	J	17,100	J	24,000	J	18,000	J
Lead	1	153		32.8		49.6		39.8		20.4		11.4		10.6	
Magnesium	500	3,480	J	4,260	J	2,050	J	3,040	J	3,640	J	5,750	J	4,270	J
Manganese	1.5	604	K	390	K	278	K	732	K	331	K	359	K	223	K
Mercury	0.1	1.2				<i>0.21</i>		0.21	J						
Nickel	4	38.2		23.3		11.1		16.4		20.5		24.8		22.6	
Potassium	500	1,080		803		391	J	918	J	1,040		1,480		1,120	
Selenium	3.5	4.3	J	3.5	J	1.9	J	2.7	J	3	J	4.1	J	3	J
Silver	1	1.2	J	0.42	J	0.39	J	0.59	J	0.21	J	0.33	J	0.17	J
Sodium	500	290	B	301	B	221	B	299	B	292	B	386	B	325	B
Thallium	2.5		UL		UL		UL		UL		UL		UL		UL
Vanadium	5	56.1		35.4		12.2		20.5		28.7		37.1		33.8	
Zinc	6	355	J	112	J	187	J	179	J	108	J	66.2	J	55.8	J
Total Organic Carbon	N/A	20,400		9,910		18,100		18,500		26,800		39,600		14,700	

Notes:

All CRQLs and results are in milligrams per kilogram (mg/kg)

CRQL = Contract Required Quantitation Limit

Sample quantitation limit = (CRQL * Dilution Factor) / (%Solids/ 100)

Empty cell indicates substance not reported above detection limit

Bold indicates that value significantly exceeds background

Italics indicates maximum background concentrations

Data qualifiers (Q):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

B = Not detected substantially above the level reported in laboratory or field blanks.

UL = Not detected, quantitation limit is probably higher.

TABLE B-7, page 1 of 2
ANALYTICAL RESULTS - FIELD AND RINSATE BLANKS
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

SEMIVOLATILE ORGANIC COMPOUNDS

Sample Number: C45C3		C45C3		C45C4	
Sampling Location: MC-FB-01		MC-FB-01		MC-RB-01	
Matrix: Aqueous		Aqueous		Aqueous	
Date Sampled: 6/8/2010		6/8/2010		6/8/2010	
Dilution Factor: 1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Q	Result	Q
Benzaldehyde	5.0				
Phenol	5.0				
Bis(2-chloroethyl)ether	5.0				
2-Chlorophenol	5.0				
2-Methylphenol	5.0				
2,2'-Oxybis(1-chloropropane)	5.0				
Acetophenone	5.0				
4-Methylphenol	5.0				
N-Nitroso-di-n-propylamine	5.0				
Hexachloroethane	5.0				
Nitrobenzene	5.0				
Isophorone	5.0				
2-Nitrophenol	5.0				
2,4-Dimethylphenol	5.0				
Bis(2-chloroethoxy)methane	5.0				
2,4-Dichlorophenol	5.0				
Naphthalene	5.0				
4-Chloroaniline	5.0				
Hexachlorobutadiene	5.0				
Caprolactam	5.0				
4-Chloro-3-methylphenol	5.0				
2-Methylnaphthalene	5.0				
Hexachlorocyclopentadiene	5.0				
2,4,6-Trichlorophenol	5.0				
2,4,5-Trichlorophenol	5.0				
1,1'-Biphenyl	5.0				
2-Chloronaphthalene	5.0				
2-Nitroaniline	10				
Dimethylphthalate	5.0				
2,6-Dinitrotoluene	5.0				
Acenaphthylene	5.0				
3-Nitroaniline	10				
Acenaphthene	5.0				
2,4-Dinitrophenol	10				
4-Nitrophenol	10				
Dibenzofuran	5.0				
2,4-Dinitrotoluene	5.0				

Sample Number: C45C3		C45C3		C45C4	
Sampling Location: MC-FB-01		MC-FB-01		MC-RB-01	
Matrix: Aqueous		Aqueous		Aqueous	
Date Sampled: 6/8/2010		6/8/2010		6/8/2010	
Dilution Factor: 1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Q	Result	Q
Diethylphthalate	5.0				
Fluorene	5.0				
4-Chlorophenyl-phenylether	5.0				
4-Nitroaniline	10				
4,6-Dinitro-2-methylphenol	10				
N-Nitrosodiphenylamine	5.0				
1,2,4,5-Tetrachlorobenzene	5.0				
4-Bromophenyl-phenylether	5.0				
Hexachlorobenzene	5.0				
Atrazine	5.0				
Pentachlorophenol	10				
Phenanthrene	5.0				
Anthracene	5.0				
Carbazole	5.0				
Di-n-butylphthalate	5.0				
Fluoranthene	5.0				
Pyrene	5.0				
Butylbenzylphthalate	5.0				
3,3'-Dichlorobenzidine	5.0				
Benzo(a)anthracene	5.0				
Chrysene	5.0				
Bis(2-ethylhexyl)phthalate	5.0				
Di-n-octylphthalate	5.0				
Benzo(b)fluoranthene	5.0				
Benzo(k)fluoranthene	5.0				
Benzo(a)pyrene	5.0				
Indeno(1,2,3-cd)pyrene	5.0				
Dibenzo(a,h)anthracene	5.0				
Benzo(g,h,i)perylene	5.0				
2,3,4,6-Tetrachlorophenol	5.0				

TABLE B-7, page 1 of 2
ANALYTICAL RESULTS - FIELD AND RINSATE BLANKS
METRO CONTAINER SITE, TRAINER, PA
JUNE 7-10, 2010

AROCLORS

Sample Number:	C45C3	C45C4			
Sampling Location:	MC-FB-01	MC-RB-01			
Matrix:	Aqueous	Aqueous			
Date Sampled:	6/8/2010	6/8/2010			
Dilution Factor:	1.0	1.0			
Compound	CRQL	Result	Q	Result	Q
Aroclor-1016	1.0				
Aroclor-1221	1.0				
Aroclor-1232	1.0				
Aroclor-1242	1.0				
Aroclor-1248	1.0				
Aroclor-1254	1.0				
Aroclor-1260	1.0				
Aroclor-1262	1.0				
Aroclor-1268	1.0				

INORGANICS

Sample Number:	C45C3	C45C4			
Sampling Location:	MC-FB-01	MC-RB-01			
Matrix:	Aqueous	Aqueous			
Date Sampled:	6/8/2010	6/8/2010			
Dilution Factor:	1.0	1.0			
Analyte	CRQL	Result	Q	Result	Q
Aluminum	200	6.6	J		
Antimony	60				
Arsenic	10				
Barium	200				
Beryllium	5				
Cadmium	5				
Calcium	5000				
Chromium	10				
Cobalt	50				
Copper	25				
Iron	100	22.3	J		UL
Lead	10				
Magnesium	5000				
Manganese	15				
Mercury	0.2				
Nickel	40	0.46	J		
Potassium	5000				
Selenium	35				
Silver	10		UL		UL
Sodium	5000				
Thallium	25				
Vanadium	50		UL		UL
Zinc	60	3.4	J		

Notes:

All CRQLs and results are in micrograms per liter (µg/L)
 CRQL = Contract Required Quantitation Limit
 Sample quantitation limit = (CRQL * Dilution Factor)
 Empty cell indicates substance not reported above detection limit

Data qualifiers (Q):

J = Analyte present. Reported value may not be accurate or precise.
 UL = Not detected, quantitation limit is probably higher.

APPENDIX C
FIELD LOGBOOK NOTES

2503910

Metro
Container



"Rite in the Rain"

ALL-WEATHER

JOURNAL

No. 391

Log book 1 of 2

INCH

"Rite in the Rain"
ALL-WEATHER WRITING PAPER



Name

Address

Phone

Project

7 Creek Pkwy
700 - Suite Boothwyn

PA 19061

Metro
Container

Clear Vinyl Protective Slipcovers (Item No. 30) are available for this style of notebook. Helps protect your notebook from wear & tear. Contact your dealer or the J. L. Darling Corporation.

6/7/2010

Metro

CONTENTS
Garavelas

Container

PAGE

REFERENCE

DATE

Site Contact Metro
Cell

Tetra Ted:

All notes taken in this
logbook taken by

Nick office

ex 4

All samples on chain of
custody begin with
"MC"

6/7/2010

6/7/2010 Metro June 7, 2010

Dustin Armstrong
En. Protection Specialist
PADEP
Haz Clean up SE office
lto 484-250 5723

Sara Pantclidou PADEP
PG Geologist
Special Projects
484-250-5778

(has historic knowledge of site)
Charles Creamer
EPA
215 814 2145

PADEP Contacts:

Alan Everett 484 280515/
Biologist
Kevin Hess
717 -783-9491

Weather 75° Sunny
Samples on COCs begin with MC
for Metro Containe

[redacted] 6/7/2010

6/7/2010 Metro June 7, 2010

SD-07 organic
black strong
petroleum smell/
organic material
rocks black silt/sand
and silt as
sample collected by
[redacted]

At 1140

0-6" bgs
sample 20 feet upstream
of Conoco Phillips
cooling water discharge
IN Stony Creek
sample very warm
sediment, UNUSUALLY
warm sediment

sample collected for
Metro Bank of

Stoney Creek, east bank

1/2 foot into water

[redacted] 6/7/2010

4 6/7/2010 Metro June 7 2010

Photo SD-07 Looking down
at aluminum mixing
pan of SD07 photo 28
also taken of 2 Bottles
SD-07, two photo of
Bottles (photos 29+30)
photo of Conoco Phillips
discharge to Stony
Creek (photo 31)

Photo #32
looking down at
pan with SD06 and
white plastic scoop
taken from the bank
submerged sediment
of Stony Creek by
[redacted] at 1205
silty gray sediment
taken 1 foot ~~upstream~~
downstream from drainage
~~ditch~~ ditch from
Metro contained, 0-6" hgs
photo of SD06 in
jar (photo 33)
photo of drainage
[redacted] 6/7/2010

5 6/7/2010 Metro June 7, 2010

ditch (photo 34)
organic small
Bank composed of waste
material rubble construction
waste banks of Stony
Creek formed from waste

[redacted] GPS
each coordinate in

poisoning along banks very
heavy growth of poisoning

Samples collected using Avg

two photos taken looking
upstream from SD-06
(photos 35+36)

photo 37 of drum in stream,
Stony Creek

photo 38 waste in Stony Creek
photo waste in bank Stony
Creek

[redacted] 6/7/2010

6/7/2010

Metro

photo 39 drainage ditch
from metro near SP-06
discharge pipe at bottom
of ditch

photo 40 of SD5 black
at ~~gradient~~ silty + clay + gravel

photo 41 waste in bank near
SD-05 SD5 very strong
petroleum smell sample
collected by [redacted]
at 1235 taken @ 0-6" hrs

photo 42 looking down @
SD 05

photo 43 looking down
@ SD05

photo 44 looking down
@ SD05

photo 45 looking
down at SD05

photo 46 looking
down at SD05

photo 47 looking
up stream from SD 05

[redacted] 6/7/2010

June 7 2010 Metro

SD 06 Coordinates appear
not to have recorded
correctly

SS01 tanker between MW6
and MW7 at lagoon

SS02 + SBO2 east of
SE01, ~ 15 feet east

Conoco Phillips Representatives:

[redacted]

SD-15 collected by
[redacted] @ 400pm/600

sample collected at
possible backgoint @ 0-6" hrs
tide low sample
collected from mud

flat exposed silty sand
dark gray black small
amount organic matter @
Delaware River

[redacted] 6/7/2010

6/7/2010 Metro

SD16 Sediment sample collected from the Delaware River as possible background sample sample collected 100 yards east of SD15 sample collected at 4:30 pm 6/30 by [redacted] gray silt and sand and organic matter @ 0-6" layer

All sediment sample collected during low tide from exposed mud flats surrounded by wetlands dominated by Fragmites

Photo 48 and 49 Panarama of Metro former process building

Photo 50 looking at sampling location SD 15

[redacted] 6/7/2010

6/7/2010 Metro

Photo 51 looking at wetlands surrounding SD15

Photo 52 looking towards the Delaware River from SD 15, looks like supports for a pier exposed at the surface

Photo 53 looking at SD16 photo 54 looking at SD16

Photo 55 looking out to the Delaware River from SD16

Photo 56 looking at sample location SD16

Sara P. from PADEP has been working at Metro since Metro opened at the location Sara assisted TetraTech with identifying sampling [redacted] 6/7/07

10 6/7/2010 Metro
location of Metro
including location of
former lagoon / drum
storage Area

The former lagoon storage
areas will be covered
with fill material to
construct gravel parking
lot. Therefore soil samples
could not be collected from
these areas because the auger
could not go through the
gravel. Any sampling,
sub surface, would need to
be collected from a backhoe
Conoco Phillips wants to use
the site for a parking lot

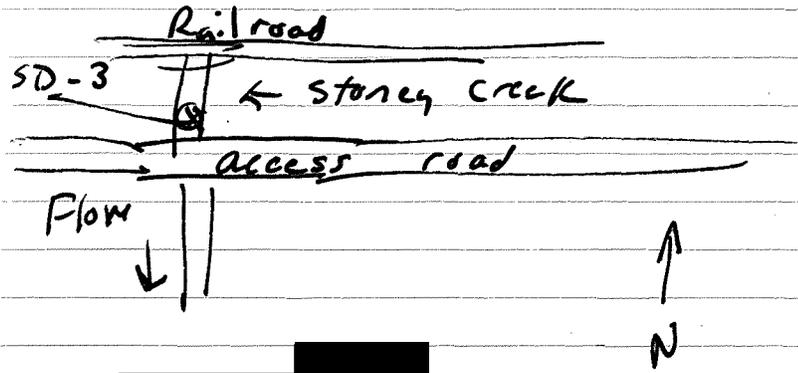
6/7/2010

11 6/8/2010 Metro

1300 START members -
Tetra Tech



On-site at the Stoney Creek
site @ 1300, sign-in and
get access, review Health
and Safety Plan proceed to
Stoney Creek to get SD-03
A background sample for
Metes Contain for
Stoney Creek



6/8/2010

6/8/2010 Metro

Photo 69 of Aerial of Stoney
Creek site

Photo 70 Looking upstream
towards the level road track
towards SD-03

Photo 71 looking down at
SD03 sampling location

SD 03. Collected by [REDACTED]
Sediment - gravel sand and
some organic matter

oil smell, to may collect
to get a better material

@ 1400 photo 73 SD-03 location
SD02 collected by Donna Davis
at 1430 silty sand + gravel
black oil sheen

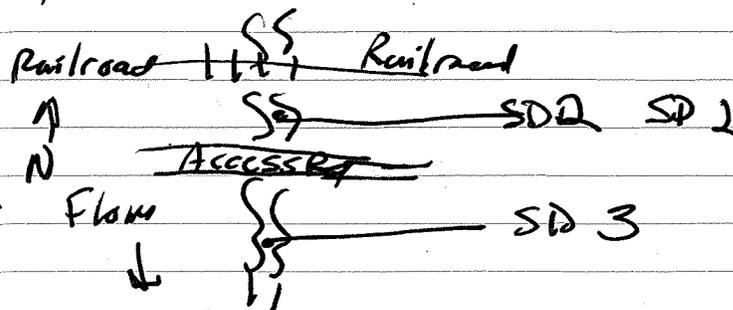
photo 7

3 photos of SD02 location
note collect in the
left and concrete walls
on the right

[REDACTED] 6/8/2010

6/8/2010 Metro

photos 74 to 76 SD-02



Background sample
collect Booth pad
W. 6th Street
Near Railroad,
up gradient side
North of Stoney Creek

site. Tried to find
background sample for
Stoney Creek upstream

[REDACTED] 6/8/2010

6/8/2010 Metro

of Stoney Creek Site
 could not find the
 creek walked along the
 railroad on the N. side
 of the Stoney Creek Site

CS04 collected by [redacted]
 [redacted] @ 1500 N side
 of RR track, gray brown
 organic soil, silty sand, fine
 silty matrix very
 clay area vegetated

SB04 collected AT 1510
 Background soil sample,
 dry brown silty ^{fine} matrix
 with some ^{fine} sand + clay in
 sample collect AT 0-12 inch

Silty fine sand + some clay

[redacted]
 [redacted]
 6/8/2010

6/8/2010

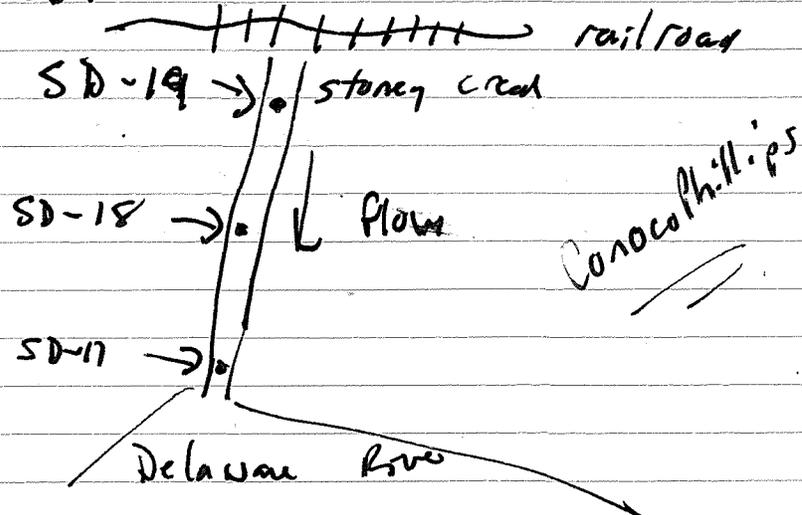
Metro

SD-19 gray clay some organic
 No collect @ 1602 by [redacted]

[redacted] - some organic
 SD-18 @ 1614 gray clay by [redacted]

[redacted] some organic
 SD-17 @ 1624 gray clay by [redacted]

SD-17



SD-17, 18 + 19 from Stoney
 Creek on ConocoPhillips
 property below south of
 railroad

[redacted]
 [redacted]
 6/8/2010

6/8/2010 Metro

Background soil sample
collected at Market
Square Memorial Park

8505 Background soil
collected @ 1724 by
[redacted]

[redacted] soil with silt
adjacent to river

Surface soil (SS) sample
collected after vegetation
removed from the surface

1730 to 1930 Tried to find
background sampling location
for Delaware River and
Stony Creek. Could not
find Stony Creek upstream
of Stony Creek site. Walked
along the ~~past~~ railroad adjacent
to the Stony Creek site. Could
not find Stony Creek.

All Background Delaware River
sampling locations, were
too dangerous to get to

6/8/2010

Metro

Late entry

Photo 26 Green pipe
discharge to Stony
Creek from Metro
east bank

Photo 27 Green pipe
discharge same as
photo 26

photo 48 Metro Container
former process Bldg
photo 49 Metro Bldg

Could not find background for
Stony Creek. Using SD15 +
SD16 for background location
for Delaware River. Other
possible background locations
were covered with rocks
for erosion control or
too dangerous to access

[redacted] 6/8/2010

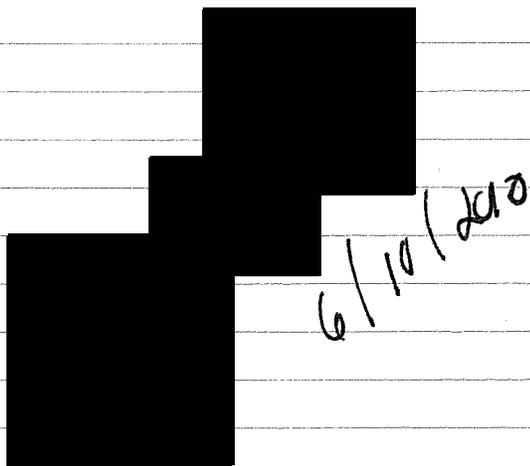
6/10/2010

Metro

After rain found the
Northern end of Stoney
Creek, north of railroad
+ Stoney Creek Site

Will collect a background
sample from this location.

- All
Surface runoff from Metro flows to
Stoney Creek



end of entries for 6/10/2010

6/11/2010

Metro

Late Entry - site observations

None of the former source
areas such as lagoons
are visible. The entire
site has been graded and
covered with gravel to level
the property. A bermed area
exists where the former lagoon
was located. The MWH reports
for the site are still
accurate. The site has not
changed significantly.

No sewers observed on site
Monitoring wells still onsite
The area around the site
is densely developed
with junk yard to the North
and Conoco Phillips to the
south. Residential properties
are mixed in. The site is
active but contact with
sources is not possible
as sources are covered.

6/11/2010

Metro Container
6/7/10 - 6/10/10



"Rite in the Rain"
ALL-WEATHER
JOURNAL
No. 391

Metro Container
Trainer, PA

Monday - 6-7-10
Weather = Clear, 70°F
Sunny

onsite to conduct soil sampling - surface
and subsurface - at former lagoon
source areas.

1120 begins collecting surface soil (SS)
sample 01 (SS-01) from former
lagoon area. Sample SS-01 consists
of dry, fine-grained silty sand brown to
dark brown in color. PID = 0.0. Sample depth = 6".
[SS-01 collected @ 1120] SS-01 collected
from area west-southwest of MW-6.

1130 begins augering activities for
collection of SB-01. Encountered
refusal @ ~ 1 ft. bgs. Offset boring
location 1 ft. to right + attempted
auger activities; refusal encountered
again (rock + brick) @ 1 ft. bgs; offset
boring location 1 ft. to left + attempted
auger activities; refusal encountered
once more @ 1 ft. bgs. Terminated
auger activities @ SB-01.

Metro Container (Cont'd) Monday - 6-7-10

1155 move to location of
sample SS-02 + SB-02.

begins augering to collect sample
SS-02. Surface soil collected in
aluminum pan + homogenized prior
to placing in glassware. +
Sample location is located south of MW-6.

1202 Collection of SS-02 @ 1202; Depth = 6";
Soil consists of fine, silty sand with
brick, rock and wood debris. PID = 0.0.
Sample collected by BW.

1205 continues hand augering for
collection of sample SB-02.

1211 placed soil for subsurface sample
from bucket of auger into aluminum
pan. Soil is homogenized + then
placed into glassware. Sample SB-02
collected @ 1211; Sample consists of
brown, dry, fine silty sand with
brick, glass, wood + rock. PID = 0.0.
collected sample SB-02.
Sample depth = 12".

1221 photograph samples + sample
locations for SS-01, SS-02 + SB-02.

Metro Containers (Cont'd) Monday-6-7-10
 1235 [redacted] move to sample location #3 for surface soil sample SS-03 and subsurface soil sample SB-03. Sample location within former lagoon area, fill encountered 0 - 1 foot below surface. Soil is dry, fine silty sand with rocks.

1240 [redacted] hand augers for soil sample SS-03. Surface soil placed into aluminum pan and homogenized prior to collecting sample into glass jars. [redacted] collects [SS-03] at 1240. PID = 0.0 ppm; ^{Sample} depth = 6".

1245 [redacted] continues to hand auger for soil sample SB-03. Refusal at 12" below ground surface. Sample Depth = 12".

1248 [redacted] collects [SB-03]. Soil that made up sample SB-03 was contained within an aluminum pan + homogenized prior to the soil being placed in sample jars. Sample consisted of brown, fine, dry, silty sand with wood, rock + brick fragments.

1300 [redacted] decon. equipment + load van.

Metro Containers (Cont'd) Monday-6-7-10
 1315 [redacted] offsite for lunch.

1400 [redacted] meet [redacted] @ Conoco Phillips facility to check-in, watch safety video + briefing.

1500 [redacted] arrive at mudflat location on Conoco Phillips property + discuss scope of work and sampling plans. START begins to gather PPE + sampling equipment needed for sampling of mudflats.

1545 [redacted] begin to walk onto mudflats to sampling locations.

1553 [redacted] begins hand augering activities at sample location SD-12. Augered to approx. 6" bgs; contained augered sediment in aluminum pan. Sediment homogenized in pan prior to placement in bottles.

