Consolidated Edison Company
of New York, Inc.
31-01 20th Avenue
Long Island City NY 11105-2048
www.conEd.com

April 24, 2012

BY ELECTRONIC MAIL

Mr. John Miller
Environmental Engineer
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, New York 12233-7017

Subject: **Supplemental Sediment Investigation Report**
Pemart Avenue former MGP Site (NYSDEC Site No. V00566)
Peekskill, New York
Voluntary Clean-up Agreement – Index No. D2-0003-02-08

Dear Mr. Miller:

Enclosed for the Department's review and approval is an electronic copy of the Supplemental Sediment Investigation Report for the Pemart Avenue Works former MGP.

Please contact me directly should you have any questions regarding this submittal.

Very truly yours,

Neil O'Halloran
Project Manager,
MGP Remediation Group
Environment, Health and Safety Department

Enc.

cc: F. Navratil, NYSDOH
G. Heitzman, NYSDEC (w/o Enc.)
C. Jaffe, Esq., Con Edison (w/o Enc.)
K. Kaiser, Con Edison (w/o Enc.)
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Supplemental Sediment Investigation Report

Former Pemart Avenue Works Manufactured Gas Plant Site

Peekskill, New York
Site No. V00566

April 2012

ARCADIS

Jason Brien
Principal Engineer

Margaret Carrillo Sheridan
Principal in Charge

Nancy Gensky
Principal in Charge

Supplemental Sediment Investigation Report

Former Pemart Avenue Works
Manufactured Gas Plant Site

Prepared for:
Consolidated Edison Company of New York, Inc.

Prepared by:
ARCADIS of New York, Inc.
6723 Towpath Road
P O Box 66
Syracuse
New York 13214-0066
Tel 315 446 9120
Fax 315 449 0017

Our Ref.:
B0043029

Date:
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1. Introduction

This *Supplemental Sediment Investigation Report* has been prepared on behalf of Consolidated Edison Company of New York, Inc (Con Edison) and summarizes the activities conducted and results obtained for the supplemental sediment investigation at the Former Pemart Avenue Works Manufactured Gas Plant (MGP) site (the site) located in Peekskill, New York (Site No. V00566). The supplemental sediment investigation was completed as part of the Remedial Investigation conducted by Con Edison under a Voluntary Cleanup Agreement (VCA) with the New York State Department of Environmental Conservation (NYSDEC).

1.1 Background

The site is located on North Water Street