1600 [redacted] collects sample [SD-12] @ 1600. Sediment sample consisted of dark brown, moist/wet sand with organic material and petroleum odor. [redacted] decons auger.

1603 [redacted] move to next sample point SD-11. [redacted] begins hand augering activities at SD-11 location.

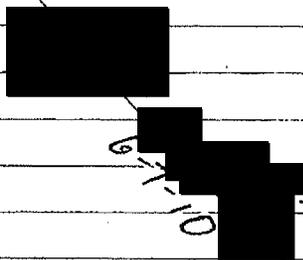
Metro Containers (Cont'd) Monday-6-7-10

- 11608 Sample [SD-11] collected by [redacted] @
11608 Sediment sample consisted of dark brown to brown, wet sand with organic material. Petroleum odor was noted. [redacted] begins auger down.
- 11612 [redacted] move to next sample point SD-10. [redacted] begins hand augering activities at location SD-10.
- 11616 Sample [SD-10] collected by [redacted] @ 11616. Sediment sample consisted of dark brown to brown, wet sand with organic material. Petroleum odor was noted. [redacted] begins down.
- 11619 [redacted] of hand auger [redacted] [redacted] [redacted]
- 11619 ^{concluded} BW continued augering at location SD-10; duplicate sample [SD-13] collected from location SD-10 @ 11619 from approximately 6" bgs. Sediment sample consisted of dark brown to brown, wet sand with organic material. Petroleum odor was noted. [redacted] discons auger.
- 11631 [redacted] photograph hand auger / sediment sample locations.
- 11644 [redacted] walk back from mudflats and begin to organize samples + dis/pack equip.

Metro Containers (Cont'd) Monday-6-7-10

Sediment Sample	Sample Depth (bgs)
SD-10	8"
SD-11	6"
SD-12	6"
SD-13 (dup. of SD-10)	8"

- 11730 START discons, packo equipment and samples in vehicles and detrobs from Conoco Phillips property [redacted]



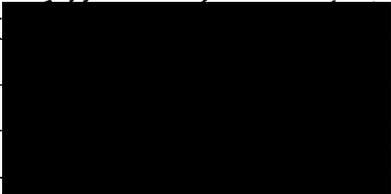
Metro Containers

Tuesday, 6/8/10

Trainer, PA

Weather: Sunny, clear, 70°F

Samples:



START

1315 START arrives @ Stony Creek site in an effort to access Stony Creek for sampling.

1320 START checks in at Stony Creek site, reviews HASP for site and signs HASP.

1335 START travels through Stony Creek site to unimproved road which provides access to the creek.

1346 START collects equipment + PPE to enter creek for sample collection.

1350 [redacted] enters creek to collect a sediment sample.

1401 [redacted] collected sediment sample [SD-03]. Sediment consists of black sandy silt with gravel, collected within Stony Creek, north of the roadway crossover; Depth = 6"

1415 [redacted] moves to second location within Stony Creek to collect sediment sample.

Metro Container

Tuesday 6-8-10

1423 [redacted] collects sediment sample [SD-02]

Sediment consists of black sandy silt with gravel and petroleum odor.

Sample collected further north of roadway crossing. Sample Depth = 6"

1430 SD-03 and SD-02 sample locations GPS'd using Trimble.

1445 [redacted] mobe to collect background soil sample from

North side of Septa/Amtrack railroad.

1500 [redacted] collects surface soil sample [SS-04]. Sample Depth = 6"; Sample consisted of

1510 [redacted] collects subsurface soil sample [SB-04]. Sample Depth = 12"; Sample consisted of

late note: 1330 = [redacted] collects Field Blank: MC-FB-01

1741 [redacted] collects inside blank: MC-RB-01.

Metro Containers Thursday-6/10/10

Weather = Clear, sunny, 76°F

Staff:

[REDACTED]

1430 [REDACTED] arrive at right of way for railroad access via West 6th Street.

[REDACTED] review scope + H.A.S.P.

1439 [REDACTED] begin walk down right-of-way to determine a location for the collection of a background sediment sample.

1503 [REDACTED] identify a sample location - portion of Storey Creek.

1512 [REDACTED] conducts a recon. of sample area; [REDACTED] identifies the presence of trash/debris along the banks of the Creek.

1551 [REDACTED] begins augering in an effort to collect a background sediment sample. Sediment from auger is contained with an aluminum pan and homogenized prior to placement into sample glassware.

Metro Containers (Cont'd) Thursday-6/10/10

1600 [REDACTED] collects sample MC-SB-01 from this portion of Storey Creek.

Sample consisted of wet, black sandy silt. Sample depth = 8".

1614 [REDACTED] remove sample equipment and pack vehicle.

1619 [REDACTED] remove for Boothroy office.

[REDACTED]
6-10-10
[REDACTED]

APPENDIX D
ANALYTICAL DATA REPORTS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350

DATE : July 15, 2010
SUBJECT: Region III Data QA Review
FROM: Colleen Walling *CC Walling*
Region III ESAT RPO (3EA20)
TO: Charlene Creamer
Regional Project Manager (3HS12)

Attached is the organic data validation report for the Metro Container Corp. site (Case #: 40185; SDG#: C4598, C45B5) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

cc:

TO: #0027 TDF: #06108

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

Lockheed Martin IS&GS – Civil
Energy & Environment
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-530
Telephone 410-305-3037 Facsimile 410-305-3597

DATE: July 8, 2010

SUBJECT: Level M3 Organic Data Validation for Case 40185
SDG: C4598 and C45B5
Site: Metro Container Corporation

FROM: [REDACTED]
Organic Data Reviewer
[REDACTED]
Senior Oversight Chemist

TO: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Case 40185, Sample Delivery Groups (SDGs) C4598 and C45B5, consisted of twenty (25) soil samples submitted to KAP Technologies, Inc. (KAP) for semivolatile and aroclor analyses. The sample set included one (1) rinsate blank, one (1) field blank and one (1) field duplicate pair. Samples were analyzed according to Contract Laboratory Program (CLP) Statement of Work (SOW) SOM01.2 through Routine Analytical Services (RAS) program.

SUMMARY

Data were validated according to the Region III Modifications to the National Functional Guidelines for Organic Data Review, Level M3. Areas that may impact data usability are listed below.

MAJOR PROBLEM

- Semivolatile sample C45A9 reported zero percent (0%) recovery of Deuterated Monitoring Compound (DMC) 4,6-dinitro-2-methylphenol-d2 while sample C45A0RE reported less than ten percent (<10%) recovery for 4-nitrophenol-d4 in SDG C4598. Quantitation limits for compounds associated with these DMCs in these samples were rejected and qualified "R" on the DSFs.

MINOR PROBLEMS

- Several compounds failed precision criteria [Percent Relative Standard Deviations (%RSDs) and/or Percent Differences (%Ds)] in the initial and/or continuing calibrations. The associated positive sample results for these compounds were qualified "J" on the DSFs. Nitrobenzene precision exceeded fifty percent (%D > 50%) criteria in the continuing calibration performed on 06/24/2010 at 11:04 in SDG C4598. Since results for this compound in affected samples were reported from reanalyses no data were qualified based on this outlier.
- Semivolatile sample C45A7RE (SDG C4598) had a recovery of DMC anthracene-d10 outside the upper Quality Control (QC) limit. The "K" qualifier for the positive result (phenanthrene) associated with this DMC was superseded by "J" on the DSFs.
- Internal standard (IS) area counts for 1,4-dichlorobenzene-d4 and naphthalene-d8 were outside the lower control limits in sample C45A9 (SDG C4598). This sample was reanalyzed with similar results. The initial analysis results for this sample were reported on the DSFs. Reported results and quantitation limits for compounds associated with these internal standards were qualified "J" and "UJ", respectively, on the DSFs.
- Internal standard (IS) area counts for 1,4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10 and/or perylene-d12 were outside the control limits in semivolatile samples C45A0, C45A2, C45A3, C45A6, C45A7, C45B0 and/or C45B1 (SDG C4598). These samples were reanalyzed with area count of 1,4-dichlorobenzene-d4 outside the lower control limit. The reanalysis results for these samples were reported on the DSFs. Quantitation limits for compounds associated with internal standard 1,4-dichlorobenzene-d4 were qualified "UJ" on the DSFs.
- Positive results for pesticide/PCB compounds with percent differences (%Ds) greater than twenty-five percent (>25%) between the two analytical columns were qualified "J" on the DSFs. The lower of the two columns results are reported.
- Aroclor analyses of sample C45A4 (SDG C4598) reported high recovery of Decachlorobiphenyl (DCB) on both analytical columns. Aroclor-1260 the only positive result reported in this sample was qualified "J" on the DSFs.
- Aroclor analysis of samples C45B5 and C45B9 (SDG C45B5) reported recovery of Tetrachloro-m-xylene (TCX) outside the lower control limit on both analytical columns. Reported results and quantitation limits in these samples were qualified "J" and "UJ", respectively, on the DSF.

NOTES

- No positive result was reported in the analyses of rinsate, field, method and storage blanks associated with this data set.
- The Response Factor (RRF) was less than 0.05 for pentachlorophenol in the semivolatile continuing calibration performed 06/24/2010 at 01:17 in SDG C4598. Since results for this compound in samples associated with this calibration were reported from reanalyses. No data were qualified based on this outlier.
- The concentration of several compounds exceeded the calibration range in the initial analyses of in the following field samples. These samples were diluted and re-analyzed to bring the concentration of these compounds within the calibration range. Results for these compounds are reported from the diluted analyses and annotated with a (+) symbol on the DSFs by the reviewer.

<u>Fraction</u>	<u>Samples</u>	<u>Dilution Factor</u>	<u>Compounds</u>
Semivolatile	C4598	5.0 X	Fluoranthene, Pyrene
Aroclor	C4598	10 X	Aroclor-1260
	C45B0, C45B1	5.0 X	Aroclor-1260

- All semivolatile soil samples in both SDGs were collected form 6/7/2010 to 6/10/2010 and extracted on 6/19/2010 to 6/20/2010. The aqueous technical holding time of (7) days from time of sample collection were exceeded by three (3) to five (5) days. Due to the stability of semivolatile compounds in the soil matrix, no data qualifying action was taken by data reviewer based on holding time outlier unless the holding time of fourteen (14) days was exceeded. The contractual holding time of ten (10) days from the Validated Time of Sample Receipt (VTSR) was met.
- Aroclor soil samples C4598, C4599, C45A0, C45A1, C45A2, C45A3, C45A4, C45A5, C45A6, C45A7, C45A8, C45A9, C45B0, and C45B1 (SDG C4598) were collected on 6/7/2010 and extracted on 6/15/2010. The aqueous technical holding time of (7) days from time of sample collection were exceeded by one (1) day. Due to the stability of aroclor compounds in the soil matrix, no data qualifying action was taken by data reviewer based on holding time outlier unless the holding time of fourteen (14) days was exceeded. The contractual holding time of ten (10) days from the VTSR was met.
- The following semivolatile samples had recoveries of DMCs outside the upper QC limits. Since the associated sample results were either non-detects or not reported from reanalyses, no data qualifying action was taken by data reviewer.

<u>SDG</u>	<u>Sample</u>	<u>DMCs</u>
C4598	C45A7RE	Acenaphthylene-d8
	C45A9	2,4-Dichlorophenol-d3
C45B5	C45B5	Acenaphthylene-d8

- The following semivolatile samples had recoveries of DMCs outside the lower QC limits. Since the associated sample results were reported from reanalysis, no data qualifying action was taken by data reviewer.

<u>SDG</u>	<u>Sample</u>	<u>DMCs</u>
C4598	C45A0, C45A3	2-Nitrophenol-d4
	C4598	Pyrene-d10

- The following semivolatile samples had recoveries of DMCs < 10%. Since the associated sample results were reported from reanalysis, no data qualifying action was taken by data reviewer.

<u>SDG</u>	<u>Sample</u>	<u>DMCs</u>
C4598	C45A0, C45A3, C45A6	4-Nitrophenol-d4
	C45A2	4,6-dinitro-2-methylphenol-d2

- Internal standard (IS) area counts for 1,4-dichlorobenzene-d4, naphthalene-d8, acenaphthene-d10 and/or perylene-d12 were outside the lower control limits in samples C4598 and C45B4 (SDG C4598). These samples were reanalyzed with internal standard area counts were within the control limits. The reanalysis results for these samples were reported on the DSFs. No data were qualified based on these outliers.
- Aroclor analyses of sample C45A7 (SDG C4598) reported high recovery of DCB on both analytical columns. Since no positive results were reported in this sample, no data were qualified in this sample.
- Reported recoveries for pesticide and aroclors in Laboratory Control Samples (LCS) and Matrix Spike/Matrix Spike Duplicate (MS/MSD) analysis were within QC limits on both columns in both SDGs.
- A sample weight other than thirty (30) grams in the semivolatile and aroclor analyses was used for samples associated with this case. Dilution factors reported on DSFs reflect actual sample weight used.
- Results for semivolatile field duplicate pair, samples C45A3RE/C45A6RE (SDG C4598), were comparable for all compounds except for phenanthrene and bis(2-ethylhexyl)phthalate.

- Results for aroclor field duplicate pair, samples C45A3/C45A6 (SDG C4598), were comparable.
- Tentatively Identified Compounds (TICs) were reviewed during data validation. Compounds identified as blank contaminants were crossed off TIC Form Is by the reviewer. Several TICs were identified as the same target compounds at different retention time. Identification for these TICs was changed to “unknown” by the reviewer. TIC Form Is for samples in which TICs were identified are included in Appendix E.
- Compounds detected below Contract Required Quantitation Limits (CRQLs) were qualified “J” on the DSFs.

All data for Case 40185, SDGs C4598 and C45B5, were reviewed in accordance with Region III Modifications to the National Functional Guidelines for Organic Data Review, September 1994.

ATTACHMENTS

Appendix A	Glossary of Data Qualifier Terms
Appendix B	Data Summary Form
Appendix C	Chain-of-Custody Records
Appendix D	Laboratory Case Narrative
Appendix E	Tentatively Identified Compounds (TICs)

DCN: 40185 – C4598 and C45B5

Appendix A
Glossary of Data Qualifiers

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

Appendix B

Data Summary Forms

DATA SUMMARY FORM: BNA

Case #: 40185

SDG : C4598

Number of Soil Samples : 20

Site :

METRO CONTAINER CORP

Number of Water Samples : 0

Lab. :

KAP

Sample Number :		C4598RE	C4599	C45A0RE	C45A1	C45A2RE					
Sampling Location :		MC-SB-02	MC-SB-03	MC-SD-05	MC-SD-06	MC-SD-07					
Field QC :											
Matrix :		Soil	Soil	Soil	Soil	Soil					
Units :		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg					
Date Sampled :		6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010					
Time Sampled :		12:11	12:48	12:35	12:05	11:40					
%Moisture :		6	6	19	33	21					
Dilution Factor :		1.0/4.98	1.0	1.0	1.0	1.0					
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	170						UJ				UJ
Phenol	170						UJ				UJ
Bis(2-chloroethyl)ether	170						UJ				UJ
2-Chlorophenol	170						UJ				UJ
2-Methylphenol	170						UJ				UJ
2,2'-Oxybis(1-chloropropane)	170						UJ				UJ
Acetophenone	170						UJ				UJ
4-Methylphenol	170						UJ				UJ
N-Nitroso-di-n-propylamine	170						UJ				UJ
Hexachloroethane	170						UJ				UJ
Nitrobenzene	170										
Isophorone	170										
2-Nitrophenol	170										
2,4-Dimethylphenol	170										
Bis(2-chloroethoxy)methane	170										
2,4-Dichlorophenol	170										
Naphthalene	170							100	J		
4-Chloroaniline	170										
Hexachlorobutadiene	170										
Caprolactam	170										
4-Chloro-3-methylphenol	170										
2-Methylnaphthalene	170					110	J	160	J		
Hexachlorocyclopentadiene	170										
2,4,6-Trichlorophenol	170										
2,4,5-Trichlorophenol	170										
1,1'-Biphenyl	170										
2-Chloronaphthalene	170										
2-Nitroaniline	330						R				
Dimethylphthalate	170										
2,6-Dinitrotoluene	170										
Acenaphthylene	170	110	J							91	J
3-Nitroaniline	330						R				
Acenaphthene	170	120	J								

Case #: 40185

SDG : C4598

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :	C4598RE	C4599	C45A0RE	C45A1	C45A2RE						
Sampling Location :	MC-SB-02	MC-SB-03	MC-SD-05	MC-SD-06	MC-SD-07						
Field QC :											
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010						
Time Sampled :	12:11	12:48	12:35	12:05	11:40						
%Moisture :	6	6	19	33	21						
Dilution Factor :	1.0/4.98	1.0	1.0	1.0	1.0						
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	330						R				
4-Nitrophenol	330						R				
Dibenzofuran	170	95	J								
2,4-Dinitrotoluene	170										
Diethylphthalate	170										
Fluorene	170	200	J								
4-Chlorophenyl-phenylether	170										
4-Nitroaniline	330						R				
4,6-Dinitro-2-methylphenol	330										
N-Nitrosodiphenylamine	170										
1,2,4,5-Tetrachlorobenzene	170										
4-Bromophenyl-phenylether	170										
Hexachlorobenzene	170			72	J						
Atrazine	170										
Pentachlorophenol	330										
Phenanthrene	170	2100		380		250		300		580	
Anthracene	170	580		110	J			100	J	140	J
Carbazole	170	180	J	74	J						
Di-n-butylphthalate	170										
Fluoranthene	170	3100 +		620		430		460		1100	
Pyrene	170	2700 +		590		360		410		800	
Butylbenzylphthalate	170			88	J						
3,3'-Dichlorobenzidine	170									88	J
Benzo(a)anthracene	170	1700		420		140	J	270		450	
Chrysene	170	1600		500		140	J	300		480	
Bis(2-ethylhexyl)phthalate	170	520		210						300	
Di-n-octylphthalate	170										
Benzo(b)fluoranthene	170	1400		380				280		410	
Benzo(k)fluoranthene	170	1600		370				210	J	370	
Benzo(a)pyrene	170	1700		600		91	J	380		290	
Indeno(1,2,3-cd)pyrene	170	1100								300	
Dibenzo(a,h)anthracene	170										
Benzo(g,h,i)perylene	170	1200		790				460		300	
2,3,4,6-Tetrachlorophenol	170										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]

Revised 09/99

"+" = Results are reported from diluted analyses.

Case #: 40185

SDG : C4598

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :	C45A3RE	C45A4	C45A5	C45A6RE	C45A7RE						
Sampling Location :	MC-SD-10	MC-SD-11	MC-SD-12	MC-SD-13	MC-SD-15						
Field QC :	Dup. of C45A6RE			Dup. of C45A3RE							
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010						
Time Sampled :	16:16	16:08	16:00	16:19	16:00						
%Moisture :	39	44	35	39	43						
Dilution Factor :	0.99	1.0	1.0	0.99	1.0						
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	170		UJ						UJ		UJ
Phenol	170		UJ						UJ		UJ
Bis(2-chloroethyl)ether	170		UJ						UJ		UJ
2-Chlorophenol	170		UJ						UJ		UJ
2-Methylphenol	170		UJ						UJ		UJ
2,2'-Oxybis(1-chloropropane)	170		UJ						UJ		UJ
Acetophenone	170		UJ						UJ		UJ
4-Methylphenol	170		UJ						UJ		UJ
N-Nitroso-di-n-propylamine	170		UJ						UJ		UJ
Hexachloroethane	170		UJ						UJ		UJ
Nitrobenzene	170										
Isophorone	170										
2-Nitrophenol	170										
2,4-Dimethylphenol	170										
Bis(2-chloroethoxy)methane	170										
2,4-Dichlorophenol	170										
Naphthalene	170										
4-Chloroaniline	170										
Hexachlorobutadiene	170										
Caprolactam	170										
4-Chloro-3-methylphenol	170										
2-Methylnaphthalene	170	150	J								
Hexachlorocyclopentadiene	170										
2,4,6-Trichlorophenol	170										
2,4,5-Trichlorophenol	170										
1,1'-Biphenyl	170										
2-Chloronaphthalene	170										
2-Nitroaniline	330										
Dimethylphthalate	170										
2,6-Dinitrotoluene	170										
Acenaphthylene	170										
3-Nitroaniline	330										
Acenaphthene	170										

Case #: 40185

SDG : C4598

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :	C45A3RE	C45A4	C45A5	C45A6RE	C45A7RE						
Sampling Location :	MC-SD-10	MC-SD-11	MC-SD-12	MC-SD-13	MC-SD-15						
Field QC :	Dup. of C45A6RE			Dup. of C45A3RE							
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010						
Time Sampled :	16:16	16:08	16:00	16:19	16:00						
%Moisture :	39	44	35	39	43						
Dilution Factor :	0.99	1.0	1.0	0.99	1.0						
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	330										
4-Nitrophenol	330										
Dibenzofuran	170										
2,4-Dinitrotoluene	170										
Diethylphthalate	170										
Fluorene	170										
4-Chlorophenyl-phenylether	170										
4-Nitroaniline	330										
4,6-Dinitro-2-methylphenol	330										
N-Nitrosodiphenylamine	170										
1,2,4,5-Tetrachlorobenzene	170										
4-Bromophenyl-phenylether	170										
Hexachlorobenzene	170										
Atrazine	170										
Pentachlorophenol	330										
Phenanthrene	170	360		550				190	J	210	J
Anthracene	170										
Carbazole	170										
Di-n-butylphthalate	170									120	J
Fluoranthene	170	180	J	560				390		270	J
Pyrene	170	210	J	430				320		240	J
Butylbenzylphthalate	170										
3,3'-Dichlorobenzidine	170										
Benzo(a)anthracene	170	130	J	320				210	J	160	J
Chrysene	170	160	J	370				220	J	180	J
Bis(2-ethylhexyl)phthalate	170	350		370		2300		220	J	180	J
Di-n-octylphthalate	170										
Benzo(b)fluoranthene	170	130	J	250	J			150	J	120	J
Benzo(k)fluoranthene	170			280	J			170	J	150	J
Benzo(a)pyrene	170	150	J	320		110	J	210	J	170	J
Indeno(1,2,3-cd)pyrene	170			190	J			120	J		
Dibenzo(a,h)anthracene	170			130	J						
Benzo(g,h,i)perylene	170	120	J	230	J			150	J	160	J
2,3,4,6-Tetrachlorophenol	170										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]

Revised 09/99

Case #: 40185

SDG : C4598

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :	C45A8	C45A9	C45B0RE	C45B1RE	C45B2																
Sampling Location :	MC-SD-16	MC-SS-01	MC-SS-02	MC-SS-03	MC-SB-04																
Field QC :																					
Matrix :	Soil	Soil	Soil	Soil	Soil																
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg																
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010																
Time Sampled :	16:30	11:20	12:02	12:40	15:10																
%Moisture :	51	3	5	4	6																
Dilution Factor :	1.0	1.0	1.0	1.0	1.0																
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag										
Benzaldehyde	170				UJ				UJ												
Phenol	170			400	J				UJ												
Bis(2-chloroethyl)ether	170				UJ				UJ												
2-Chlorophenol	170				UJ				UJ												
2-Methylphenol	170				UJ				UJ												
2,2'-Oxybis(1-chloropropane)	170				UJ				UJ												
Acetophenone	170			130	J				UJ												
4-Methylphenol	170				UJ				UJ												
N-Nitroso-di-n-propylamine	170				UJ				UJ												
Hexachloroethane	170				UJ				UJ												
Nitrobenzene	170				UJ																
Isophorone	170				UJ																
2-Nitrophenol	170				UJ																
2,4-Dimethylphenol	170				UJ																
Bis(2-chloroethoxy)methane	170				UJ																
2,4-Dichlorophenol	170				UJ																
Naphthalene	170			88	J																
4-Chloroaniline	170				UJ																
Hexachlorobutadiene	170				UJ																
Caprolactam	170				UJ																
4-Chloro-3-methylphenol	170				UJ																
2-Methylnaphthalene	170			71	J															81	J
Hexachlorocyclopentadiene	170																				
2,4,6-Trichlorophenol	170																				
2,4,5-Trichlorophenol	170																				
1,1'-Biphenyl	170																				
2-Chloronaphthalene	170																				
2-Nitroaniline	330																				
Dimethylphthalate	170																			100	J
2,6-Dinitrotoluene	170																				
Acenaphthylene	170																				
3-Nitroaniline	330																				
Acenaphthene	170																				

DATA SUMMARY FORM: BNA

Case #: 40185 SDG : C4598
 Site : METRO CONTAINER CORP
 Lab. : KAP

Sample Number :	C45A8	C45A9	C45B0RE	C45B1RE	C45B2						
Sampling Location :	MC-SD-16	MC-SS-01	MC-SS-02	MC-SS-03	MC-SB-04						
Field QC :											
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010						
Time Sampled :	16:30	11:20	12:02	12:40	15:10						
%Moisture :	51	3	5	4	6						
Dilution Factor :	1.0	1.0	1.0	1.0	1.0						
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	330										
4-Nitrophenol	330										
Dibenzofuran	170										
2,4-Dinitrotoluene	170										
Diethylphthalate	170										
Fluorene	170										
4-Chlorophenyl-phenylether	170										
4-Nitroaniline	330										
4,6-Dinitro-2-methylphenol	330			R							
N-Nitrosodiphenylamine	170										
1,2,4,5-Tetrachlorobenzene	170										
4-Bromophenyl-phenylether	170										
Hexachlorobenzene	170										
Atrazine	170										
Pentachlorophenol	330										
Phenanthrene	170			420		360	J	170	J	140	J
Anthracene	170			130	J						
Carbazole	170			80	J						
Di-n-butylphthalate	170										
Fluoranthene	170			770		750	J	240	J	230	J
Pyrene	170			680		550		200		210	
Butylbenzylphthalate	170					82	J				
3,3'-Dichlorobenzidine	170										
Benzo(a)anthracene	170			430		280	J	96	J	120	J
Chrysene	170			480		380	J	120	J	190	J
Bis(2-ethylhexyl)phthalate	170	150	J	390		300		87	J		
Di-n-octylphthalate	170										
Benzo(b)fluoranthene	170			390		340	J	99	J	190	J
Benzo(k)fluoranthene	170			380		290	J	100	J	140	J
Benzo(a)pyrene	170			500		310	J	110	J	120	J
Indeno(1,2,3-cd)pyrene	170			340		250	J	77	J	110	J
Dibenzo(a,h)anthracene	170			170	J	97	J				
Benzo(g,h,i)perylene	170			490		290		90	J	120	J
2,3,4,6-Tetrachlorophenol	170										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]

Revised 09/99

Case #: 40185

SDG : C4598

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :	C45B3	C45B4RE	C45B6	C45B7	C45B8						
Sampling Location :	MC-SD-02	MC-SD-03	MC-SD-17	MC-SD-18	MC-SD-19						
Field QC :											
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/8/2010	6/8/2010	6/8/2010	6/8/2010	6/8/2010						
Time Sampled :	14:30	14:01	16:24	16:14	16:02						
%Moisture :	35	26	43	48	40						
Dilution Factor :	1.0	1.0	1.0	0.99	1.0						
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	170										
Phenol	170	300		210	J						
Bis(2-chloroethyl)ether	170										
2-Chlorophenol	170										
2-Methylphenol	170										
2,2'-Oxybis(1-chloropropane)	170										
Acetophenone	170										
4-Methylphenol	170										
N-Nitroso-di-n-propylamine	170										
Hexachloroethane	170										
Nitrobenzene	170										
Isophorone	170										
2-Nitrophenol	170										
2,4-Dimethylphenol	170										
Bis(2-chloroethoxy)methane	170										
2,4-Dichlorophenol	170										
Naphthalene	170	120	J								
4-Chloroaniline	170										
Hexachlorobutadiene	170										
Caprolactam	170										
4-Chloro-3-methylphenol	170										
2-Methylnaphthalene	170										
Hexachlorocyclopentadiene	170										
2,4,6-Trichlorophenol	170										
2,4,5-Trichlorophenol	170										
1,1'-Biphenyl	170										
2-Chloronaphthalene	170										
2-Nitroaniline	330										
Dimethylphthalate	170										
2,6-Dinitrotoluene	170										
Acenaphthylene	170			140	J						
3-Nitroaniline	330										
Acenaphthene	170										

DATA SUMMARY FORM: BNA

Case #: 40185

SDG : C4598

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :	C45B3	C45B4RE	C45B6	C45B7	C45B8						
Sampling Location :	MC-SD-02	MC-SD-03	MC-SD-17	MC-SD-18	MC-SD-19						
Field QC :											
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/8/2010	6/8/2010	6/8/2010	6/8/2010	6/8/2010						
Time Sampled :	14:30	14:01	16:24	16:14	16:02						
%Moisture :	35	26	43	48	40						
Dilution Factor :	1.0	1.0	1.0	0.99	1.0						
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	330										
4-Nitrophenol	330										
Dibenzofuran	170										
2,4-Dinitrotoluene	170										
Diethylphthalate	170										
Fluorene	170										
4-Chlorophenyl-phenylether	170										
4-Nitroaniline	330										
4,6-Dinitro-2-methylphenol	330										
N-Nitrosodiphenylamine	170										
1,2,4,5-Tetrachlorobenzene	170										
4-Bromophenyl-phenylether	170										
Hexachlorobenzene	170										
Atrazine	170										
Pentachlorophenol	330										
Phenanthrene	170	640	J	650							
Anthracene	170	170	J	200	J						
Carbazole	170	110	J	130	J						
Di-n-butylphthalate	170			110	J						
Fluoranthene	170	1200	J	2100							
Pyrene	170	1000		1200							
Butylbenzylphthalate	170			120	J						
3,3'-Dichlorobenzidine	170										
Benzo(a)anthracene	170	640	J	820							
Chrysene	170	720	J	930	J						
Bis(2-ethylhexyl)phthalate	170	580		410							
Di-n-octylphthalate	170										
Benzo(b)fluoranthene	170	610	J	790							
Benzo(k)fluoranthene	170	570	J	640	J						
Benzo(a)pyrene	170	740	J	850	J						
Indeno(1,2,3-cd)pyrene	170	510	J	560							
Dibenzo(a,h)anthracene	170	290	J	280							
Benzo(g,h,i)perylene	170	810		730							
2,3,4,6-Tetrachlorophenol	170										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / [(100 - %Moisture) / 100]

Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 40185

SDG : C45B5

Number of Soil Samples : 3

Site :

METRO CONTAINER CORP

Number of Water Samples : 2

Lab. :

KAP

Sample Number :		C45B5	C45B9	C45C5					
Sampling Location :		MC-SS-04	MC-SS-05	MC-SD-01					
Field QC :									
Matrix :		Soil	Soil	Soil					
Units :		ug/Kg	ug/Kg	ug/Kg					
Date Sampled :		6/8/2010	6/8/2010	6/10/2010					
Time Sampled :		15:00	17:24	16:00					
%Moisture :		5	6	28					
Dilution Factor :		1.0	1.0	1.0					
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	170								
Phenol	170								
Bis(2-chloroethyl)ether	170								
2-Chlorophenol	170								
2-Methylphenol	170								
2,2'-Oxybis(1-chloropropane)	170								
Acetophenone	170								
4-Methylphenol	170								
N-Nitroso-di-n-propylamine	170								
Hexachloroethane	170								
Nitrobenzene	170								
Isophorone	170								
2-Nitrophenol	170								
2,4-Dimethylphenol	170								
Bis(2-chloroethoxy)methane	170								
2,4-Dichlorophenol	170								
Naphthalene	170								
4-Chloroaniline	170								
Hexachlorobutadiene	170								
Caprolactam	170								
4-Chloro-3-methylphenol	170								
2-Methylnaphthalene	170								
Hexachlorocyclopentadiene	170								
2,4,6-Trichlorophenol	170								
2,4,5-Trichlorophenol	170								
1,1'-Biphenyl	170								
2-Chloronaphthalene	170								
2-Nitroaniline	330								
Dimethylphthalate	170								
2,6-Dinitrotoluene	170								
Acenaphthylene	170					120	J		
3-Nitroaniline	330								
Acenaphthene	170								

DATA SUMMARY FORM: BNA

Case #: 40185

SDG : C45B5

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :		C45B5	C45B9	C45C5					
Sampling Location :		MC-SS-04	MC-SS-05	MC-SD-01					
Field QC :									
Matrix :		Soil	Soil	Soil					
Units :		ug/Kg	ug/Kg	ug/Kg					
Date Sampled :		6/8/2010	6/8/2010	6/10/2010					
Time Sampled :		15:00	17:24	16:00					
%Moisture :		5	6	28					
Dilution Factor :		1.0	1.0	1.0					
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	330								
4-Nitrophenol	330								
Dibenzofuran	170								
2,4-Dinitrotoluene	170								
Diethylphthalate	170								
Fluorene	170								
4-Chlorophenyl-phenylether	170								
4-Nitroaniline	330								
4,6-Dinitro-2-methylphenol	330								
N-Nitrosodiphenylamine	170								
1,2,4,5-Tetrachlorobenzene	170								
4-Bromophenyl-phenylether	170								
Hexachlorobenzene	170								
Atrazine	170								
Pentachlorophenol	330								
Phenanthrene	170	120	J	440		360			
Anthracene	170			90	J				
Carbazole	170								
Di-n-butylphthalate	170					93	J		
Fluoranthene	170	450		830		1200			
Pyrene	170	340		650		770			
Butylbenzylphthalate	170								
3,3'-Dichlorobenzidine	170								
Benzo(a)anthracene	170	200		370		490			
Chrysene	170	290	J	400	J	520	J		
Bis(2-ethylhexyl)phthalate	170	80	J			690			
Di-n-octylphthalate	170								
Benzo(b)fluoranthene	170	270		300		420			
Benzo(k)fluoranthene	170	220	J	320	J	510	J		
Benzo(a)pyrene	170	170	J	350	J	500	J		
Indeno(1,2,3-cd)pyrene	170	150	J	230		350			
Dibenzo(a,h)anthracene	170	77	J	120	J	130	J		
Benzo(g,h,i)perylene	170	160	J	260		360			
2,3,4,6-Tetrachlorophenol	170								

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: $(CRQL * Dilution Factor) / [(100 - \%Moisture) / 100]$

Revised 09/99

Case #: 40185

SDG : C45B5

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :		C45C3	C45C4						
Sampling Location :		MC-FB-01	MC-RB-01						
Field QC :		Field Blank	Rinsate Blank						
Matrix :		Water	Water						
Units :		ug/L	ug/L						
Date Sampled :		6/8/2010	6/8/2010						
Time Sampled :		13:30	17:41						
Dilution Factor :		1.0	1.0						
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	5.0								
Phenol	5.0								
Bis(2-chloroethyl)ether	5.0								
2-Chlorophenol	5.0								
2-Methylphenol	5.0								
2,2'-Oxybis(1-chloropropane)	5.0								
Acetophenone	5.0								
4-Methylphenol	5.0								
N-Nitroso-di-n-propylamine	5.0								
Hexachloroethane	5.0								
Nitrobenzene	5.0								
Isophorone	5.0								
2-Nitrophenol	5.0								
2,4-Dimethylphenol	5.0								
Bis(2-chloroethoxy)methane	5.0								
2,4-Dichlorophenol	5.0								
Naphthalene	5.0								
4-Chloroaniline	5.0								
Hexachlorobutadiene	5.0								
Caprolactam	5.0								
4-Chloro-3-methylphenol	5.0								
2-Methylnaphthalene	5.0								
Hexachlorocyclopentadiene	5.0								
2,4,6-Trichlorophenol	5.0								
2,4,5-Trichlorophenol	5.0								
1,1'-Biphenyl	5.0								
2-Chloronaphthalene	5.0								
2-Nitroaniline	10								
Dimethylphthalate	5.0								
2,6-Dinitrotoluene	5.0								
Acenaphthylene	5.0								
3-Nitroaniline	10								
Acenaphthene	5.0								

Case #: 40185

SDG : C45B5

Site :

METRO CONTAINER CORP

Lab. :

KAP

Sample Number :		C45C3	C45C4								
Sampling Location :		MC-FB-01	MC-RB-01								
Field QC :		Field Blank	Rinsate Blank								
Matrix :		Water	Water								
Units :		ug/L	ug/L								
Date Sampled :		6/8/2010	6/8/2010								
Time Sampled :		13:30	17:41								
Dilution Factor :		1.0	1.0								
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2,4-Dinitrophenol	10										
4-Nitrophenol	10										
Dibenzofuran	5.0										
2,4-Dinitrotoluene	5.0										
Diethylphthalate	5.0										
Fluorene	5.0										
4-Chlorophenyl-phenylether	5.0										
4-Nitroaniline	10										
*4,6-Dinitro-2-methylphenol	10										
N-Nitrosodiphenylamine	5.0										
1,2,4,5-Tetrachlorobenzene	5.0										
4-Bromophenyl-phenylether	5.0										
*Hexachlorobenzene	5.0										
Atrazine	5.0										
*Pentachlorophenol	10										
Phenanthrene	5.0										
Anthracene	5.0										
Carbazole	5.0										
Di-n-butylphthalate	5.0										
Fluoranthene	5.0										
Pyrene	5.0										
Butylbenzylphthalate	5.0										
3,3'-Dichlorobenzidine	5.0										
Benzo(a)anthracene	5.0										
Chrysene	5.0										
Bis(2-ethylhexyl)phthalate	5.0										
Di-n-octylphthalate	5.0										
Benzo(b)fluoranthene	5.0										
Benzo(k)fluoranthene	5.0										
Benzo(a)pyrene	5.0										
Indeno(1,2,3-cd)pyrene	5.0										
Dibenzo(a,h)anthracene	5.0										
Benzo(g,h,i)perylene	5.0										
2,3,4,6-Tetrachlorophenol	5.0										

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

DATA SUMMARY FORM: Aroclor

Case #: 40185

SDG : C4598

Number of Soil Samples : 20

Site :

METRO CONTAINER CORP

Number of Water Samples : 0

Lab. :

KAP

Sample Number :	C4598	C4599	C45A0	C45A1	C45A2						
Sampling Location :	MC-SB-02	MC-SB-03	MC-SD-05	MC-SD-06	MC-SD-07						
Field QC :											
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010						
Time Sampled :	12:11	12:48	12:35	12:05	11:40						
%Moisture :	6	6	19	33	21						
Dilution Factor :	1.0/10	1.0	0.99	0.99	1.0						
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016	33										
Aroclor-1221	33										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33	930 +	J								
Aroclor-1262	33										
Aroclor-1268	33										

Sample Number :	C45A3	C45A4	C45A5	C45A6	C45A7						
Sampling Location :	MC-SD-10	MC-SD-11	MC-SD-12	MC-SD-13	MC-SD-15						
Field QC :	Dup. of C45A6			Dup. of C45A3							
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010						
Time Sampled :	16:16	16:08	16:00	16:19	16:00						
%Moisture :	39	44	35	39	43						
Dilution Factor :	1.0	1.0	1.0	1.0	0.99						
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016	33										
Aroclor-1221	33										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33	64	J	140	J	27	J	27	J		
Aroclor-1262	33										
Aroclor-1268	33										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: $(CRQL * Dilution Factor) / [(100 - \%Moisture) / 100]$

Revised 09/99

"+" = The result is reported from diluted analyses.

Case #: 40185 SDG : C4598
 Site : METRO CONTAINER CORP
 Lab. : KAP

Sample Number :	C45A8	C45A9	C45B0	C45B1	C45B2						
Sampling Location :	MC-SD-16	MC-SS-01	MC-SS-02	MC-SS-03	MC-SB-04						
Field QC :											
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/8/2010						
Time Sampled :	16:30	11:20	12:02	12:40	15:10						
%Moisture :	51	3	5	4	6						
Dilution Factor :	1.0	1.0	0.99/4.97	0.99/4.98	0.99						
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016	33										
Aroclor-1221	33										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33	37	J			1100 +	J	750 +		230	
Aroclor-1262	33										
Aroclor-1268	33										

Sample Number :	C45B3	C45B4	C45B6	C45B7	C45B8						
Sampling Location :	MC-SD-02	MC-SD-03	MC-SD-17	MC-SD-18	MC-SD-19						
Field QC :											
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/8/2010	6/8/2010	6/8/2010	6/8/2010	6/8/2010						
Time Sampled :	14:30	14:01	16:24	16:14	16:02						
%Moisture :	35	26	43	48	40						
Dilution Factor :	1.0	0.99	1.0	1.0	0.99						
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016	33										
Aroclor-1221	33										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										
Aroclor-1262	33										
Aroclor-1268	33										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: $(CRQL * Dilution Factor) / [(100 - \%Moisture) / 100]$

Revised 09/99

"+" = Results are reported from diluted analyses.

Case #: 40185
 Site :
 Lab. :

SDG : C45B5
 METRO CONTAINER CORP
 KAP

Number of Soil Samples : 3
 Number of Water Samples : 2

Sample Number :	C45B5	C45B9	C45C5						
Sampling Location :	MC-SS-04	MC-SS-05	MC-SD-01						
Field QC :									
Matrix :	Soil	Soil	Soil						
Units :	ug/Kg	ug/Kg	ug/Kg						
Date Sampled :	6/8/2010	6/8/2010	6/10/2010						
Time Sampled :	15:00	17:24	16:00						
%Moisture :	5	6	28						
Dilution Factor :	1.0	1.0	1.0						
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Aroclor-1016	33		UJ	8.5	J				
Aroclor-1221	33		UJ		UJ				
Aroclor-1232	33		UJ		UJ				
Aroclor-1242	33		UJ		UJ				
Aroclor-1248	33		UJ		UJ				
Aroclor-1254	33		UJ		UJ				
Aroclor-1260	33	61	J	49	J				
Aroclor-1262	33		UJ		UJ				
Aroclor-1268	33		UJ		UJ				

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: $(CRQL * Dilution Factor) / [(100 - \%Moisture) / 100]$

Revised 09/99

Sample Number :	C45C3	C45C4							
Sampling Location :	MC-FB-01	MC-RB-01							
Field QC :	Field Blank	Rinsate Blank							
Matrix :	Water	Water							
Units :	ug/L	ug/L							
Date Sampled :	6/8/2010	6/8/2010							
Time Sampled :	13:30	17:41							
Dilution Factor :	1.0	1.0							
Aroclor Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag
*Aroclor-1016	1.0								
*Aroclor-1221	1.0								
*Aroclor-1232	1.0								
*Aroclor-1242	1.0								
*Aroclor-1248	1.0								
*Aroclor-1254	1.0								
*Aroclor-1260	1.0								
*Aroclor-1262	1.0								
*Aroclor-1268	1.0								

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: $(CRQL * Dilution Factor)$

Revised 09/99

Appendix C

Chain of Custody (COC) Records



USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 40185
 DAS No: [Redacted] **R**

Region: 3	Date Shipped: 6/8/2010	Chain of Custody Record		Sampler Signature:
Project Code:	Carrier Name: FedEx	Relinquished By	(Date / Time)	Received By
Account Code:	Airbill: 8731 0479 8162	[Redacted]	6/8/10 8700	
CERCLIS ID: PAD044545895	Shipped to: KAP Technologies Inc	2		
Spill ID:	9391 Grogans Mill Rd,	3		
Site Name/State: Metro Container Corp Project/PA	Suite A-2	4		
Project Leader: [Redacted]	The Woodlands TX 77380			
Action: Expanded Site Investigation/RI	(281) 367-0065			
Sampling Co: Tetra Tech				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C4598	Soil (>12")/ [Redacted]	M/G	CLP SV/PCB (14)	436 (Ice Only) (1)	MC-SB-02	S: 6/7/2010	12:11	MC4598	-
C4599	Soil (>12")/ [Redacted]	M/G	CLP SV/PCB (14)	438 (Ice Only) (1)	MC-SB-03	S: 6/7/2010	12:48	MC4599	-
C45A0	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	440 (Ice Only) (1)	MC-SD-05	S: 6/7/2010	12:35	MC45A0	-
C45A1	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	442 (Ice Only) (1)	MC-SD-06	S: 6/7/2010	12:05	MC45A1	-
C45A2	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	444 (Ice Only) (1)	MC-SD-07	S: 6/7/2010	11:40	MC45A2	-
C45A3	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	446 (Ice Only) (1)	MC-SD-10	S: 6/7/2010	16:16	MC45A3	-
C45A4	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	448 (Ice Only) (1)	MC-SD-11	S: 6/7/2010	16:08	MC45A4	-
C45A5	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	450 (Ice Only) (1)	MC-SD-12	S: 6/7/2010	16:00	MC45A5	-
C45A6	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	452 (Ice Only) (1)	MC-SD-13	S: 6/7/2010	16:19	MC45A6	Duplicate of MC-SD-10
C45A7	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	454 (Ice Only) (1)	MC-SD-15	S: 6/7/2010	16:00	MC45A7	-
C45A8	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	456 (Ice Only) (1)	MC-SD-16	S: 6/7/2010	16:30	MC45A8	-

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: C45A8	Additional Sampler Signature(s): [Redacted]	Chain of Custody Seal Number:
Analysis Key: CLP SV/PCB = CLP Semivolatiles and Aroclors - soil	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-242195023-060810-0003

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.
 Send Copy to: Sample Management Office, Attn: [Redacted], CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602



**USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record**

Case No: 40185
DAS No: R

Region: 3 Project Code: Account Code: CERCLIS ID: PAD044545895 Spill ID: Site Name/State: Metro Container Corp/PA Project Leader: Action: Expanded Site Investigation/RI Sampling Co: Tetra Tech	Date Shipped: 6/9/2010 Carrier Name: FedEx Airbill: 8731 0479 8129 Shipped to: KAP Technologies Inc 9391 Grogans Mill Rd, Suite A-2 The Woodlands TX 77380 (281) 367-0065	Chain of Custody Record Relinquished By: (Date / Time) Received By: (Date / Time) 2 3 4	Sampler Signature: Received By:
--	--	---	------------------------------------

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C45B6	Sediment/	M/G	CLP SV/PCB (14)	496 (Ice Only) (1)	MC-SD-17	S: 6/8/2010	16:24	MC45B6	-
C45B7	Sediment/	M/G	CLP SV/PCB (14)	498 (Ice Only) (1)	MC-SD-18	S: 6/8/2010	16:14	MC45B7	-
C45B8	Sediment/	M/G	CLP SV/PCB (14)	500 (Ice Only) (1)	MC-SD-19	S: 6/8/2010	16:02	MC45B8	-
C45B9	Soil (0"-12")/	M/G	CLP SV/PCB (14)	502 (Ice Only) (1)	MC-SS-05	S: 6/8/2010	17:24	MC45B9	-
C45C3	Field QC/	M/G	W- SV/PCB (14)	518 (Ice Only), 519 (Ice Only), 520 (Ice Only), 521 (Ice Only) (4)	MC-FB-01	S: 6/8/2010	13:30	MC45C3	Field Blank
C45C4	Field QC/	M/G	W- SV/PCB (14)	523 (Ice Only), 524 (Ice Only), 525 (Ice Only), 526 (Ice Only) (4)	MC-RB-01	S: 6/8/2010	17:41	MC45C4	Rinsate

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-242195023-060910-0002

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**USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record**

Case No: 40185

DAS No:

R

Region: 3	Date Shipped: 6/8/2010	Chain of Custody Record	Sampler Signature:
Project Code:	Carrier Name: FedEx		
Account Code:	Airbill: 8731 0479 8162	Relinquished By (Date / Time)	Received By (Date / Time)
CERCLIS ID: PAD044545895	Shipped to: KAP Technologies Inc 9391 Grogans Mill Rd, Suite A-2 The Woodlands TX 77380 (281) 367-0065	[Redacted] 4/8/10 1700	
Spill ID:		2	
Site Name/State: Metro Container Corp Project/PA		3	
Project Leader: [Redacted]		4	
Action: Expanded Site Investigation/RI			
Sampling Co: Tetra Tech			

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C45A9	Soil (0"-12")/ [Redacted]	M/G	CLP SV/PCB (14)	458 (Ice Only) (1)	MC-SS-01	S: 6/7/2010	11:20	MC45A9	-
C45B0	Soil (0"-12")/ [Redacted]	M/G	CLP SV/PCB (14)	460 (Ice Only) (1)	MC-SS-02	S: 6/7/2010	12:02	MC45B0	-
C45B1	Soil (0"-12")/ [Redacted]	M/G	CLP SV/PCB (14)	462 (Ice Only) (1)	MC-SS-03	S: 6/7/2010	12:40	MC45B1	-

Shipment for Case Complete? <input type="checkbox"/> N	Sample(s) to be used for laboratory QC: C45A8	Additional Sampler Signature(s): [Redacted]	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? <input type="checkbox"/>
CLP SV/PCB = CLP Semivolatiles and Aroclors - soil			

TR Number: 3-242195023-060810-0003

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**USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record**

Case No: 40185
DAS No: R

Region: 3 Project Code: Account Code: CERCLIS ID: PAD044545895 Spill ID: Site Name/State: Metro Container Corp/PA Project Leader: Action: Expanded Site Investigation/RI Sampling Co: Tetra Tech	Date Shipped: 6/9/2010 Carrier Name: FedEx Airbill: 8731 0479 8129 Shipped to: KAP Technologies Inc 9391 Grogans Mill Rd, Suite A-2 The Woodlands TX 77380 (281) 367-0065	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Chain of Custody Record</th> <th colspan="2">Sampler Signature</th> </tr> <tr> <td>Relinquished By</td> <td>(Date / Time)</td> <td>Received By</td> <td>(Date / Time)</td> </tr> <tr> <td>[Redacted]</td> <td>6-9-10 1520</td> <td>[Redacted]</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> </tr> </table>	Chain of Custody Record		Sampler Signature		Relinquished By	(Date / Time)	Received By	(Date / Time)	[Redacted]	6-9-10 1520	[Redacted]		2				3				4			
Chain of Custody Record		Sampler Signature																								
Relinquished By	(Date / Time)	Received By	(Date / Time)																							
[Redacted]	6-9-10 1520	[Redacted]																								
2																										
3																										
4																										

ORGANIC SAMPLE No.	MATR/DX SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C45B6	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	496 (Ice Only) (1)	MC-SD-17	S: 6/8/2010	16:24	MC45B6	-
C45B7	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	498 (Ice Only) (1)	MC-SD-18	S: 6/8/2010	16:14	MC45B7	-
C45B8	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	500 (Ice Only) (1)	MC-SD-19	S: 6/8/2010	16:02	MC45B8	-
C45B9	Soil (0"-12")/ [Redacted]	M/G	CLP SV/PCB (14)	502 (Ice Only) (1)	MC-SS-05	S: 6/8/2010	17:24	MC45B9	-
C45C3	Field QC/ [Redacted]	M/G	W- SV/PCB (14)	518 (Ice Only), 519 (Ice Only), 520 (Ice Only), 521 (Ice Only) (4)	MC-FB-01	S: 6/8/2010	13:30	MC45C3	Field Blank
C45C4	Field QC/ [Redacted]	M/G	W- SV/PCB (14)	523 (Ice Only), 524 (Ice Only), 525 (Ice Only), 526 (Ice Only) (4)	MC-RB-01	S: 6/8/2010	17:41	MC45C4	Rinsate

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
CLP SV/PCB = CLP Semivolatiles and Aroclors - soil, W- SV/PCB = CLP-Water TCL Semivolatiles and Aroclors			

TR Number: 3-242195023-060910-0002

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**USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record**

Case No: 40185
DAS No: [Redacted] **R**

Region: 3	Date Shipped: 6/9/2010	Chain of Custody Record	Sampler Signature: [Redacted]
Project Code:	Carrier Name: FedEx		Relinquished By (Date / Time)
Account Code:	Airbill: 8731 0479 8129	1 [Redacted] - 6-9-10 1500	
CERCLIS ID: PAD044545895	Shipped to: KAP Technologies Inc 9391 Grogans Mill Rd, Suite A-2 The Woodlands TX 77380 (281) 367-0065	2	
Spill ID:		3	
Site Name/State: Metro Container Corp/PA		4	
Project Leader: [Redacted]			
Action: Expanded Site Investigation/RI			
Sampling Co: Tetra Tech			

ORGANIC SAMPLE No.	MATRD/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C45B2	Soil (>12")/ [Redacted]	M/G	CLP SV/PCB (14)	479 (Ice Only) (1)	MC-SB-04	S: 6/8/2010	15:10	MC45B2	-
C45B3	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	481 (Ice Only) (1)	MC-SD-02	S: 6/8/2010	14:30	MC45B3	-
C45B4	Sediment/ [Redacted]	M/G	CLP SV/PCB (14)	483 (Ice Only) (1)	MC-SD-03	S: 6/8/2010	14:00 14:00	MC45B4	-
C45B5	Soil (0"-12")/ [Redacted]	M/G	CLP SV/PCB (14)	485 (Ice Only), 486 (Ice Only) (2)	MC-SS-04	S: 6/8/2010	15:00	MC45B5	-

Shipment for Case Complete: [Redacted]	Sample(s) to be used for laboratory QC: C45B5	Additional Sampler Signature(s): [Redacted]	Chain of Custody Seal Number:
Analysis Key: CLP SV/PCB = CLP Semivolatiles and Aroclors - soil	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-242195023-060810-0005

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**USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record**

Case No: 40185
DAS No: [REDACTED] **R**

Region: 3	Date Shipped: 6/10/2010	Chain of Custody Record		Sampler Signature: [REDACTED]
Project Code:	Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)	
Account Code:	Airbill: 8731 0479 8107	1 [REDACTED]		
CERCLIS ID: PAD044545895	Shipped to: KAP Technologies Inc 9391 Grogans Mill Rd, Suite A-2 The Woodlands TX 77380 (281) 367-0065	2		
Spill ID:		3		
Site Name/State: Metro Container Corp/PA		4		
Project Leader: [REDACTED]				
Action: Expanded Site Investigation/RI				
Sampling Co: Tetra Tech				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C45C5	Sediment/ [REDACTED]	M/G	CLP SV/PCB (14)	534 (Ice Only) (1)	MC-SD-01	S: 6/10/2010	16:00	MC45C5	-

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____
CLP SV/PCB = CLP Semivolatiles and Aroclors - soil			

TR Number: 3-242195023-061010-0003

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U.S EPA Region III Analytical Request Form

STS 5-21-10

40185

OASQA USE ONLY			
Control#	CT4996	RAS#	
DAS#		NSF#	
PES#		Analytical TAT	14 days

Date: 5/17/2010		Site Activity: Expanded Site Inspection	
Site Name: Metro Container <i>Corp.</i>		Street Address: 2nd And Price Streets	
City: Trainer	State: PA	Latitude: 39.82642	Longitude: 75.39903
Program: Superfund	Acct. #: 2010 T03N302DD2C032H QB 00	CERCLIS #: PAD044545895	
Site ID:	Spill ID: 032H	Operable Unit:	
Site Specific QA Plan Submitted: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		Title: START3 QAPP	Date Approved: November 2006
EPA Project Leader: Charlene Creamer	Phone#: 215-814-2145	Cell Phone #:	E-mail: creamer.charlene@epa.gov
Request Preparer: [REDACTED]	Phone#: [REDACTED]	Cell Phone #: [REDACTED]	E-mail: [REDACTED]
Request Preparer: [REDACTED]	Phone#: [REDACTED]	Cell Phone #: [REDACTED]	E-mail: [REDACTED]
Contractor: Tetra Tech EM Inc		EPA CO/PO: [REDACTED]	
#Samples 37	Matrix: Soil	Parameter: SVOC, PCB <i>KAD</i>	Method: CLP SOW SOM01.2 <i>32430,31</i>
#Samples 37	Matrix: Soil	Parameter: TAL Metals + Hg <i>CHEM</i>	Method: CLP SOW ILM05.4 ICP-AES <i>32432</i>
#Samples 2	Matrix: Blank	Parameter: SVOC, PCB	Method: CLP SOW SOM01.2
#Samples 2	Matrix: Blank	Parameter: TAL Metals + Hg	Method: CLP SOW ILM05.4 ICP-AES
Ship Date From: 6/7/2010		Ship Date To: 6/10/2010	Org. Validation Level M3
Unvalidated Data Requested: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes		If Yes, TAT Needed: <input checked="" type="checkbox"/> 14days <input type="checkbox"/> 7days <input type="checkbox"/> 72hrs <input type="checkbox"/> 48hrs <input type="checkbox"/> 24hrs <input type="checkbox"/> Other (Specify) <i>by CSAT</i>	
Validated Data Package Due: <input type="checkbox"/> 42 days <input checked="" type="checkbox"/> 30 days <input type="checkbox"/> 21days <input type="checkbox"/> 14 days <input type="checkbox"/> Other (Specify)		<i>14/16</i>	
Electronic Data Deliverables Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (EDDs will be provided in Region 3 EDD Format)			
Special Instructions: Required detection limits attached.			

Appendix D

Laboratory Case Narrative

Contract No. EPW05032	Case No. 40185	SDG No. C4598
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SDG NARRATIVE

SAMPLE RECEIPT:

On 06/09/10 @ 10:00 A.M. - Received one cooler via FedEx with shipment number 873104798162. The cooler temperature was 2.6°C.

On 06/10/10 @ 08:55 A.M. - Received one cooler via FedEx with shipment number 873104798129. The cooler temperature was 5.3°C.

The package contained the following samples for SVOA and AROCLORS analyses.
 The custody seals were intact.

EPA SAMPLE ID	pH	EPA SAMPLE ID	pH
C4598	NA	C45A8MS	NA
C4598DL	NA	C45A8MSD	NA
C4598RE	NA	C45A9	NA
C4599	NA	C45A9RE	NA
C45A0	NA	C45B0	NA
C45A0RE	NA	C45B0DL	NA
C45A1	NA	C45B0RE	NA
C45A2	NA	C45B1	NA
C45A2RE	NA	C45B1DL	NA
C45A3	NA	C45B1RE	NA
C45A3RE	NA	C45B2	NA
C45A4	NA	C45B3	NA
C45A5	NA	C45B4	NA
C45A6	NA	C45B4RE	NA
C45A6RE	NA	C45B6	NA
C45A7	NA	C45B7	NA
C45A7RE	NA	C45B8	NA
C45A8	NA		

No problems were encountered during sample receipt and login.

Contract No. EPW05032	Case No. 40185	SDG No. C4598
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SDG NARRATIVE

SEMIVOLATILES SOIL:

The soil samples were extracted on 06/19/10 using the sonication method as per statement of work SOM 1.2. The samples were cleaned by GPC. No problems were encountered during the extraction.

The samples were analyzed on instruments C-5973 GC/MS and F-5973 GC/MS using a 30 meters long RTX-5MS column having a 0.25mm ID and 0.25µm film thickness.

The sample C4598DL had target compound concentrations above the calibration range and was analyzed using a dilution in order to bring the concentrations within the calibration range. Both the analyses were reported and are billable.

The soil samples C4598, C45A0, C45A2, C45A3, C45A6, C45A7, C45A9, C45B0, C45B1, and C45B4 had failed in the internal standard and were reanalyzed. Upon reanalysis again failed due to sample matrix. Both the analyses were reported and are billable.

No other problems were encountered during the sample analyses.

The formula used to calculate the Sample concentration:

SOIL SAMPLES:

$$\text{Concentration of Soil, Sediment sample } \mu\text{g/kg} = \frac{(A_x)(I_s)(V_t)(DF)(GPC)}{(A_{is})(RRF)(V_i)(W_s)(D)}$$

Where,

- A_x = Area of characteristic ion to be measured
- I_s = Amount of internal standard injected in ng
- A_{is} = Area of characteristic ion in internal standard
- V_t = Volume of concentrated extract in uL.
- V_i = Volume of extract injected.
- GPC = GPC cleaning Factor.
- D = $\frac{100 - \% \text{ moisture}}{100}$
- W_s = Weight of sample extract.
- RRF = Mean relative Response Factor determined from the initial calibration standard.
- DF = Dilution Factor.

Manual Integrations:

The software did not pick-up the following compounds and these compounds were manually integrated and the EICP is enclosed in the data package.

SSTD080IK – Caprolactam

Contract No. EPW05032	Case No. 40185	SDG No. C4598
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SDG NARRATIVE

SSTD080IK – Pentachlorophenol
SSTD080IK – Fluoranthene
SSTD080IK – Benzo(b)fluoranthene
SSTD080IK – Benzo(k)fluoranthene
SSTD040IK – Caprolactam
SSTD040IK – Fluoranthene
SSTD040IK – Benzo(b)fluoranthene
SSTD010IK – Caprolactam
SSTD010IK – Pentachlorophenol
SSTD010IK – Fluoranthene
SSTD010IK – Benzo(b)fluoranthene
SSTD020IK – Fluoranthene
SSTD020IK – Benzo(b)fluoranthene
SSTD005IK – Fluoranthene
SSTD005IK – Benzo(b)fluoranthene
SSTD005IK – Indeno(1,2,3-cd)pyrene
SSTD04079 – Caprolactam
SSTD04079 – Dibenzo(a,h)anthracene
SSTD02079 – Perylene-d12
SSTD02079 – Dibenzo(a,h)anthracene
SSTD01079 – Caprolactam
SSTD08079 – Indeno(1,2,3-cd)pyrene
SSTD00579 – Dibenzo(a,h)anthracene
SSTD00579 – Benzo(g,h,i)perylene
SSTD020IM – Fluoranthene
SSTD02084 – Benzo(b)fluoranthene

AROCLORS SOIL:

The soil samples were extracted on 06/15/10 using the sonication method as per statement of work SOM1.2. No problems were encountered during extraction.

The samples were analyzed on P-6890 GC using two columns manufactured by Restek.

*RTX – CLP2: 30m*0.53mmID*0.41um film thickness. (Primary Column)*

*RTX – CLP: 30m*0.53mmID*0.50um film thickness. (Confirmation Column)*

A 1uL injection was used.

The samples C4598, C45B0 and C45B1 had target compound concentrations above the calibration range and were analyzed using a dilution in order to bring the concentrations within the calibration range. Both the analyses were reported and are billable.

No other problems were encountered during sample analysis.

Contract No. EPW05032	Case No. 40185	SDG No. C4598
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SDG NARRATIVE

The formula used to calculate the Sample concentration:

SOIL SAMPLE:

$$\text{Concentration of Target compound in soil/sediment ug/kg} = \frac{(Ax)(Vt)(DF)}{(CF)(Vi)(Ws)(D)}$$

Ax = Response of the compound to be measured.

CF = Mean calibration factor from the initial calibration (area/ng)

Vt = 10,000 uL.

Vi = Volume of extract injected.

Ws = Weight of sample extracted.

$$D = \frac{100 - \% \text{moisture}}{100}$$

DF = Dilution Factor.

Manual Integrations:

The software did not pick-up the following compounds and these compounds were manually integrated and the EICP is enclosed in the data package.

AR16603G1 – AR1016-1

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy sample data package and in the electronic data deliverable has been authorized by the laboratory manager or the manager's designee, as verified by the following signature:

Signature/Title

6/28/10

Date of Signature

Contract No. EPW05032	Case No. 40185	SDG No. C45B5
-----------------------	----------------	---------------

SDG NARRATIVE

SAMPLE RECEIPT:

On 06/10/10 @ 08:55 A.M. - Received one cooler via FedEx with shipment number 873104798129. The cooler temperature was 5.3°C.

On 06/11/10 @ 09:23 A.M. - Received one cooler via FedEx with shipment number 873104798107. The cooler temperature was 2.6°C.

The package contained the following samples for SVOA and AROCLORS analyses. The custody seals were intact.

EPA SAMPLE ID	pH	EPA SAMPLE ID	pH
C45B5	NA	C45C5	NA
C45B9	NA	C45C5MS	NA
C45C3	NA	C45C5MSD	NA
C45C4	NA		

No problems were encountered during sample receipt and login.

SEMIVOLATILES WATER:

The water samples were extracted on 06/14/10 and using continuous Liquid/Liquid Extraction as per statement of work SOM 1.2. No problems were encountered during extraction and analysis.

The samples were analyzed on instrument F-5973 GC/MS using a 30 meters long RTX-5MS column having a 0.25mm ID and 0.25µm film thickness.

No problems were encountered during the sample analyses.

The formula used to calculate the Sample concentration:

WATER SAMPLES:

$$\text{Concentration ug/L} = \frac{(Ax)(Is)(Vt)(DF)}{(Ais)(RRF)(Vo)(Vi)}$$

Where,

- Ax = Area of the characteristic ion for the compound to be measured.
- Ais = Area of the characteristic ion for the internal standard.
- Is = Amount of internal standard injected in ng
- Vo = Volume of water extracted in mL.
- Vi = Volume of extract injected in uL.

Contract No. EPW05032	Case No. 40185	SDG No. C45B5
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SDG NARRATIVE

RRF = Mean Relative Response Factor determined from the initial calibration Standard.
DF = Dilution Factor.

SEMIVOLATILES SOIL:

The soil samples were extracted on 06/20/10 using the sonication method as per statement of work SOM 1.2. The samples were cleaned by GPC. No problems were encountered during the extraction.

The samples were analyzed on instruments F-5973 GC/MS using a 30 meters long RTX-5MS column having a 0.25mm ID and 0.25µm film thickness.

No other problems were encountered during the sample analyses.

The formula used to calculate the Sample concentration:

SOIL SAMPLES:

$$\text{Concentration of Soil, Sediment sample } \mu\text{g/kg} = \frac{(A_x)(I_s)(V_t)(DF)(GPC)}{(A_{is})(RRF)(V_i)(W_s)(D)}$$

Where,

- A_x = Area of characteristic ion to be measured
- I_s = Amount of internal standard injected in ng
- A_{is} = Area of characteristic ion in internal standard
- V_t = Volume of concentrated extract in µL.
- V_i = Volume of extract injected.
- GPC = GPC cleaning Factor.
- D = $\frac{100 - \% \text{ moisture}}{100}$
- W_s = Weight of sample extract.
- RRF = Mean relative Response Factor determined from the initial calibration standard.
- DF = Dilution Factor.

AROCLORS WATER:

The water sample was extracted using separatory funnel extraction method on 06/15/2010 as per statement of work SOM 1.2.

No problems were encountered during extraction.

All samples were analyzed on a P-6890 GC using two columns manufactured by Restek.

Contract No. EPW05032	Case No. 40185	SDG No. C45B5
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SDG NARRATIVE

*RTX – CLP2: 30m*0.53mmID*0.41um film thickness. (Primary Column)*
*RTX – CLP: 30m*0.53mmID*0.50um film thickness. (Confirmation Column)*
A 1uL injection was used.

The formula used to calculate the Sample concentration:

WATER SAMPLES:

$$\text{Concentration of the sample ug/L} = \frac{(A_x)(V_t)(DF)}{(CF)(V_o)(V_i)}$$

Where,

- A_x = Response of the compound to be measured.
- CF = Mean calibration factor from the initial calibration (area/ng)
- V_t = Volume of the concentrated extract (uL)
- V_i = Volume of extract injected.
- V_o = Volume of water extracted

- DF = Dilution Factor.

AROCLORS SOIL:

The soil samples were extracted on 06/15/10 using the sonication method as per statement of work SOM1.2. No problems were encountered during extraction.

The samples were analyzed on P-6890 GC using two columns manufactured by Restek.

*RTX – CLP2: 30m*0.53mmID*0.41um film thickness. (Primary Column)*
*RTX – CLP: 30m*0.53mmID*0.50um film thickness. (Confirmation Column)*
A 1uL injection was used.

No other problems were encountered during sample analysis.

The formula used to calculate the Sample concentration:

SOIL SAMPLE:

$$\text{Concentration of Target compound in soil/sediment ug/kg} = \frac{(A_x)(V_t)(DF)}{(CF)(V_i)(W_s)(D)}$$

- A_x = Response of the compound to be measured.
- CF = Mean calibration factor from the initial calibration (area/ng)
- V_t = 10,000 uL.
- V_i = Volume of extract injected.
- W_s = Weight of sample extracted.

KAP TECHNOLOGIES, INC.

9391 Grogans Mill Rd, Suite A2 • The Woodlands, TX 77380 • Phone (281) 367-0065

Contract No. EPW05032	Case No. 40185	SDG No. C45B5
------------------------------	-----------------------	----------------------

SDG NARRATIVE

$$D = \frac{100 - \%moisture}{100}$$

DF = Dilution Factor.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy sample data package and in the electronic data deliverable has been authorized by the laboratory manager or the manager's designee, as verified by the following signature:



Signature/Title

6/28/10
Date of Signature

Appendix E

TIC Form Is

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C4598

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.01
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: C05873
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 6.0 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/24/2010
 GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000613-12-7	Anthracene, 2-methyl-	14.79	1100	NJ
02	000057-10-3	n-Hexadecanoic acid	14.87	1100	NJ
03		Unknown-01	14.91	1100	J
04		Unknown-02	15.06	990	J
05	000084-65-1	9,10-Anthracenedione	15.17	1500	NJ
06	041464-42-0	1,1'-Biphenyl, 2,3',5,5'-tetr	15.25	1000	NJ
07	000091-76-9	1,3,5-Triazine-2,4-diamine, 6	15.32	2000	NJ
08	003674-66-6	Phenanthrene, 2,5-dimethyl-	15.41	1500	NJ
09	132545-36-9	1-Methyl-4-ethyl 2-phenylsucc	15.44	1500	NJ
10	041464-51-1	1,1'-Biphenyl, 2,2',3',4,5-Pe	15.51	2200	NJ
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. C4598DL

Lab Name: KAP TECHNOLOGIES, INC.	Contract: EPW05032
Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____	SDG No.: C4598
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: S-3169.01DL
Sample wt/vol: 30.10 (g/mL) G	Lab File ID: F36951
Level: (LOW/MED) LOW	Extraction: (Type) SONC
% Moisture: 6.0 Decanted: (Y/N) N	Date Received: 06/09/2010
Concentrated Extract Volume: 500 (uL)	Date Extracted: 06/19/2010
Injection Volume: 1.0 (uL)	Date Analyzed: 06/27/2010
GPC Cleanup: (Y/N) Y pH: 7.8	Dilution Factor: 5.0
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000059-31-4	2 (1H)-Quinolinone	13.95	9300	DNJ
02		Unknown-01	14.52	3300	DJ
03		Unknown-02	15.09	2600	DJ
04		Unknown-03	15.47	2800	DJ
05		Unknown-04	18.20	2900	DJ
06		Unknown-05	18.28	2400	DJ
07		Unknown-06	18.74	3100	DJ
08		Unknown-07	19.36	2800	DJ
09		Unknown-08	19.50	3200	DJ
10					
11					
12					
13					
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24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C4598RE

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.01RE
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36882
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 6.0 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000613-12-7	Anthracene, 2-methyl-	15.00	710	NJ
02	000779-02-2	Anthracene, 9-methyl-	15.07	970	NJ
03	000203-64-5	4H-Cyclopenta[def]phenanthren	15.13	990	NJ
04	041464-41-9	1,1'-Biphenyl, 2,2',5,6-Tetra	15.17	730	NJ
05	035465-71-5	2-Phenylnaphthalene	15.33	980	NJ
06	000084-65-1	9,10-Anthracenedione	15.36	1700	NJ
07	000781-43-1	9,10-Dimethylantracene	15.49	1100	NJ
08	001576-67-6	Phenanthrene, 3,6-dimethyl-	15.53	1500	NJ
09	003674-66-6	Phenanthrene, 2,5-dimethyl-	15.62	1300	NJ
10		Unknown-01	15.65	710	J
11	005737-13-3	Cyclopenta(def)phenanthrenone	15.70	690	NJ
12		Unknown-02	17.52	750	J
13	000604-53-5	1,1'-Binaphthalene	18.33	1300	NJ
14		Unknown-03	18.49	860	J
15	000205-82-3	Benzo[j]fluoranthene	18.70	1300	NJ
16		Unknown-04	19.41	970	J
17		Unknown-05	19.58	1200	J
18		Unknown-06	20.37	920	J
19					
20					
21					
22					
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24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C4599

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.02
 Sample wt/vol: 30.00 (g/mL) G Lab File ID: F36883
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 6.0 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 8.4 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000779-02-2	Anthracene, 9-methyl-	15.01	880	NJ
02	000057-10-3	n-Hexadecanoic acid	15.07	770	NJ
03		Unknown-01	15.14	690	J
04		Unknown-02	15.33	830	J
05	000084-65-1	9,10-Anthracenedione	15.37	960	NJ
06	002789-88-0	di-p-Tolylacetylene	15.50	700	NJ
07		Unknown-03	15.53	750	J
08	000781-43-1	9,10-Dimethylanthracene	15.62	1100	NJ
09		Unknown-04	17.52	1000	J
10	002498-77-3	Benz[a]anthracene, 1-methyl-	17.69	1300	NJ
11	181425-91-2	Benzene-1,3-dicarboxylic acid	17.91	900	NJ
12		Unknown-05	18.19	710	J
13	027458-90-8	Disulfide, di-tert-dodecyl	18.50	690	NJ
14		Unknown-06	18.69	690	J
15		Unknown-07	18.77	870	J
16		Unknown-08	19.29	800	J
17		Unknown-09	20.37	830	J
18		Unknown-10	20.62	690	J
19					
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27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A	1300	J

² EPA-designated Registry Number.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45A0

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.03
 Sample wt/vol: 29.90 (g/mL) G Lab File ID: C05875
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 19 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/24/2010
 GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	6.39	3900	J
02		Unknown-02	6.71	3000	J
03		Unknown-03	9.34	3500	J
04	330207-53-9	E-14-Hexadecenal	14.79	4100	NJ
05		Unknown-04	14.87	2500	J
06		Unknown-05	15.12	12000	J
07		Unknown-06	15.52	8800	J
08		Unknown-07	15.76	4400	J
09	066563-30-2	Bacchotricuneatin c UNKNOWN	15.97	4400	NJ
10		Unknown-08	16.07	3200	J
11		Unknown-09	16.19	3200	J
12	066563-30-2	Bacchotricuneatin c UNKNOWN	16.26	2700	NJ
13		Unknown-10	16.56	4100	J
14		Unknown-11	16.69	3500	J
15		Unknown-12	17.77	4100	J
16		Unknown-13	17.98	2200	J
17		Unknown-14	18.03	4200	J
18					
19					
20					
21					
22					
23					
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27					
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30					
	E966796 ²	Total Alkanes	N/A	56000	J

² EPA-designated Registry Number.

Su 07/01/2010

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45A0RE

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.03RE
 Sample wt/vol: 29.90 (g/mL) G Lab File ID: F36884
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 19 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	7.12	2400	J
02		Unknown-02	7.40	1400	J
03	001795-17-1	Dodecylcyclohexane	14.68	1400	NJ
04	002136-72-3	Ethanol, 2-(octadecyloxy) <i>Unknown</i>	14.85	1800	NJ
05		Unknown-03	14.88	1400	J
06	002136-72-3	Ethanol, 2-(octadecyloxy) <i>Unknown</i>	14.98	3000	NJ
07		Unknown-04	15.08	1900	J
08		Unknown-05	15.13	2000	J
09		Unknown-06	15.16	3700	J
10		Unknown-07	15.27	2700	J
11		Unknown-08	15.31	3400	J
12		Unknown-09	15.34	2200	J
13		Unknown-10	15.40	5800	J
14		Unknown-11	15.44	2000	J
15		Unknown-12	15.47	2000	J
16		Unknown-13	15.49	2500	J
17	001795-18-2	Cyclohexane, tetradecyl-	15.59	4300	NJ
18	066563-30-2	Bacchotricuneatin c	15.63	3800	NJ
19		Unknown-14	15.67	3100	J
20		Unknown-15	15.69	2400	J
21		Unknown-16	15.71	3000	J
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A	22000	J

² EPA-designated Registry Number.

Su analiso.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45A2

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.05
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: C05877
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/24/2010
 GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	14.49	1600	J
02		Unknown-02	14.71	1300	J
03		Unknown-03	14.78	2800	J
04		Unknown-04	14.85	1200	J
05	000112-89-0	Octadecane, 1-bromo-	14.99	2100	NJ
06		Unknown-05	15.03	1200	J
07		Unknown-06	15.05	950	J
08		Unknown-07	15.10	3900	J
09		Unknown-08	16.04	910	J
10	000629-93-6	Octadecane, 1-iodo-	16.24	1100	NJ
11		Unknown-09	16.60	890	J
12	066563-30-2	Bacchotricuneatin c	17.37	970	NJ
13		Unknown-10	17.72	1300	J
14		Unknown-11	17.94	1300	J
15	1000214-29-6	4-[Trichloromethyl]-2-[[4-nit	18.15	1700	NJ
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A	18000	J

² EPA-designated Registry Number.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C45A2RE

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.05RE
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36886
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 21 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	15.01	1300	J
02		Unknown-02	15.26	1600	J
03		Unknown-03	15.30	1600	J
04		Unknown-04	15.34	1400	J
05		Unknown-05	15.37	1400	J
06		Unknown-06	15.40	1400	J
07		Unknown-07	15.58	2100	J
08		Unknown-08	15.61	2600	J
09		Unknown-09	15.65	1900	J
10		Unknown-10	15.70	3600	J
11		Unknown-11	16.71	1400	J
12		Unknown-12	16.85	1600	J
13		Unknown-13	17.10	1600	J
14	006938-66-5	1-Bromodocosane	17.38	1500	NJ
15		Unknown-14	17.48	1500	J
16		Unknown-15	17.70	1700	J
17		Unknown-16	17.85	1400	J
18	025116-58-9	20.Xi.-Lanosta-7,9(11)-diene-	17.94	1400	NJ
19		Unknown-17	18.01	2000	J
20		Unknown-18	18.28	1500	J
21		Unknown-19	18.35	1500	J
22		Unknown-20	18.40	1500	J
23		Unknown-21	18.70	1500	J
24		Unknown-22	18.86	2000	J
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A	18000	J

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. C45A3

Lab Name: KAP TECHNOLOGIES, INC.	Contract: EPW05032
Lab Code: KAP Case No.: 40185	Mod. Ref No.: _____ SDG No.: C4598
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: S-3169.06
Sample wt/vol: 30.20 (g/mL) G	Lab File ID: C05878
Level: (LOW/MED) LOW	Extraction: (Type) SONC
% Moisture: 39 Decanted: (Y/N) N	Date Received: 06/09/2010
Concentrated Extract Volume: 500 (uL)	Date Extracted: 06/19/2010
Injection Volume: 1.0 (uL)	Date Analyzed: 06/24/2010
GPC Cleanup: (Y/N) Y pH: 6.6	Dilution Factor: 1.0
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	002531-84-2	Phenanthrene, 2-methyl-	14.79	1600	NJ
02		Unknown-01	15.10	1500	J
03		Unknown-02	15.16	1300	J
04		Unknown-03	15.20	1500	J
05	003674-69-9	Phenanthrene, 4,5-dimethyl-	15.28	1400	NJ
06	003674-65-5	Phenanthrene, 2,3-dimethyl-	15.40	1200	NJ
07					
08					
09					
10					
11					
12					
13					
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25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A	4500	J

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C45A4

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.07
 Sample wt/vol: 30.00 (g/mL) G Lab File ID: F36888
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 44 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000613-12-7	Anthracene, 2-methyl-	15.01	1600	NJ
02		Unknown-01	15.08	1600	J
03		Unknown-02	15.14	3000	J
04		Unknown-03	15.37	1800	J
05		Unknown-04	15.50	1500	J
06		Unknown-05	15.52	1800	J
07	001576-67-6	Phenanthrene, 3,6-dimethyl-	15.62	2000	NJ
08	000483-87-4	Phenanthrene, 1,7-dimethyl-	15.68	1600	NJ
09					
10					
11					
12					
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29					
30					
	E966796 ²	Total Alkanes	N/A	3200	J

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C45A5

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.08
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36889
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 35 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 6.2 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	8.13	1000	J
02		Unknown-02	10.12	790	J
03		Unknown-03	15.77	670	J
04	000112-84-5	13-Docosenamide, (Z)-	18.10	670	NJ
05		Unknown-04	18.56	780	J
06					
07					
08					
09					
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11					
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19					
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	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. C45A6RE

Lab Name: KAP TECHNOLOGIES, INC.	Contract: EPW05032
Lab Code: KAP Case No.: 40185	Mod. Ref No.: _____ SDG No.: C4598
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: S-3169.09RE
Sample wt/vol: 30.30 (g/mL) G	Lab File ID: F36890
Level: (LOW/MED) LOW	Extraction: (Type) SONC
% Moisture: 39 Decanted: (Y/N) N	Date Received: 06/09/2010
Concentrated Extract Volume: 500 (uL)	Date Extracted: 06/19/2010
Injection Volume: 1.0 (uL)	Date Analyzed: 06/26/2010
GPC Cleanup: (Y/N) Y pH: 6.6	Dilution Factor: 1.0
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	8.12	1000	J
02		Unknown-02	15.14	1100	J
03		Unknown-03	15.43	1000	J
04		Unknown-04	15.53	940	J
05		Unknown-05	15.82	1200	J
06					
07					
08					
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	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45A7

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.10
 Sample wt/vol: 29.90 (g/mL) G Lab File ID: C05882
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 43 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/24/2010
 GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	107426-38-0	Naphtho[2,3-b]norbornadiene	14.78	1100	NJ
02		Unknown-01	14.91	1200	J
03		Unknown-02	15.01	1200	J
04		Unknown-03	15.20	1300	J
05		Unknown-04	15.29	1600	J
06		Unknown-05	17.63	1300	J
07	000112-84-5	13-Docosenamide, (Z)-	17.86	1100	NJ
08					
09					
10					
11					
12					
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	E966796 ²	Total Alkanes	N/A	1600	J

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45A8

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.11
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36892
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 51 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown-01	15.77	1300	J
02	Unknown-02	17.44	990	J
03	Unknown-03	18.10	1100	J
04				
05				
06				
07				
08				
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E966796 ²	Total Alkanes	N/A	2000	J

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45A9RE

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.12RE
Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36910
Level: (LOW/MED) LOW Extraction: (Type) SONC
% Moisture: 3.0 Decanted: (Y/N) N Date Received: 06/09/2010
Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	013798-23-7	Sulfur	12.64	700	NJ
02	000057-10-3	n-Hexadecanoic acid	15.05	690	NJ
03		Unknown-01	15.11	740	J
04		Unknown-02	15.31	750	J
05	1000296-40-5	Benzamide, 4-chloro-N-[2-(4-c	15.37	1000	NJ
06	052251-71-5	Anthracene, 2-ethyl-	15.47	1000	NJ
07	000483-87-4 Unknown	Phenanthrene, 1,7-dimethyl-	15.51	750	NJ
08	000483-87-4 Unknown	Phenanthrene, 1,7-dimethyl-	15.59	1100	NJ
09		Unknown-03	15.63	1000	J
10		Unknown-04	17.83	650	J
11		Unknown-05	18.08	630	J
12		Unknown-06	18.22	1000	J
13		Unknown-07	18.29	1000	J
14		Unknown-08	18.36	700	J
15	000050-32-8	Benzo[a]pyrene	18.66	720	NJ
16		Unknown-09	18.75	1100	J
17		Unknown-10	19.36	740	J
18		Unknown-11	19.69	910	J
19		Unknown-12	19.95	980	J
20	040897-27-6	Benzo[a]cyclopropa[cd]pentale	20.28	1000	NJ
21					
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	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

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1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C45B0

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.13
 Sample wt/vol: 29.90 (g/mL) G Lab File ID: F36894
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 5.0 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	14.91	590	J
02	000613-12-7	Anthracene, 2-methyl-	15.01	770	NJ
03		Unknown-02	15.08	730	J
04		Unknown-03	15.14	1100	J
05		Unknown-04	15.21	780	J
06	000612-94-2	Naphthalene, 2-phenyl-	15.33	1300	NJ
07	000084-65-1	9,10-Anthracenedione	15.37	1000	NJ
08		Unknown-05	15.44	710	J
09		Unknown-06	15.49	640	J
10		Unknown-07	15.53	740	J
11		Unknown-08	15.56	570	J
12	000781-43-1	9,10-Dimethylanthracene	15.62	1100	NJ
13		Unknown-09	15.65	1000	J
14		Unknown-10	15.82	520	J
15	003351-28-8	Chrysene, 1-methyl-	17.69	500	NJ
16		Unknown-11	18.12	590	J
17	000205-99-2	Benz[e]acephenanthrylene	18.70	480	NJ
18		Unknown-12	19.40	530	J
19		Unknown-13	19.77	530	J
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	E966796 ²	Total Alkanes	N/A	490	J

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45B0RE

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.13RE
 Sample wt/vol: 29.90 (g/mL) G Lab File ID: F36911
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 5.0 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	8.10	570	J
02	000057-10-3	n-Hexadecanoic acid	15.05	500	NJ
03		Unknown-02	15.12	580	J
04	000084-65-1	9,10-Anthracenedione	15.34	500	NJ
05		Unknown-03	15.43	540	J
06		Unknown-04	15.63	640	J
07		Unknown-05	15.69	470	J
08		Unknown-06	15.81	730	J
09	000243-17-4	11H-Benzo[b]fluorene	16.33	480	NJ
10		Unknown-07	17.50	680	J
11	000630-02-4	Octacosane	17.65	590	NJ
12		Unknown-08	17.83	820	J
13		Unknown-09	18.07	620	J
14	005353-25-3	Ethanol, 2-(9-octadecenyloxy)	18.23	770	NJ
15	000638-66-4	Octadecanal	19.24	600	NJ
16	000630-04-6	Hentriacontane	19.53	570	NJ
17	007390-81-0	Oxirane, hexadecyl-	20.65	570	NJ
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19					
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30					
	E966796 ²	Total Alkanes	N/A	2000	J

² EPA-designated Registry Number.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C45B1

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.14
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36895
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 4.0 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown-01	5.48	560	J
02	Unknown-02	8.14	630	J
03	Unknown-03	15.14	680	J
04	Unknown-04	15.37	1300	J
05	Unknown-05	15.54	1500	J
06	000781-43-1 9,10-Dimethylanthracene	15.62	630	NJ
07	Unknown-06	15.67	650	J
08	Unknown-07	17.69	580	J
09	Unknown-08	19.40	570	J
10	Unknown-09	19.74	860	J
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E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45B1RE

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3169.14RE
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36912
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 4.0 Decanted: (Y/N) N Date Received: 06/09/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000119-36-8	Methyl Salicylate	8.70	1400	NJ
02		Unknown-01	11.45	500	J
03		Unknown-02	14.70	500	J
04	005129-60-2	Pentadecanoic acid, 14-methyl	14.89	550	NJ
05	000057-10-3	n-Hexadecanoic acid	15.06	1900	NJ
06	000082-38-2	1-(Methylamino)anthraquinone	17.02	780	NJ
07		Unknown-03	17.42	420	J
08		Unknown-04	17.65	410	J
09		Unknown-05	17.74	490	J
10	000112-84-5	13-Docosenamide, (Z)-	18.07	500	NJ
11					
12					
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28					
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30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C45B2

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3178.01
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36906
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 6.0 Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	18.69	840	J
02	007390-81-0	Oxirane, hexadecyl-	19.23	760	NJ
03	055320-06-4	Heneicosane, 11-decyl-	19.51	1200	NJ
04		Unknown-02	19.72	790	J
05		Unknown-03	21.32	690	J
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07					
08					
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30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
 C45B3

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3178.02
 Sample wt/vol: 29.90 (g/mL) G Lab File ID: F36908
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 35 Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000057-10-3	n-Hexadecanoic acid	15.05	1600	NJ
02		Unknown-01	15.11	1000	J
03	052663-58-8	1,1'-Biphenyl, 2,3,4',6-tetra	15.15	960	NJ
04	035465-71-5	2-Phenylnaphthalene	15.30	1200	NJ
05	041464-40-8	1,1'-Biphenyl, 2,2',4,5'-tetr	15.34	1100	NJ
06	000483-87-4	Phenanthrene, 1,7-dimethyl-	15.46	1600	NJ
07		Unknown-02	15.50	2100	J
08	003674-66-6	Phenanthrene, 2,5-dimethyl-	15.59	1700	NJ
09		Unknown-03	15.67	920	J
10		Unknown-04	17.50	1000	J
11	000301-02-0	9-Octadecenamide, (Z)-	18.08	1300	NJ
12	000111-02-4	2,6,10,14,18,22-Tetracosahexa	18.23	1000	NJ
13		Unknown-05	18.29	1200	J
14	000205-99-2	Benz[e]acephenanthrylene	18.65	1000	NJ
15		Unknown-06	18.85	1100	J
16		Unknown-07	19.24	1300	J
17		Unknown-08	19.37	1200	J
18		Unknown-09	19.88	930	J
19		Unknown-10	20.33	1000	J
20		Unknown-11	22.89	1100	J
21					
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	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

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1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
C45B4

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3178.03
 Sample wt/vol: 30.00 (g/mL) G Lab File ID: F36909
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 26 Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	14.81	1200	J
02		Unknown-02	14.98	1100	J
03		Unknown-03	15.05	890	J
04		Unknown-04	15.31	1100	J
05		Unknown-05	15.42	890	J
06		Unknown-06	15.51	2000	J
07	003674-65-5	Phenanthrene, 2,3-dimethyl-	15.59	1800	NJ
08		Unknown-07	15.62	1400	J
09		Unknown-08	15.68	990	J
10		Unknown-09	18.20	1200	J
11		Unknown-10	18.29	1100	J
12		Unknown-11	18.78	1200	J
13		Unknown-12	19.24	1000	J
14		Unknown-13	19.35	1600	J
15		Unknown-14	19.83	1100	J
16		Unknown-15	20.26	1300	J
17		Unknown-16	20.67	840	J
18		Unknown-17	21.60	950	J
19		Unknown-18	22.09	990	J
20					
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30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45B4RE

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3178.03RE
 Sample wt/vol: 30.00 (g/mL) G Lab File ID: F36933
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 26 Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/27/2010
 GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	15.04	950	J
02	006572-60-7	Tricyclo[8.2.2.2(4,7)]hexadec	15.30	1300	NJ
03		Unknown-02	15.33	820	J
04		Unknown-03	15.36	910	J
05	000483-87-4	Phenanthrene, 1,7-dimethyl-	15.50	1700	NJ
06		Unknown-04	15.52	830	J
07	003674-65-5	Phenanthrene, 2,3-dimethyl-	15.58	1500	NJ
08	005737-13-3	Cyclopenta(def)phenanthrenone	15.67	920	NJ
09		Unknown-05	17.49	1300	J
10	002541-69-7	Benz[a]anthracene, 7-methyl-	17.65	840	NJ
11		Unknown-06	17.82	870	J
12		Unknown-07	18.07	1300	J
13		Unknown-08	18.28	1100	J
14		Unknown-09	18.35	970	J
15	000205-99-2	Benz[e]acephenanthrylene	18.64	1200	NJ
16		Unknown-10	18.75	1100	J
17		Unknown-11	19.32	840	J
18		Unknown-12	19.52	940	J
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45B5

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C45B5
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3179.01
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36952
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 5.0 Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/20/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/27/2010
 GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000057-10-3	n-Hexadecanoic acid	15.03	660	NJ
02		Unknown-01	15.10	760	J
03		Unknown-02	15.58	700	J
04	1000155-82-2	Bicyclo[10.8.0]eicosane, cis-	19.23	730	NJ
05					
06					
07					
08					
09					
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30					
	E966796 ²	Total Alkanes	N/A	890	J

² EPA-designated Registry Number.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45B7

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C4598
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3178.05
 Sample wt/vol: 30.20 (g/mL) G Lab File ID: F36904
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 48 Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/19/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/26/2010
 GPC Cleanup: (Y/N) Y pH: 5.7 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000112-84-5	13-Docosenamide, (Z)-	18.06	1600	NJ
02	007683-64-9	Squalene	18.23	950	NJ
03		Unknown-01	19.51	820	J
04		Unknown-02	21.10	940	J
05					
06					
07					
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27					
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29					
30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. C45B8

Lab Name: KAP TECHNOLOGIES, INC.	Contract: EPW05032
Lab Code: KAP	Case No.: 40185
Matrix: (SOIL/SED/WATER) SOIL	Mod. Ref No.: _____
Sample wt/vol: 30.10 (g/mL) G	SDG No.: C4598
Level: (LOW/MED) LOW	Lab Sample ID: S-3178.06
% Moisture: 40	Decanted: (Y/N) N
Concentrated Extract Volume: 500 (uL)	Lab File ID: F36905
Injection Volume: 1.0 (uL)	Extraction: (Type) SONC
GPC Cleanup: (Y/N) Y	pH: 5.0
	Date Received: 06/10/2010
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Date Extracted: 06/19/2010
	Date Analyzed: 06/26/2010
	Dilution Factor: 1.0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000301-02-0	9-Octadecenamide, (Z)-	16.61	480	NJ
02	 	Unknown-01	18.06	910	J
03		Unknown-02	19.51	540	J
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

Su 07/02/10

SOM01.2 (6/2007)

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45B9

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C45B5
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3179.02
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36931
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 6.0 Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/20/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/27/2010
 GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	007683-64-9	Squalene	18.22	670	NJ
02		Unknown-01	20.29	810	J
03	036645-68-8	1,30-Triacontanediol	20.61	700	NJ
04		Unknown-02	21.55	640	J
05					
06					
07					
08					
09					
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	E966796 ²	Total Alkanes	N/A	1100	J

² EPA-designated Registry Number.

1K - FORM I SV-TIC
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45C5

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C45B5
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3183.01
 Sample wt/vol: 30.10 (g/mL) G Lab File ID: F36930
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: 28 Decanted: (Y/N) N Date Received: 06/11/2010
 Concentrated Extract Volume: 500 (uL) Date Extracted: 06/20/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/27/2010
 GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	14.00	670	J
02		Unknown-02	14.11	1000	J
03		Unknown-03	14.59	800	J
04		Unknown-04	14.68	650	J
05		Unknown-05	14.75	2000	J
06		Unknown-06	14.90	700	J
07	000613-12-7	Anthracene, 2-methyl-	14.97	580	NJ
08	000057-10-3	n-Hexadecanoic acid	15.04	830	NJ
09	038419-74-8	2H-3,5a-Epoxy naphth[2,1-b]oxep	15.23	630	NJ
10		Unknown-07	15.38	600	J
11					
12					
13					
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24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

1K - FORM I SV-TIC
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45C3

Field Blank

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
 Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C45B5
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: S-3179.03
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: F36940
 Level: (LOW/MED) LOW Extraction: (Type) CONT
 % Moisture: _____ Decanted: (Y/N) N Date Received: 06/10/2010
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/14/2010
 Injection Volume: 1.0 (uL) Date Analyzed: 06/27/2010
 GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.0
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown 01	10.14	0.2	JB
02	022599-96-8	Cholestan-3-ol, 2-methylene-	18.22	6.5	NJ
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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16					
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30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.

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1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C45C4

Rimate Blank.

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032
Lab Code: KAP Case No.: 40185 Mod. Ref No.: _____ SDG No.: C45B5
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: S-3179.04
Sample wt/vol: 1000 (g/mL) ML Lab File ID: F36920
Level: (LOW/MED) LOW Extraction: (Type) CONT
% Moisture: _____ Decanted: (Y/N) N Date Received: 06/10/2010
Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/14/2010
Injection Volume: 1.0 (uL) Date Analyzed: 06/27/2010
GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.0
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000123-95-5	Octadecanoic acid, butyl ester	16.62	17	NJ
02	000301-02-0	9-Octadecenamide, (Z)-	18.05	21	NJ
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 ²	Total Alkanes	N/A		

² EPA-designated Registry Number.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350

DATE : July 6, 2010
SUBJECT: Region III Data QA Review
FROM: Colleen Walling *Colleen K. Walling*
Region III ESAT RPO (3EA20)
TO: Charlene Creamer
Regional Project Manager (3HS12)

Attached is the inorganic data validation report for the Metro Container Corp. site (Case #: 40185; SDG#: MC4598) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

cc: [REDACTED] (TTEMI)

TO: #0027 TDF: #06098

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

Lockheed Martin IS&GS – Civil
Energy & Environment
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597

DATE: June 30, 2010

SUBJECT: Level IM2 Inorganic Data Validation for Case 40185
SDG: MC4598
Site: Metro Container Corp.

FROM: [REDACTED]
Inorganic Data Reviewer

Through: [REDACTED]
Senior Data Review Chemist

TO: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Case 40185, Sample Delivery Group (SDG) MC4598, consisted of eighteen (18) soil samples, one (1) associated field blank and one (1) associated rinsate blank submitted to ChemTech Consulting Group (CHEM) for total metals analyses. The sample set included one (1) field duplicate pair. Samples were analyzed in accordance with Contract Laboratory Program (CLP) Statement of Work (SOW) ILM05.4 through the Routine Analytical Services (RAS) program.

SUMMARY

Data were validated according to the Region III Modifications to the National Functional Guidelines for Inorganic Data Review, level IM2. Areas of concern with respect to data usability are listed below.

Data in this Case have been impacted by outliers present in the laboratory blanks as well as the matrix spike and the ICP serial dilution analyses. Details for these outliers are discussed under "Minor Problems", specific samples affected are outlined in "Table 1A" and qualified analytical results for all samples are summarized on the Data Summary Forms (DSFs).

MINOR PROBLEMS

The Preparation Blank (PB) had a reported result greater than the Method Detection Limit (MDL) for sodium (Na). Positive results reported for this analyte in all soil samples which are less than five times ($< 5X$) the blank concentration may be biased high and have been qualified "B" on the DSFs.

PBs and/or a Continuing Calibration Blank (CCB) had negative results greater than the absolute values of the MDLs for the analytes listed below. The positive result reported for iron (Fe) in sample MC45C3 which is less than two times ($< 2X$) the absolute value of the blank concentration may be biased low. The "L" qualifier for this outlier in this sample has been superseded by "J" on the DSF. Quantitation limits for these analytes in affected samples may be biased low and have been qualified "UL" on the DSFs.

<u>Matrix</u>	<u>Blank</u>	<u>Affected Samples</u>
Soil	PB	thallium (Tl)
Aqueous	PB CCB	iron (Fe), silver (Ag) vanadium (V)

Percent Differences (%Ds) for the ICP serial dilution analysis were outside the control limit ($>10\%$) for copper (Cu), Fe, magnesium (Mg) and zinc (Zn). Reported positive results regarding these analytes in all soil samples are estimated and have been qualified "J" on the DSFs.

The matrix spike recovery was low ($<75\%$ but $> 30\%$) for antimony (Sb). The low recovery may be attributed to matrix interferences or analyte lost during the digestion process. Reported results for this analyte in affected soil samples may be biased low and have been qualified "L" on the DSFs unless superseded by "J". Quantitation limit for this analyte in affected soil samples may be biased low and have been qualified "UL" on the DSFs.

Matrix spike recoveries were high ($>125\%$) for manganese (Mn) and Zn. Positive results reported for these analytes in all soil samples may be biased high and have been qualified "K" unless superseded by "J" on the DSFs.

NOTES

Positive results which are less than the Contract Required Quantitation Limits (CRQLs) but greater than MDLs have been qualified "J" on the DSFs unless superseded by "B".

The soil Laboratory Control Sample (LCS) reported a result above the MDL for potassium (K). Therefore, the LCS result for this analyte was reported as a non-detect on Form 7. The lower acceptance limit for this analyte was also below the laboratory MDL which makes the recovery of this analyte within the control limit. No data were qualified based on LCS recovery.

The post digestion spike recovery was low (<75% but > 30%) for Zn. No data were qualified based on this outlier.

Sample MC45A8 was used to perform QC (matrix spike, laboratory duplicate and serial dilution analyses) for the soil samples only because the two (2) aqueous samples were field and rinsate blanks and do not require laboratory QC.

Reported results for field duplicate pair MC45A3/MC45A6 were within 35% Relative Percent Difference (RPD), $\pm 2XCRQL$ for all analytes except for barium (Ba), chromium (Cr), Cu, lead (Pb), Mn, mercury (Hg) and Zn.

Data for Case 40185, SDG MC4598, were reviewed in accordance with Region III Modifications to the National Functional Guidelines for Evaluating Inorganic Analyses, April 1993.

ATTACHMENTS

INFORMATION REGARDING REPORT CONTENT

TABLES 1A	SUMMARY OF QUALIFIERS ON DATA SUMMARY FORMS AFTER DATA VALIDATION
TABLE 1B	CODES USED IN COMMENTS COLUMN OF TABLES 1A
APPENDIX A	GLOSSARY OF DATA QUALIFIER CODES
APPENDIX B	DATA SUMMARY FORM(S)
APPENDIX C	CHAIN OF CUSTODY RECORD(S)
APPENDIX D	LABORATORY CASE NARRATIVE(S)

DCN: 40185_MC4598.IM2

**TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY
FORM AFTER DATA VALIDATION**

Case 40185, SDG MC4598

<u>ANALYTE</u>	<u>SAMPLES AFFECTED</u>	<u>POSITIVE VALUES</u>	<u>NON-DETECTED VALUES</u>	<u>BIAS</u>	<u>COMMENTS*</u>
Sb	MC45A1, MC45A6, MC45B6, MC45B7, MC45B8, MC4598	L	UL	Low	MSL (74%)
	All Soil Samples Except MC45A1, MC45A6, MC45B6, MC45B7, MC45B8, MC4598	J			> MDL < CRQL MSL (74%)
Cu	All Soil Samples	J			SD (13%)
Fe	All Soil Samples	J			SD (11%)
	MC45C4		UL	Low	PBN (-15.504 J ug/L)
	MC45C3	J			> MDL < CRQL PBN (-15.504 J ug/L)
Mg	All Soil Samples	J			SD (11%)
Mn	All Soil Samples	K		High	MSH (226%)
Ag	MC45C3, MC45C4		UL	Low	PBN (- 0.452 J ug/L)
Na	All Soil Samples	B		High	PB (139.533 J mg/Kg)
Tl	All Soil Samples		UL	Low	PBN (- 0.373 J mg/Kg)
V	MC45C3, MC45C4		UL	Low	CBN (- 0.365 J ug/L)
Zn	All Soil Samples	J			SD (11%) MSH (139%)

* See explanation of comments in Table 1B

TABLE 1B
CODES USED IN COMMENTS COLUMN

MSL	=	The matrix spike recovery was low (>30 % but < 75%) [the %recovery is in parenthesis]. Reported results and quantitation limits may be biased low.
>MDL <CRQL	=	Reported results are between MDL and CRQL and are considered estimated.
SD	=	Percent differences (%Ds) for the ICP serial dilution analysis were outside the control limit (>10%) [the %D are in parenthesis]. Positive results are estimated.
PBN	=	Preparation blanks had reported negative results greater than absolute values of MDLs [result are in parenthesis]. Reported results which are less than two times (< 2X) the absolute value of the blank and quantitation limits may be biased low.
MSH	=	Matrix spike recoveries were high (>125%) [%recoveries are in parenthesis]. Reported results may be biased high.
PB	=	The preparation blank had reported results greater than the MDLs [results are in parenthesis]. Reported results which are less than five times (<5X) the blank concentration may be biased high.
CBN	=	The continuing calibration blank had a reported negative result greater than absolute value of MDL [the result is in parenthesis]. Quantitation limits may be biased low.

APPENDIX A

Glossary of Qualifier Codes

GLOSSARY OF DATA QUALIFIER CODES (INORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of analytes):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present.
Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte Present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low.
Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

APPENDIX B
Data Summary Forms

DATA SUMMARY FORM: INORGANIC

Case #: 40185

SDG : MC4598

Number of Soil Samples : 18

Site :

METRO CONTAINER CORP

Number of Water Samples : 2

Lab. :

CHEM

Sample Number :		MC45A0	MC45A1	MC45A2	MC45A3	MC45A4					
Sampling Location :		MC-SD-05	MC-SD-06	MC-SD-07	MC-SD-10	MC-SD-11					
Field QC :					Dup. of MC45A6						
Matrix :		Soil	Soil	Soil	Soil	Soil					
Units :		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg					
Date Sampled :		6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010					
Time Sampled :		12:35	12:05	11:40	16:16	16:08					
%Solids :		76.7	73.5	79.3	58.3	49.0					
Dilution Factor :		1.0	1.0	1.0	1.0	1.0					
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
ALUMINUM	20	7480		5140		4030		8860		11000	
ANTIMONY	6	0.57	J		UL	0.29	J	0.55	J	1.3	J
ARSENIC	1	9.2		2.7		3.0		7.6		13.1	
BARIUM	20	3750		66.7		412		147		203	
BERYLLIUM	0.5	2.1		0.53	J	0.60		0.60		0.87	
CADMIUM	0.5	2.7		0.20	J	0.67		1.5		2.1	
CALCIUM	500	21100		863		9940		3180		3220	
CHROMIUM	1	239		17.5		50.2		37.8		49.1	
COBALT	5	7.8		7.6		3.9	J	8.6		11.8	
COPPER	2.5	1080	J	9.3	J	41.9	J	126	J	137	J
IRON	10	20100	J	8630	J	13900	J	17300	J	20600	J
*LEAD	1	283		18.3		56.6		106		153	
MAGNESIUM	500	4800	J	1540	J	5440	J	2780	J	3480	J
MANGANESE	1.5	653	K	76.0	K	260	K	461	K	604	K
MERCURY	0.1	0.81		0.082	J	0.16		2.0		1.2	
NICKEL	4	54.7		30.8		16.2		31.0		38.2	
POTASSIUM	500	962		584		729		724		1080	
SELENIUM	3.5	3.4		1.5	J	2.2	J	2.6	J	4.3	J
SILVER	1	0.68	J	0.12	J	0.22	J	1.5		1.2	J
SODIUM	500	500	B	219	B	171	B	244	B	290	B
THALLIUM	2.5		UL		UL		UL		UL		UL
VANADIUM	5	62.5		17.8		19.7		42.5		56.1	
ZINC	6	546	J	33.3	J	143	J	255	J	355	J

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (%Solids/ 100)

Revised 09/99

DATA SUMMARY FORM: INORGANIC

Case #: 40185 SDG : MC4598
 Site : METRO CONTAINER CORP
 Lab. : CHEM

Sample Number :		MC45A5	MC45A6	MC45A7	MC45A8	MC45A9					
Sampling Location :		MC-SD-12	MC-SD-13	MC-SD-15	MC-SD-16	MC-SS-01					
Field QC :			Dup. of MC45A3								
Matrix :		Soil	Soil	Soil	Soil	Soil					
Units :		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg					
Date Sampled :		6/7/2010	6/7/2010	6/7/2010	6/7/2010	6/7/2010					
Time Sampled :		16:00	16:19	16:00	16:30	11:20					
%Solids :		64.2	53.5	72.0	48.3	96.1					
Dilution Factor :		1.0	1.0	1.0	1.0	1.0					
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	20	12100		11900		5500		6940		6640	
ANTIMONY	6	0.33	J		UL	0.64	J	0.33	J	4.1	J
ARSENIC	1	4.6		10.1		5.6		6.5		3.7	
BARIUM	20	104		94.1		66.5		95.4		339	
BERYLLIUM	0.5	0.77		0.84		0.36	J	0.66	J	1.5	
CADMIUM	0.5	0.81		0.55	J	0.86		0.061	J	13.9	
CALCIUM	500	2020		2520		1890		3010		10900	
CHROMIUM	1	35.2		67.8		17.0		27.2		143	
COBALT	5	11.1		10.4		5.4	J	8.3	J	15.3	
COPPER	2.5	32.2	J	31.2	J	54.1	J	33.3	J	167	J
IRON	10	25900	J	18300	J	9900	J	16500	J	26800	J
*LEAD	1	32.8		54.7		49.6		39.8		665	
MAGNESIUM	500	4260	J	3580	J	2050	J	3040	J	5290	J
MANGANESE	1.5	390	K	295	K	278	K	732	K	377	K
MERCURY	0.1			0.49		0.21		0.21	J	2.6	
NICKEL	4	23.3		22.9		11.1		16.4		33.5	
POTASSIUM	500	803		880		391	J	918	J	1810	
SELENIUM	3.5	3.5	J	3.1	J	1.9	J	2.7	J	3.9	
SILVER	1	0.42	J	0.25	J	0.39	J	0.59	J	1.6	
SODIUM	500	301	B	321	B	221	B	299	B	238	B
THALLIUM	2.5		UL		UL		UL		UL		UL
VANADIUM	5	35.4		31.3		12.2		20.5		26.7	
ZINC	6	112	J	97.7	J	187	J	179	J	1220	J

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (%Solids/ 100)

Revised 09/99

DATA SUMMARY FORM: INORGANIC

Case #: 40185 SDG : MC4598
 Site : METRO CONTAINER CORP
 Lab. : CHEM

Sample Number :		MC45B0	MC45B1	MC45B6	MC45B7	MC45B8					
Sampling Location :		MC-SS-02	MC-SS-03	MC-SD-17	MC-SD-18	MC-SD-19					
Field QC :											
Matrix :		Soil	Soil	Soil	Soil	Soil					
Units :		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg					
Date Sampled :		6/7/2010	6/7/2010	6/8/2010	6/8/2010	6/8/2010					
Time Sampled :		12:02	12:40	16:24	16:14	16:02					
%Solids :		93.9	94.9	56.5	51.7	60.5					
Dilution Factor :		1.0	1.0	1.0	1.0	1.0					
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
ALUMINUM	20	6100		5590		10800		14600		12800	
ANTIMONY	6	2.6	J	0.87	J		UL		UL		UL
ARSENIC	1	5.1		6.9		5.4		6.4		5.9	
BARIUM	20	210		140		138		104		103	
BERYLLIUM	0.5	1.0		0.36	J	0.98		0.82	J	0.81	
CADMIUM	0.5	7.3		3.4		0.54	J	0.62	J	0.49	J
CALCIUM	500	9460		9390		2430		2240		1840	
CHROMIUM	1	184		64.4		31.8		41.0		36.5	
COBALT	5	11.3		7.0		8.8		11.3		9.7	
COPPER	2.5	114	J	52.8	J	18.2	J	9.1	J	8.8	J
IRON	10	25600	J	20600	J	17100	J	24000	J	18000	J
LEAD	1	445		191		20.4		11.4		10.6	
MAGNESIUM	500	5260	J	4720	J	3640	J	5750	J	4270	J
MANGANESE	1.5	481	K	294	K	331	K	359	K	223	K
MERCURY	0.1	1.6		0.90							
NICKEL	4	28.0		19.3		20.5		24.8		22.6	
POTASSIUM	500	1360		1130		1040		1480		1120	
SELENIUM	3.5	3.4		3.3		3.0	J	4.1	J	3.0	J
SILVER	1	1.1		0.57	J	0.21	J	0.33	J	0.17	J
SODIUM	500	193	B	185	B	292	B	386	B	325	B
THALLIUM	2.5		UL		UL		UL		UL		UL
VANADIUM	5	35.8		28.2		28.7		37.1		33.8	
ZINC	6	803	J	626	J	108	J	66.2	J	55.8	J

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (%Solids/ 100)

Revised 09/99

DATA SUMMARY FORM: INORGANIC

Case #: 40185 SDG : MC4598
 Site : METRO CONTAINER CORP
 Lab. : CHEM

Sample Number :		MC45B9		MC4598		MC4599					
Sampling Location :		MC-SS-05		MC-SB-02		MC-SB-03					
Field QC :											
Matrix :		Soil		Soil		Soil					
Units :		mg/Kg		mg/Kg		mg/Kg					
Date Sampled :		6/8/2010		6/7/2010		6/7/2010					
Time Sampled :		17:24		12:11		12:48					
%Solids :		93.8		92.7		93.6					
Dilution Factor :		1.0		1.0		1.0					
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	20	7980		6340		6130					
ANTIMONY	6	0.43	J	5.7	L	0.93	J				
ARSENIC	1	8.6		3.0		7.2					
BARIUM	20	118		366		144					
BERYLLIUM	0.5	0.49		1.5		0.65					
CADMIUM	0.5	0.82		18.2		3.1					
CALCIUM	500	4610		17000		16000					
CHROMIUM	1	24.6		184		53.5					
COBALT	5	7.3		17.3		7.2					
COPPER	2.5	33.3	J	158	J	56.1	J				
IRON	10	14000	J	23800	J	19700	J				
*LEAD	1	158		851		183					
MAGNESIUM	500	3200	J	8320	J	8250	J				
MANGANESE	1.5	401	K	312	K	273	K				
MERCURY	0.1	0.75		3.1		0.89					
NICKEL	4	17.5		29.9		19.6					
POTASSIUM	500	1250		1680		990					
SELENIUM	3.5	2.2	J	3.5		2.6	J				
SILVER	1	0.30	J	2.0		0.43	J				
SODIUM	500	103	B	274	B	189	B				
THALLIUM	2.5		UL		UL		UL				
VANADIUM	5	33.4		24.7		28.4					
ZINC	6	153	J	1160	J	543	J				

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (%Solids/ 100)

Revised 09/99

DATA SUMMARY FORM: INORGANIC

Case #: 40185 SDG : MC4598
 Site : METRO CONTAINER CORP
 Lab : CHEM

Sample Number :	MC45C3	MC45C4									
Sampling Location :	MC-FB-01	MC-RB-01									
Field QC :	Field Blank	Rinsate Blank									
Matrix :	Water	Water									
Units :	ug/L	ug/L									
Date Sampled :	6/8/2010	6/8/2010									
Time Sampled :	13:30	17:41									
Dilution Factor :	1.0	1.0									
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	6.6	J								
ANTIMONY	60										
*ARSENIC	10										
BARIUM	200										
BERYLLIUM	5										
*CADMIUM	5										
CALCIUM	5000										
*CHROMIUM	10										
COBALT	50										
COPPER	25										
IRON	100	22.3	J		UL						
*LEAD	10										
MAGNESIUM	5000										
MANGANESE	15										
MERCURY	0.2										
*NICKEL	40	0.46	J								
POTASSIUM	5000										
SELENIUM	35										
SILVER	10		UL		UL						
SODIUM	5000										
THALLIUM	25										
VANADIUM	50		UL		UL						
ZINC	60	3.4	J								

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
 To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

APPENDIX C

Chain of Custody (COC) Records



USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 40185 **R**
 DAS No:

Region: 3	Date Shipped: 6/8/2010	Chain of Custody Record		Sampler Signature:
Project Code:	Carrier Name: FedEx		(Date / Time)	Received By
Account Code:	Airbill: 8731 0479 8151		4/8/10 1500	(Date / Time)
CERCLIS ID: PAD044545895	Shipped to: ChemTech Consulting Group (CHEM) 284 Sheffield Street Mountainside NJ 07092 (908) 789-8900	2		
Spill ID:		3		
Site Name/State: Metro Container Corp <i>Project/PA</i>		4		
Project Leader:				
Action: Expanded Site Investigation/RI				
Sampling Co: Tetra Tech				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNOVER	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC4598	Soil (>12")	M/G	AES&Hg - S (14)	437 (Ice Only) (1)	MC-SB-02	S: 6/7/2010	12:11	C4598	-
MC4599	Soil (>12")	M/G	AES&Hg - S (14)	439 (Ice Only) (1)	MC-SB-03	S: 6/7/2010	12:48	C4599	-
MC45A0	Sediment/	M/G	AES&Hg - S (14)	441 (Ice Only) (1)	MC-SD-05	S: 6/7/2010	12:35	C45A0	-
MC45A1	Sediment/	M/G	AES&Hg - S (14)	443 (Ice Only) (1)	MC-SD-06	S: 6/7/2010	12:05	C45A1	-
MC45A2	Sediment/	M/G	AES&Hg - S (14)	445 (Ice Only) (1)	MC-SD-07	S: 6/7/2010	11:40	C45A2	-
MC45A3	Sediment/	M/G	AES&Hg - S (14)	447 (Ice Only) (1)	MC-SD-10	S: 6/7/2010	16:16	C45A3	-
MC45A4	Sediment/	M/G	AES&Hg - S (14)	449 (Ice Only) (1)	MC-SD-11	S: 6/7/2010	16:08	C45A4	-
MC45A5	Sediment/	M/G	AES&Hg - S (14)	451 (Ice Only) (1)	MC-SD-12	S: 6/7/2010	16:00	C45A5	-
MC45A6	Sediment/	M/G	AES&Hg - S (14)	453 (Ice Only) (1)	MC-SD-13	S: 6/7/2010	16:19	C45A6	Duplicate of MC-SD-10
MC45A7	Sediment/	M/G	AES&Hg - S (14)	455 (Ice Only) (1)	MC-SD-15	S: 6/7/2010	16:00	C45A7	-
MC45A8	Sediment/	M/G	AES&Hg - S (14)	457 (Ice Only) (1)	MC-SD-16	S: 6/7/2010	16:30	C45A8	-

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: MC45A8	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: AES&Hg - S = CLP TAL Metals - Soil - ICP/AES & Mea	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-242195023-060810-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
 Send Copy to: Sample Management Office, Attn: [Redacted], CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

REGION COPY

EPA USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 40185 **R**
 DAS No:

Region: 3	Date Shipped: 6/8/2010	Chain of Custody Record	Sampler Signature:
Project Code:	Carrier Name: FedEx		Relinquished By (Date / Time)
Account Code:	Airbill: 8731 0479 8151		
CERCLIS ID: PAD044545895	Shipped to: ChemTech Consulting Group (CHEM) 284 Sheffield Street Mountainside NJ 07092 (908) 789-8900	[Redacted] 6/8/10 17:00	
Spill ID:		2	
Site Name/State: Metro Container Corp [Redacted] PA		3	
Project Leader:		4	
Action: Expanded Site Investigation/RI			
Sampling Co: Tetra Tech			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNOVER	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC45A9	Soil (0"-12") [Redacted]	M/G	AES&Hg - S (14)	459 (Ice Only) (1)	MC-SS-01	S: 6/7/2010	11:20	C45A9	-
MC45B0	Soil (0"-12") [Redacted]	M/G	AES&Hg - S (14)	461 (Ice Only) (1)	MC-SS-02	S: 6/7/2010	12:02	C45B0	-
MC45B1	Soil (0"-12") [Redacted]	M/G	AES&Hg - S (14)	463 (Ice Only) (1)	MC-SS-03	S: 6/7/2010	12:40	C45B1	-

Shipment for Case Complete? <input type="checkbox"/> N	Sample(s) to be used for laboratory QC: MC45A8	Additional Sampler Signature(s): [Redacted]	Chain of Custody Seal Number:
Analysis Key: AES&Hg - S = CLP TAL Metals - Soil - ICP/AES & Mer	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? <input type="checkbox"/>

TR Number: **3-242195023-060810-0002**

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
 Send Copy to: Sample Management Office, Attn: [Redacted], CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602



USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 40185
 DAS No: [REDACTED] **R**

Region: 3	Date Shipped: 6/9/2010	Chain of Custody Record		Sampler Signature: [REDACTED]	
Project Code:	Carrier Name: FedEx	Relinquished By	(Date / Time)	Received By	(Date / Time)
Account Code:	Airbill: 8731 0479 8130	1 [REDACTED]	6-9-10 1500		
CERCLIS ID: PAD044545895	Shipped to: ChemTech Consulting Group (CHEM) 284 Sheffield Steet Mountainside NJ 07092 (908) 789-8900	2			
Spill ID:		3			
Site Name/State: Metro Container Corp/PA		4			
Project Leader: [REDACTED]					
Action: Expanded Site Investigation/RI					
Sampling Co: Tetra Tech					

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC45B6	Sediment/ [REDACTED]	M/G	AES&Hg - S (14)	497 (Ice Only) (1)	MC-SD-17	S: 6/8/2010	16:24	C45B6	-
MC45B7	Sediment/ [REDACTED]	M/G	AES&Hg - S (14)	499 (Ice Only) (1)	MC-SD-18	S: 6/8/2010	16:14	C45B7	-
MC45B8	Sediment/ [REDACTED]	M/G	AES&Hg - S (14)	501 (Ice Only) (1)	MC-SD-19	S: 6/8/2010	16:02	C45B8	-
MC45B9	Soil (0"-12")/ [REDACTED]	M/G	AES&Hg - S (14)	503 (Ice Only) (1)	MC-SS-05	S: 6/8/2010	17:24	C45B9	-
MC45C3	Field QC/ [REDACTED]	M/G	W-TM&Hg (14)	517 (HNO3) (1)	MC-FB-01	S: 6/8/2010	13:30	C45C3	Field Blank
MC45C4	Field QC/ [REDACTED]	M/G	W-TM&Hg (14)	522 (HNO3) (1)	MC-RB-01	S: 6/8/2010	17:41	C45C4	Rinsate

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment iced? _____
AES&Hg - S = CLP TAL Metals - Soil - ICP/AES & Mer. W-TM&Hg = CLP Water ICP/AES TAL Metals & Mercury			

TR Number: 3-242195023-060910-0001

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
 Send Copy to: Sample Management Office, Attn: [REDACTED], CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

U.S EPA Region III Analytical Request Form

SJS 5-21-10

OASQA USE ONLY			
Control #	CT4996		
DAS#		NSF #	
PES #		Analytical TAT	14 days

40185

Date: 5/17/2010		Site Activity: Expanded Site Inspection	
Site Name: Metro Container <i>Corp.</i>		Street Address: 2nd And Price Streets	
City: Trainer	State: PA	Latitude: 39.82642	Longitude: 75.39903
Program: Superfund	Acct. #: 2010 T03N302DD2C032H QB 00	CERCLIS #: PAD044545895	
Site ID:	Spill ID: 032H	Operable Unit:	
Site Specific QA Plan Submitted: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		Title: START3 QAPP	Date Approved: November 2006
EPA Project Leader: Charlene Creamer	Phone#: 215-814-2145	Cell Phone #:	E-mail: creamer.charlene@epa.gov
Request Preparer: [REDACTED]	Phone#: [REDACTED]	Cell Phone #: [REDACTED]	E-mail: [REDACTED]
Request Preparer: [REDACTED]	Phone#: [REDACTED]	Cell Phone #: [REDACTED]	E-mail: [REDACTED]
Contractor: Tetra Tech EM Inc		EPA CO/PO: [REDACTED]	
#Samples 37	Matrix: Soil	Parameter: SVOC, PCB <i>KAD</i>	Method: CLP SOW SOM01.2 <i>32430,31</i>
#Samples 37	Matrix: Soil	Parameter: TAL Metals + Hg <i>CHEM</i>	Method: CLP SOW ILM05.4 ICP-AES <i>32432</i>
#Samples 2	Matrix: Blank	Parameter: SVOC, PCB	Method: CLP SOW SOM01.2
#Samples 2	Matrix: Blank	Parameter: TAL Metals + Hg	Method: CLP SOW ILM05.4 ICP-AES
Ship Date From: 6/7/2010		Ship Date To: 6/10/2010	Org. Validation Level M3
Inorg. Validation Level IM2		Unvalidated Data Requested: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If Yes, TAT Needed: <input checked="" type="checkbox"/> 14days <input type="checkbox"/> 7days <input type="checkbox"/> 72hrs <input type="checkbox"/> 48hrs <input type="checkbox"/> 24hrs <input type="checkbox"/> Other (Specify) <i>by ESAT</i>	
Validated Data Package Due: <input type="checkbox"/> 42 days <input checked="" type="checkbox"/> 30 days <input type="checkbox"/> 21days <input type="checkbox"/> 14 days <input type="checkbox"/> Other (Specify) <i>14/16</i>		Electronic Data Deliverables Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (EDDs will be provided in Region 3 EDD Format)	
Special Instructions: Required detection limits attached.			

APPENDIX D

Laboratory Case Narrative

USEPA - CLP
COVER PAGE

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW08065

Lab Code: CHEM Case No.: 40185 NRAS No.: _____ SDG No.: MC4598

SOW No.: ILM05.4

EPA Sample No.	Lab Sample ID
<u>MC4598</u>	<u>B2630-01</u>
<u>MC4599</u>	<u>B2630-02</u>
<u>MC45A0</u>	<u>B2630-03</u>
<u>MC45A1</u>	<u>B2630-04</u>
<u>MC45A2</u>	<u>B2630-05</u>
<u>MC45A3</u>	<u>B2630-06</u>
<u>MC45A4</u>	<u>B2630-07</u>
<u>MC45A5</u>	<u>B2630-08</u>
<u>MC45A6</u>	<u>B2630-09</u>
<u>MC45A7</u>	<u>B2630-10</u>
<u>MC45A8</u>	<u>B2630-11</u>
<u>MC45A8D</u>	<u>B2630-12</u>
<u>MC45A8S</u>	<u>B2630-13</u>
<u>MC45A9</u>	<u>B2630-14</u>
<u>MC45B0</u>	<u>B2630-15</u>
<u>MC45B1</u>	<u>B2630-16</u>
<u>MC45B6</u>	<u>B2630-17</u>
<u>MC45B7</u>	<u>B2630-18</u>
<u>MC45B8</u>	<u>B2630-19</u>
<u>MC45B9</u>	<u>B2630-20</u>
<u>MC45C3</u>	<u>B2630-21</u>
<u>MC45C4</u>	<u>B2630-22</u>

	ICP-AES	ICP-MS
Were ICP-AES and ICP-MS interelement corrections applied?	(Yes/No) <u>YES</u>	_____
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No) <u>YES</u>	_____
If yes, were raw data generated before application of background corrections?	(Yes/No) <u>NO</u>	_____

Comments:

THE "E" QUALIFIERS ON FORM I AND VIII FOR COPPER, IRON, MAGNESIUM AND ZINC INDICATE CHEMICAL OR PHYSICAL INTERFERENCE EFFECTS, WHICH WERE SUSPECTED DURING THOSE ELEMENTS' ANALYSES ONLY.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: 6/22/10

Title: DOCUMENT CONTROL OFFICER

CHEMTECH
284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # MC4598
CASE # 40185
CONTRACT # EPW08065
LAB NAME: CHEMTECH CONSULTING GROUP
LAB CODE: CHEM
CHEMTECH PROJECT # B2630

A. Number of Samples and Date of Receipt

18 Soil & 2 Water Samples were delivered to the laboratory intact on 06/09/10 & 06/10/10.

B. Parameters

Test requested for Metals CLP Full & Hg ,

C. Cooler Temp

Indicator Bottle: Presence/Absence
Cooler: 4°C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

E. Corrective Action taken for above:

F. Analytical Techniques:

All analyses were based on CLP Methodology by method ILM05.4

G. Calculation:

Calculation example for ICP-AES Soil Sample:

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):

Results reported in Mg/Kg = (Result in mg/L or ppm for ICP-AES) X 1000 X Fraction of % Solid (100/ % Solid) X Dilution Factor (if any) X Fraction of Sample Amount Taken in ICP-Soil Prep.

Example of Fraction of Sample Amount Taken in ICP-AES Soil Prep = 1/10 (1.0 X10 or 0.50 X

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284 Sheffield Street

Mountainside, NJ 07092

20)

(if 1.0 g of sample taken during Digestion and the Final Volume was made to 100 ml or 0.5 g to Final Volume 50ml)

Or

Example of Fraction of Sample Amount Taken in ICP-AES Soil Prep = $1/10.2$ (1.02×10 or 0.51×20)

(if 1.02 g of sample taken during Digestion and the Final Volume was made to 100 ml or 0.51 g to Final Volume 50ml)

Etc.

Calculation example for ICP-AES Water Sample:

Results reported in Ug/L = Results in ppm X 1000 X Dilution Factor (if any) X Fraction of Sample Amount Taken in ICP Water- Prep

Fraction of Sample Amount Taken in ICP Water- Prep = $100/100$ or $50/50 = 1$

(if 100 ml Initial Volume taken and Final Volume was made to 100 ml or 50 ml Initial Volume and Final Volume made to 50 ml in ICP-AES Water Digestion procedure)

Calculation example for Hg Soil Sample:

Conversion of Results from ppb to mg/kg (Dry Weight Basis):

Results reported in Mg/Kg = (Result in ppb for Hg) X Fraction of % Solid ($100/\%$ Solid) X Dilution Factor (if any) X Fraction of Sample Amount Taken in Prep.

Example of Fraction of Sample Amount Taken in Hg Soil Prep = $1/2$ (0.2×10)

(if 0.2 g of sample taken during Digestion and the Final Volume was made to 100 ml)

Or

Example of Fraction of Sample Amount Taken in Hg Soil Prep = $1/2.1$ (0.21×10)

(if 0.21 g of sample taken during Digestion and the Final Volume was made to 100 ml)

Etc.

Calculation example for Hg Water Sample:

Results reported in Ug/L = Results in ppb X Dilution Factor (if any) X Fraction of Sample Amount Taken

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Mountainside, NJ 07092

in Water Hg-Prep.

Fraction of Sample Amount Taken in Water Hg-Prep = $100/100 = 1$
(if 100 ml Initial Volume taken and made it to Final Volume as 100 ml)

H. QA/ QC

Calibrations met requirements. Interference check met requirements. Blank analyses did not indicate any presence of contamination. Laboratory Control sample was within control limits. Spike sample did meet requirements except for Antimony, Manganese & Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Copper, Iron, Magnesium, & Zinc.

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature



Name:



Date

6/22/10

Title: Document Control Officer

CHEMTECH

PERCENT SOLIDS

ANALYST: [REDACTED]

QC: LB50267

B2630

DATE: 06/11/10

Lab ID	Client ID	Dish #	Dish Weight (g)	Dish Wt. + Sample (g)	Dish Wt. + Dry Sample (g)	% Solids
B2630-01	MC4598	1	1.18	9.02	8.45	92.7
B2630-02	MC4599	2	1.16	9.09	8.58	93.6
B2630-03	MC45A0	3	1.2	9.06	7.23	76.7
B2630-04	MC45A1	4	1.17	9.03	6.95	73.5
B2630-05	MC45A2	5	1.19	9.06	7.43	79.3
B2630-06	MC45A3	6	1.18	9.05	5.77	58.3
B2630-07	MC45A4	7	1.17	9.04	5.03	49.0
B2630-08	MC45A5	8	1.18	9.06	6.24	64.2
B2630-09	MC45A6	9	1.17	9.08	5.4	53.5
B2630-10	MC45A7	10	1.16	9.02	6.82	72.0
B2630-11	MC45A8	11	1.16	9	4.95	48.3
B2630-12	MC45A8D	12	1.18	8.99	4.94	48.1
B2630-13	MC45A8S	13	NR	NR	NR	NR
B2630-14	MC45A9	14	1.15	9.08	8.77	96.1
B2630-15	MC45B0	15	1.15	9.07	8.59	93.9
B2630-16	MC45B1	16	1.16	9.04	8.64	94.9
B2630-17	MC45B6	17	1.19	9.08	5.65	56.5
B2630-18	MC45B7	18	1.17	9.08	5.26	51.7
B2630-19	MC45B8	19	1.17	9	5.91	60.5
B2630-20	MC45B9	20	1.18	9.04	8.55	93.8
BLANK	DISH	B1	1.17	1.17	1.17	0.0

OVEN TEMP: 106°C
TIME IN: 06/10/10 18:00
TIME OUT: _____

OVEN TEMP: 106°C
TIME OUT: 06/11/10 9:30 AM

467

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350

DATE : July 6, 2010
SUBJECT: Region III Data QA Review
FROM: Colleen Walling *Colleen K. Walling*
Region III ESAT RPO (3EA20)
TO: Charlene Creamer
Regional Project Manager (3HS12)

Attached is the inorganic data validation report for the Metro Container Corp. site (Case #: 40185; SDG#: MC45B2) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

cc: [REDACTED]

TO: #0027 TDF: #06099

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

Lockheed Martin IS&GS – Civil
Energy & Environment
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597



DATE: July 1, 2010

SUBJECT: Inorganic Data Validation (IM2 Level)
Case: 40185
SDG: MC45B2
Site: Metro Container Corporation

FROM: [REDACTED]
Inorganic Data Reviewer
[REDACTED]
Senior Oversight Chemist

TO: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Case 40185, Sample Delivery Group (SDG) MC45B2, consisted of five (5) soil samples analyzed for total metals by Chemtech Consulting Group (CHEM). The sample set contained no field Quality Control (QC) samples. Samples were analyzed in accordance with Contract Laboratory Program (CLP) Statement of Work (SOW) ILM05.4 through the Routine Analytical Services (RAS) program.

SUMMARY

Data were validated according to Region III Modifications to the National Functional Guidelines for Inorganic Data Review, Level IM2. Areas of concern with respect to data usability are listed below.

Field (MC45C3) and rinsate (MC45C4) blanks associated with the samples in this SDG were analyzed under SDG MC4598. No data were impacted by the results of these blanks. Results for these blanks are included in Appendix C.

Data in this case have been impacted by outliers present in the laboratory blanks as well as the matrix spike and ICP serial dilution analyses. Details of these outliers are discussed under "Minor Problems", specific samples affected are outlined in "Table 1A" and qualified analytical results for all samples are summarized on a single Data Summary Form (DSF).

MINOR PROBLEMS

A continuing calibration blank (CCB) had a reported result greater than the Method Detection Limit (MDL) for thallium (Tl). Positive results for this analyte which are less than five times (<5X) the blank concentration may be biased high and have been qualified "B" on the DSF.

The matrix spike recovery was high (>125%) for arsenic (As). Positive results for this analyte in all samples may be biased high. The "K" qualifier for this outlier has been superseded by "J" on the DSF.

The matrix spike recovery was low (<75% but >30%) for selenium (Se). The low recovery may be attributed to matrix interferences or analyte lost during the digestion process. Positive results for this analyte in all samples may be biased low and have been qualified "L" on the DSF unless superseded by "J".

Percent differences (%Ds) in the ICP serial dilution analysis were outside the control limit (>10%) for As, iron (Fe) and lead (Pb). Positive results for these analytes in all samples are estimated due to possible matrix interferences and have been qualified "J" on the DSF.

NOTES

Reported results between MDLs and Contract Required Quantitation Limits (CRQLs) were qualified "J" on the DSFs unless superseded by "B".

The CRQL check standard recovery in CRI04 was high (>130%) for As. Therefore, the laboratory reanalyzed the sample associated with this CRQL check standard (MC45B5A) for As in a separate analytical run. All results were inside control limits; therefore, no data were qualified based on this finding.

Relative percent differences (RPDs) in the laboratory duplicate analysis were outside contractual control limits (20% RPD, \pm CRQL) for cobalt (Co) and manganese (Mn). However, RPDs for these analytes were within Region 3 established control limits (35% RPD, \pm 2XCRQL) for soil analysis. No data were qualified for these analytes based on laboratory duplicate imprecision.

The laboratory reported that Hg was outside contractual control limits for the laboratory duplicate analysis. However, the duplicate comparison was within control limits when taking percent solids into account. Therefore, the reviewer removed the "*" qualifier flag from the Form Is and Form VI.

The solid laboratory control sample (LCS) result was below the MDL for potassium (K) and was reported as a non-detect by the laboratory. However, the lower control limit for this analyte is zero. Therefore, no data were qualified based on this finding.

Data for Case 40185, SDG MC45B2, were reviewed in accordance with the National Functional Guidelines for Evaluating Inorganic Analyses with Modification for use within Region III.

ATTACHMENTS

INFORMATION REGARDING REPORT CONTENT

Table 1A is a summary of qualifiers applied to the laboratory-generated results during data validation.

TABLE 1A	SUMMARY OF QUALIFIERS ON DATA SUMMARY FORMS AFTER DATA VALIDATION
TABLE 1B	CODES USED IN COMMENTS COLUMN OF TABLE 1A
APPENDIX A	GLOSSARY OF DATA QUALIFIER CODES
APPENDIX B	DATA SUMMARY FORMS
APPENDIX C	CHAIN OF CUSTODY RECORDS
APPENDIX D	LABORATORY CASE NARRATIVE

DCN: 40185.MC45B2IM2.doc

TABLE 1A
SUMMARY OF QUALIFIERS ON DATA SUMMARY
FORM AFTER DATA VALIDATION

Case 40185, SDG MC45B2

<u>ANALYTE</u>	<u>SAMPLES AFFECTED</u>	<u>POSITIVE VALUES</u>	<u>NON-DETECTED VALUES</u>	<u>BIAS</u>	<u>COMMENTS*</u>
As	All Samples	J			ISD (13%) MSH (145%)
Fe	All Samples	J			ISD (11%)
Pb	All Samples	J			ISD (11%)
Se	MC45B3, MC45B4, MC45C5	J			>MDL<CRQL MSL (74%)
	MC45B2, MC45B5	L		Low	MSL (74%)
Tl	MC45B2, MC45B5	B		High	CCB (6.196 J µg/L)

* See explanation of comments in Table 1B

TABLE 1B
CODES USED IN COMMENTS COLUMN

ISD =	Percent differences (%Ds) in the ICP serial dilution analysis were outside the control limit (>10%) [%Ds are in parenthesis]. Positive results are estimated.
MSH =	Matrix spike recovery was high (>125%) [% recovery is in parenthesis]. Positive results may be biased high.
>MDL = <CRQL	Reported results are greater than MDL but less than CRQL and are considered estimated.
MSL =	Matrix spike recovery was low (<75% but >30%) [% recovery is in parenthesis]. Positive results may be biased low.
CCB =	Continuing calibration blank had a result >MDL [result is in parenthesis]. Positive results which are <5X the blank concentration may be biased high.

Appendix A

Glossary of Data Qualifier Codes

GLOSSARY OF DATA QUALIFIER CODES (INORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of analytes):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present.
Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte Present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low.
Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

Appendix B

Data Summary Forms

DATA SUMMARY FORM: INORGANIC

Case #: 40185

SDG : MC45B2

Number of Soil Samples : 5

Site :

METRO CONTAINER CORP.

Number of Water Samples : 0

Lab. :

CHEM

Sample Number :	MC45B2	MC45B3	MC45B4	MC45B5	MC45C5						
Sampling Location :	MC-SB-04	MC-SD-02	MC-SD-03	MC-SS-04	MC-SD-01						
Matrix :	Soil	Soil	Soil	Soil	Soil						
Units :	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg						
Date Sampled :	6/8/2010	6/8/2010	6/8/2010	6/8/2010	6/10/2010						
Time Sampled :	15:10	14:30	14:01	15:00	16:00						
%Solids :	92.8	70.0	70.0	92.4	76.7						
Dilution Factor :	1.0	1.0	1.0	1.0	1.0						
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	20	6610		6600		6390		5780		6430	
ANTIMONY	6	13.2		0.96	J	0.89	J	13.3		0.42	J
ARSENIC	1	22.5	J	2.7	J	5.9	J	18.3	J	4.2	J
BARIUM	20	134		101		173		118		99.7	
BERYLLIUM	0.5	0.73		0.57	J	0.37	J	0.52	J	0.68	
CADMIUM	0.5	3.3		0.97		1.1		2.6		0.95	
CALCIUM	500	5930		4030		5830		2530		9770	
CHROMIUM	1	35.6		34.1		66.9		36.8		36.1	
COBALT	5	45.0		8.8		6.0	J	25.2		5.7	
COPPER	2.5	494		58.0		66.4		317		54.0	
IRON	10	68600	J	16600	J	17700	J	83800	J	18200	J
LEAD	1	592	J	99.1	J	82.4	J	522	J	89.3	J
MAGNESIUM	500	3310		4290		5340		1320		6540	
MANGANESE	1.5	1320		292		210		616		194	
MERCURY	0.1	0.22		0.10	J	0.054	J	0.35			
NICKEL	4	39.3		36.7		33.8		29.4		39.3	
POTASSIUM	500	928		1770		1490		967		1800	
SELENIUM	3.5	9.3	L	2.9	J	4.4	J	11.3	L	3.1	J
SILVER	1	1.9		0.45	J	0.27	J	1.8		0.31	J
SODIUM	500	136	J	158	J	214	J	143	J	229	J
THALLIUM	2.5	0.43	B					0.52	B		
VANADIUM	5	26.9		28.4		30.0		31.0		26.5	
ZINC	6	564		277		263		465		287	

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (%Solids/ 100)

Revised 09/99

Appendix C

Chain-of-Custody Records



**USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record**

Case No: 40185

DAS No:

R

Region: 3	Date Shipped: 6/9/2010	Chain of Custody Record	Sampler Signature: [Redacted]
Project Code:	Carrier Name: FedEx		Received By: [Redacted]
Account Code:	Airbill: 8731 0479 8130	Received By: [Redacted]	(Date / Time)
CERCLIS ID: PAD044545895	Shipped to: ChemTech Consulting Group (CHEM) 284 Sheffield Street Mountainside NJ 07092 (908) 789-8900	1 [Redacted]	6-9-10 15:00
Spill ID:		2	
Site Name/State: Metro Container Corp/PA		3	
Project Leader: [Redacted]		4	
Action: Expanded Site Investigation/RI			
Sampling Co: Tetra Tech			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MC45B2	Soil (>12")/ [Redacted]	M/G	AES&Hg - S (14)	480 (Ice Only) (1)	MC-SB-04	S: 6/8/2010	15:10	C45B2	-
MC45B3	Sediment/ [Redacted]	M/G	AES&Hg - S (14)	482 (Ice Only) (1)	MC-SD-02	S: 6/8/2010	14:30	C45B3	-
MC45B4	Sediment/ [Redacted]	M/G	AES&Hg - S (14)	484 (Ice Only) (1)	MC-SD-03	S: 6/8/2010	14:00 14:00	C45B4	-
MC45B5	Soil (0"-12")/ [Redacted]	M/G	AES&Hg - S (14)	487 (Ice Only), 488 (Ice Only) (2)	MC-SS-04	S: 6/8/2010	15:00	C45B5	-

Shipment for Case Complete: [Redacted]	Sample(s) to be used for laboratory QC: MC45B5	Additional Sample Signatures: [Redacted]	Chain of Custody Seal Number:
Analysis Key: AES&Hg - S = CLP TAL Metals - Soil - ICP/AES & M [Redacted]	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-242195023-060810-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: [Redacted], CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4802

REGION COPY



**USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record**

Case No:	40185	R
DAS No:		

Region: 3 Project Code: Account Code: CERCLIS ID: PAD044545895 Spill ID: Site Name/State: Metro Container Corp/PA Project Leader: Action: Expanded Site Investigation/RI Sampling Co: Tetra Tech	Date Shipped: 6/10/2010 Carrier Name: FedEx Airbill: 8731 0479 8118 Shipped to: ChemTech Consulting Group (CHEM) 284 Sheffield Steet Mountainside NJ 07092 (908) 789-8900	Chain of Custody Record <table border="1"> <tr> <td>Relinquished By</td> <td>(Date / Time)</td> <td>Received By</td> <td>(Date / Time)</td> </tr> <tr> <td>1 [Redacted]</td> <td>6/10/2010 1730</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> </tr> </table>	Relinquished By	(Date / Time)	Received By	(Date / Time)	1 [Redacted]	6/10/2010 1730			2				3				4				Sampler Signature: [Redacted]
Relinquished By	(Date / Time)	Received By	(Date / Time)																				
1 [Redacted]	6/10/2010 1730																						
2																							
3																							
4																							

INORGANIC SAMPLE No.	MATRX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MC45C5	Sediment/ [Redacted]	M/G	AES&Hg - S (14)	535 (Ice Only) (1)	MC-SD-01	S: 6/10/2010 18:00	C45C5	-

Shipment for Compliance Complete [Redacted]	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: AES&Hg - S = CLP TAL Metals - Soil - ICP/AES & Mer	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 3-242195023-061010-0002

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: [Redacted], CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

U.S EPA Region III Analytical Request Form

STS 5-21-10

OASQA USE ONLY			
Control #	CT4996	RAS #	
DAS#		NSF #	
PES#		Analytical TAT	14 days

40185

Date: 5/17/2010		Site Activity: Expanded Site Inspection	
Site Name: Metro Container <i>Corp.</i>		Street Address: 2nd And Price Streets	
City: Trainer	State: PA	Latitude: 39.82642	Longitude: 75.39903
Program: Superfund	Acct. #: 2010 T03N302DD2C032H QB 00	CERCLIS #: PAD044545895	
Site ID:	Spill ID: 032H	Operable Unit:	
Site Specific QA Plan Submitted: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		Title: START3 QAPP	Date Approved: November 2006
EPA Project Leader: Charlene Creamer	Phone#: 215-814-2145	Cell Phone #:	E-mail: creamer.charlene@epa.gov
Request Preparer: [REDACTED]	Phone#: [REDACTED]	Cell Phone #: [REDACTED]	E-mail: [REDACTED]
Request Preparer: [REDACTED]	Phone#: [REDACTED]	Cell Phone #: [REDACTED]	E-mail: [REDACTED]
Contractor: Tetra Tech EM Inc		EPA CO/PO: [REDACTED]	
#Samples 37	Matrix: Soil	Parameter: SVOC, PCB <i>KAP</i>	Method: CLP SOW SOM01.2 <i>32430,31</i>
#Samples 37	Matrix: Soil	Parameter: TAL Metals + Hg <i>CHEM</i>	Method: CLP SOW ILM05.4 ICP-AES <i>32432</i>
#Samples 2	Matrix: Blank	Parameter: SVOC, PCB	Method: CLP SOW SOM01.2
#Samples 2	Matrix: Blank	Parameter: TAL Metals + Hg	Method: CLP SOW ILM05.4 ICP-AES
Ship Date From: 6/7/2010		Ship Date To: 6/10/2010	Org. Validation Level M3
Inorg. Validation Level IM2		Unvalidated Data Requested: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
If Yes, TAT Needed: <input checked="" type="checkbox"/> 14days <input type="checkbox"/> 7days <input type="checkbox"/> 72hrs <input type="checkbox"/> 48hrs <input type="checkbox"/> 24hrs <input type="checkbox"/> Other (Specify) <i>by CSAT</i>		Validated Data Package Due: <input type="checkbox"/> 42 days <input checked="" type="checkbox"/> 30 days <input type="checkbox"/> 21days <input type="checkbox"/> 14 days <input type="checkbox"/> Other (Specify) <i>14/16</i>	
Electronic Data Deliverables Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (EDDs will be provided in Region 3 EDD Format)			
Special Instructions: Required detection limits attached.			

DATA SUMMARY FORM: INORGANIC (Lab Results)

Case #: 40185

SDG : MC4598

Site :

METRO CONTAINER CORP.

Lab. :

CHEM

Sample Number :		MC45C3	MC45C4								
Sampling Location :		MC-FB-01	MC-RB-01								
Field QC :		Field Blank	Rinsate Blank								
Matrix :		Water	Water								
Units :		ug/L	ug/L								
Date Sampled :		6/8/2010	6/8/2010								
Time Sampled :		13:30	17:41								
Dilution Factor :		1.0	1.0								
ANALYTE	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	200	6.6	J								
ANTIMONY	60										
*ARSENIC	10										
BARIUM	200										
BERYLLIUM	5										
*CADMIUM	5										
CALCIUM	5000										
*CHROMIUM	10										
COBALT	50										
COPPER	25										
IRON	100	22.3	J								
*LEAD	10										
MAGNESIUM	5000										
MANGANESE	15										
MERCURY	0.2										
*NICKEL	40	0.46	J								
POTASSIUM	5000										
SELENIUM	35										
SILVER	10										
SODIUM	5000										
THALLIUM	25										
VANADIUM	50										
ZINC	60	3.4	J								

CRQL = Contract Required Quantitation Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor)

Revised 09/99

Appendix D

Laboratory Case Narrative

CHEMTECH
284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # MC45B2
CASE # 40185
CONTRACT # EPW08065
LAB NAME: CHEMTECH CONSULTING GROUP
LAB CODE: CHEM
CHEMTECH PROJECT # B2640

A. Number of Samples and Date of Receipt

5 Soil Samples were delivered to the laboratory intact on 06/10/10 & 06/11/10.

B. Parameters

Test requested for ICP Metals CLP FULL (by ICP-AES) & Hg.

C. Cooler Temp

Indicator Bottle: Presence/Absence
Cooler: 4°C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

E. Corrective Action taken for above:

F. Analytical Techniques:

All analyses were based on CLP Methodology by method ILM05.4

G. Calculation:

Calculation example for ICP-AES Soil Sample:

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):

Results reported in Mg/Kg = (Result in mg/L or ppm for ICP-AES) X 1000 X Fraction of % Solid (100/
% Solid) X Dilution Factor (if any) X Fraction of Sample Amount Taken in ICP-Soil Prep.

CHEMTECH
284 Sheffield Street
Mountainside, NJ 07092

Example of Fraction of Sample Amount Taken in ICP-AES Soil Prep = $1/10$ (1.0 X10 or 0.50 X 20)
(if 1.0 g of sample taken during Digestion and the Final Volume was made to 100 ml or 0.5 g to Final Volume 50ml)

Or

Example of Fraction of Sample Amount Taken in ICP-AES Soil Prep = $1/10.2$ (1.02 X 10 or 0.51 X 20)
(if 1.02 g of sample taken during Digestion and the Final Volume was made to 100 ml or 0.51 g to Final Volume 50ml)

Etc.

Calculation example for Hg Soil Sample:

Conversion of Results from ppb to mg/kg (Dry Weight Basis):

Results reported in Mg/Kg = (Result in ppb for Hg) X Fraction of % Solid (100/ % Solid) X Dilution Factor (if any) X Fraction of Sample Amount Taken in Prep.

Example of Fraction of Sample Amount Taken in Hg Soil Prep = $1/2$ (0.2 X 10)
(if 0.2 g of sample taken during Digestion and the Final Volume was made to 100 ml)

Or

Example of Fraction of Sample Amount Taken in Hg Soil Prep = $1/2.1$ (0.21 X 10)
(if 0.21 g of sample taken during Digestion and the Final Volume was made to 100 ml)

Etc.

H. QA/QC

Calibrations met requirements. Interference check met requirements. Blank analyses did not indicate any presence of contamination. Laboratory Control sample was within control limits. Spike sample did meet requirements except for Arsenic and Selenium. Duplicate sample did meet requirements except for Cobalt and Mercury. Serial Dilution did meet requirements except for Arsenic, Iron and Lead.

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Mountainside, NJ 07092

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature: 

Name: 

Date: 6/23/10

Title: Document Control Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Final Analytical Report

Site Name.....	Metro Container
Sample Collection Date(s).....	06/07/10 11:20- 06/10/10 16:00
Contact.....	Charlene Creamer
Report Date.....	07/30/10 15:49
Project #.....	DAS R33481
Work Order.....	1006011

Analyses included in this report:

Total Organic Carbon by SM 5310 B

Approved for Release

OASQA Representative

1006011 FINAL DAS R33481 07 30 10 1549
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701 Mapes Road
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Site Name: Metro Container

Project #: DAS R33481

Report Narrative

TOC Analysis Notes:

All TOC samples are air-dried and results reported on a dry-weight basis.

The result for the matrix spike sample, MS (1006011-18 sample+spike), exceeds the high point on the standard curve; however, the system was linear beyond this point. Impact to result for source sample 1006011-18 is negligible.

The relative percent difference (RPD) for the laboratory duplicate (BG01902-Dup1) was above the RPD limit; therefore, the sample result for 1006011-10 is qualified "J" as estimated.



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Fort Meade, Maryland 20755-5350



Site Name: Metro Container **Project #: DAS R33481**

ANALYTICAL REPORT FOR SAMPLES

Station ID	Laboratory ID	Matrix	Date Sampled	Date Received
MC-SB-02	1006011-01	Soil	06/07/10 12:11	06/9/10 13:20
MC-SB-03	1006011-02	Soil	06/07/10 12:48	06/9/10 13:20
MC-SD-05	1006011-03	Sediment	06/07/10 12:35	06/9/10 13:20
MC-SD-06	1006011-04	Sediment	06/07/10 12:05	06/9/10 13:20
MC-SD-07	1006011-05	Sediment	06/07/10 11:40	06/9/10 13:20
MC-SD-10	1006011-06	Sediment	06/07/10 16:16	06/9/10 13:20
MC-SD-11	1006011-07	Sediment	06/07/10 16:08	06/9/10 13:20
MC-SD-12	1006011-08	Sediment	06/07/10 16:00	06/9/10 13:20
MC-SD-13	1006011-09	Sediment	06/07/10 16:19	06/9/10 13:20
MC-SD-15	1006011-10	Sediment	06/07/10 16:00	06/9/10 13:20
MC-SD-16	1006011-11	Sediment	06/07/10 16:30	06/9/10 13:20
MC-SS-01	1006011-12	Soil	06/07/10 11:20	06/9/10 13:20
MC-SS-02	1006011-13	Soil	06/07/10 12:02	06/9/10 13:20
MC-SS-03	1006011-14	Soil	06/07/10 12:40	06/9/10 13:20
MC-SD-02	1006011-15	Sediment	06/08/10 14:30	06/10/10 14:15
MC-SD-03	1006011-16	Sediment	06/08/10 14:01	06/10/10 14:15
MC-SB-04	1006011-17	Soil	06/08/10 15:10	06/10/10 14:15
MC-SS-04	1006011-18	Soil	06/08/10 15:00	06/10/10 14:15
MC-FB-01	1006011-19	Water	06/08/10 13:30	06/10/10 14:15
MC-RB-01	1006011-20	Water	06/08/10 17:41	06/10/10 14:15
MC-SD-17	1006011-21	Sediment	06/08/10 16:24	06/10/10 14:15
MC-SD-18	1006011-22	Sediment	06/08/10 16:14	06/10/10 14:15
MC-SD-19	1006011-23	Sediment	06/08/10 16:02	06/10/10 14:15
MC-SS-05	1006011-24	Soil	06/08/10 17:24	06/10/10 14:15
MC-SD-01	1006011-25	Sediment	06/10/10 16:00	06/11/10 12:15



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Site Name: Metro Container

Project #: DAS R33481



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: R33481
SDG No:
For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

Chain of Custody Record
Date Shipped: 6/8/2010
Carrier Name: FedEx
Airbill: 8731 0479 8173
Shipped to: EPA Region 3 Laboratory
Environmental Science Center
701 Mapes Road
Ft. Meade MD 20755
(410) 305-2606
Relinquished By: [Redacted] 6/8/10 1700
Receiver: [Redacted] 6/9/10 1320

Table with columns: SAMPLE No., MATRIX/SAMPLER, CONC/TYPE, ANALYSIS/TURNAROUND, TAG No./PRESERVATIVE/Bottles, STATION LOCATION, SAMPLE COLLECT DATE/TIME, FOR LAB USE ONLY Sample Condition On Receipt. Includes handwritten sample IDs like 1006011-01 to 1006011-10.

Shipment for Case Complete?
Sample(s) to be used for laboratory QC: R3348111
Additional Sampler Signature(s): [Redacted]
Cooler Temperature Upon Receipt: 1.4°C
Chain of Custody Seal Number:
Custody Seal Intact?
Shipment Iced?

TR Number: 3-242195023-060810-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: [Redacted] CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602



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Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
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Site Name: Metro Container

Project #: DAS R33481



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: R33481
SDG No: L

Chain of Custody Record table with columns for Date Shipped, Carrier Name, Airbill, Shipped to, Relinquished By, Received By, and For Lab Use Only.

Table with columns: SAMPLE No., MATRX/SAMPLER, CONC/TYPE, ANALYSIS/TURNAROUND, TAG No./PRESERVATIVE/Bottles, STATION LOCATION, SAMPLE COLLECT DATE/TIME, FOR LAB USE ONLY Sample Condition On Receipt.

Shipment for Case Complete?N, Sample(s) to be used for laboratory QC: R3348111, Additional Sampler Signature(s), Cooler Temperature Upon Receipt: 1.4°C, Chain of Custody Seal Number, Analysis Key, Concentration, Type/Designate, Custody Seal Intact?, Shipment Iced?

TR Number: 3-242195023-060810-0001

LABORATORY COPY

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Site Name: Metro Container

Project #: DAS R33481



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: R33481
SDG No:
For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

Chain of Custody Record table with columns for Date Shipped, Carrier Name, Airbill, Shipped to, and Chain of Custody Record (1-4).

Main data table with columns: SAMPLE No., MATRIX/SAMPLER, CONC/TYPE, ANALYSIS/TURNAROUND, TAG No./PRESERVATIVE/Bottles, STATION LOCATION, SAMPLE COLLECT DATE/TIME, FOR LAB USE ONLY Sample Condition On Receipt.

Shipment for Case Complete?
Sample(s) to be used for laboratory QC: R3348118
Additional Sampler Signature(s):
Cooler Temperature Upon Receipt: 7.4°C
Chain of Custody Seal Number:
Analysis Key:
Concentration: L = Low, M = Low/Medium, H = High
Type/Designate: Composite = C, Grab = G
Custody Seal Intact?
Shipment Iced?

TR Number: 3-242195023-060810-0006

LABORATORY COPY

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701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: Metro Container

Project #: DAS R33481



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: R33481
SDG No:
For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

Chain of Custody Record table with columns: Date Shipped, Carrier Name, Airbill, Shipped to, Relinquished By, Received By, Date/Time

Main data table with columns: SAMPLE No., MATRIX/SAMPLER, CONC/TYPE, ANALYSIS/TURNAROUND, TAG No./PRESERVATIVE/Bottles, STATION LOCATION, SAMPLE COLLECT DATE/TIME, FOR LAB USE ONLY Sample Condition On Receipt

Shipment for Case Complete?
Sample(s) to be used for laboratory QC:
Additional Sampler Signature(s):
Cooler Temperature Upon Receipt: 7.4C
Chain of Custody Seal Number:
Analysis Key:
Concentration: L = Low, M = Low/Medium, H = High
Type/Designate: Composite = C, Grab = G
Custody Seal Intact?
Shipment Iced?

TR Number: 3-242195023-060910-0003

LABORATORY COPY

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FV51.047 Page 1 of 1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: Metro Container

Project #: DAS R33481



USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case
Client No: R33481
SDG No:
For Lab Use Only
Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

Chain of Custody Record table with columns: R#, (Date / Time), Received By, (Date / Time). Includes handwritten entries for 6/10/2010 17:30 and 6/11/10 12:15.

Table with columns: SAMPLE No., MATRIX/SAMPLER, CONC/TYPE, ANALYSIS/TURNAROUND, TAG No./PRESERVATIVE/Bottles, STATION LOCATION, SAMPLE COLLECT DATE/TIME, FOR LAB USE ONLY Sample Condition On Receipt. Includes handwritten entry 1006011-25.

Shipment for Case Completed?
Sample(s) to be used for laboratory QC:
Additional Sampler Signature(s):
Cooler Temperature Upon Receipt: 6.1°C
Chain of Custody Seal Number:
Analysis Key:
Concentration: L = Low, M = Low/Medium, H = High
Type/Designate: Composite = C, Grab = G
Custody Seal Intact?
Shipment Iced?

TR Number: 3-242195023-061010-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602
F2V5.1.047 Page 1 of 1



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Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: Metro Container Project #: DAS R33481

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-01
Station ID: MC-SB-02
Sample Matrix: Soil
Collected: 06/07/2010

Table row for Total Organic Carbon: 52600, 1070 mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-02
Station ID: MC-SB-03
Sample Matrix: Soil
Collected: 06/07/2010

Table row for Total Organic Carbon: 26000, 1160 mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-03
Station ID: MC-SD-05
Sample Matrix: Sediment
Collected: 06/07/2010

Table row for Total Organic Carbon: 74600, 2750 mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B



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Site Name: Metro Container **Project #: DAS R33481**

Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-04
Station ID: MC-SD-06
Sample Matrix: Sediment
Collected: 06/07/2010

Total Organic Carbon	11600		1340	mg/kg	1	06/11/10	07/19/10 14:27	SM 5310B
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Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-05
Station ID: MC-SD-07
Sample Matrix: Sediment
Collected: 06/07/2010

Total Organic Carbon	38300		2050	mg/kg	1	06/11/10	07/19/10 14:27	SM 5310B
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Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-06
Station ID: MC-SD-10
Sample Matrix: Sediment
Collected: 06/07/2010

Total Organic Carbon	9200		1430	mg/kg	1	06/11/10	07/19/10 14:27	SM 5310B
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Site Name: Metro Container Project #: DAS R33481

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-07
Station ID: MC-SD-11
Sample Matrix: Sediment
Collected: 06/07/2010

Table row for Total Organic Carbon: 20400, 1500 mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-08
Station ID: MC-SD-12
Sample Matrix: Sediment
Collected: 06/07/2010

Table row for Total Organic Carbon: 9910, 1100 mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-09
Station ID: MC-SD-13
Sample Matrix: Sediment
Collected: 06/07/2010

Table row for Total Organic Carbon: 13000, 1210 mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B



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Site Name: Metro Container Project #: DAS R33481

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-10
Station ID: MC-SD-15
Sample Matrix: Sediment
Collected: 06/07/2010

Table row for Total Organic Carbon: 18100, J, 1470, mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-11
Station ID: MC-SD-16
Sample Matrix: Sediment
Collected: 06/07/2010

Table row for Total Organic Carbon: 18500, 1150, mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-12
Station ID: MC-SS-01
Sample Matrix: Soil
Collected: 06/07/2010

Table row for Total Organic Carbon: 42900, 1430, mg/kg, 1, 06/11/10, 07/19/10 14:27, SM 5310B



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701 Mapes Road
Fort Meade, Maryland 20755-5350



Site Name: Metro Container **Project #: DAS R33481**

Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-13
Station ID: MC-SS-02
Sample Matrix: Soil
Collected: 06/07/2010

Total Organic Carbon	63200		1300	mg/kg	1	06/11/10	07/21/10 08:00	SM 5310B
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Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-14
Station ID: MC-SS-03
Sample Matrix: Soil
Collected: 06/07/2010

Total Organic Carbon	47800		1520	mg/kg	1	06/11/10	07/21/10 08:00	SM 5310B
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Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-15
Station ID: MC-SD-02
Sample Matrix: Sediment
Collected: 06/08/2010

Total Organic Carbon	56400		1820	mg/kg	1	06/11/10	07/21/10 08:00	SM 5310B
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Site Name: Metro Container Project #: DAS R33481

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-16
Station ID: MC-SD-03
Sample Matrix: Sediment
Collected: 06/08/2010

Table row for Total Organic Carbon: 68700, 1430 mg/kg, 1, 06/11/10, 07/21/10 08:00, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-17
Station ID: MC-SB-04
Sample Matrix: Soil
Collected: 06/08/2010

Table row for Total Organic Carbon: 184000, 2720 mg/kg, 1, 06/11/10, 07/21/10 08:00, SM 5310B

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-18
Station ID: MC-SS-04
Sample Matrix: Soil
Collected: 06/08/2010

Table row for Total Organic Carbon: 89900, C, 2310 mg/kg, 1, 06/11/10, 07/21/10 08:00, SM 5310B



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701 Mapes Road
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Site Name: Metro Container Project #: DAS R33481

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-19
Station ID: MC-FB-01
Sample Matrix: Water
Collected: 06/08/2010

Table row: Total Organic Carbon, U, 3.0, mg/L, 1, 06/25/10, 06/25/10 13:51, SM 5310B/R3QA162

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-20
Station ID: MC-RB-01
Sample Matrix: Water
Collected: 06/08/2010

Table row: Total Organic Carbon, U, 3.0, mg/L, 1, 06/25/10, 06/25/10 13:51, SM 5310B/R3QA162

Classical Chemistry Parameters

Table with 9 columns: Analyte, Result, Flags/Qualifiers, Quantitation Limit, Units, Dilution, Prepared, Analyzed, Method/SOP#

Lab ID: 1006011-21
Station ID: MC-SD-17
Sample Matrix: Sediment
Collected: 06/08/2010

Table row: Total Organic Carbon, 26800, 1840, mg/kg, 1, 06/11/10, 07/21/10 08:00, SM 5310B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Office of Analytical Services and Quality Assurance
701 Mapes Road
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Site Name: Metro Container **Project #:** DAS R33481

Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-22
Station ID: MC-SD-18
Sample Matrix: Sediment
Collected: 06/08/2010

Total Organic Carbon	39600		2340	mg/kg	1	06/11/10	07/21/10 08:00	SM 5310B
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Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-23
Station ID: MC-SD-19
Sample Matrix: Sediment
Collected: 06/08/2010

Total Organic Carbon	14700		1450	mg/kg	1	06/11/10	07/21/10 08:00	SM 5310B
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Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-24
Station ID: MC-SS-05
Sample Matrix: Soil
Collected: 06/08/2010

Total Organic Carbon	35300		1210	mg/kg	1	06/11/10	07/21/10 08:00	SM 5310B
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Fort Meade, Maryland 20755-5350



Site Name: Metro Container **Project #:** DAS R33481

Classical Chemistry Parameters

Analyte	Result	Flags/ Qualifiers	Quantitation Limit	Units	Dilution	Prepared	Analyzed	Method/SOP#
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Lab ID: 1006011-25
Station ID: MC-SD-01
Sample Matrix: Sediment
Collected: 06/10/2010

Total Organic Carbon	54200		1630	mg/kg	1	06/11/10	07/21/10 08:00	SM 5310B
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350



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QC Data
Classical Chemistry Parameters

Table with 11 columns: Analyte, Result, Quantitation Limit, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Notes

Batch BG01902 - TOC Prep soil

Table containing QC data for Batch BG01902, including Duplicate (BG01902-DUP1), Matrix Spike (BG01902-MS1), and Reference (BG01902-SRM1) samples.

Batch BG02001 - TOC/DOC Prep water

Table containing QC data for Batch BG02001, including Blank (BG02001-BLK1), Duplicate (BG02001-DUP1), Matrix Spike (BG02001-MS1), and Reference (BG02001-SRM1) samples.

Batch BG02201 - TOC Prep soil

Table containing QC data for Batch BG02201, including Duplicate (BG02201-DUP1) sample.



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QC Data

Classical Chemistry Parameters

Analyte	Result	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BG02201 - TOC Prep soil

Matrix Spike (BG02201-MS1)

Source: 1006011-18

Prepared & Analyzed: 07/21/10 08:00

Total Organic Carbon	132404	2400	mg/kg	38462	89907.4	110	58-169			J
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Reference (BG02201-SRM1)

Prepared & Analyzed: 07/21/10 08:00

Total Organic Carbon	4277.67	235	mg/kg	4780.0		89	79-120			
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Notes and Definitions

J The identification of the analyte is acceptable; the reported value is an estimate.

C See narrative for comments and observations concerning this result.

A Quality control value is outside acceptance limits.

NR Not Reported

RPD Relative Percent Difference

U Analyte included in the analysis, but not detected at or above the quantitation limit.

Quantitation Limit: The lowest concentration of an analyte that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method and that takes into account analytical adjustments made during sample preparation and analysis.

REPORTING PROTOCOL FOR SOLID SAMPLE RESULTS: Percent Solids (percent dry wt at 105 degrees C) determinations are routinely performed for most organic and inorganic analyses. Consequently, these samples are analyzed wet and converted to a dry weight result for reporting purposes. If metals and mercury analyses are requested, they are routinely prepared for analyses by an initial drying at 60 degrees C, homogenized prior to digestion, and are analyzed and reported on a dry weight basis. Oil-type samples are analyzed and reported on a wet weight basis for all analyses because of the nature of the sample matrix. Any exceptions to this protocol will be noted in the narrative.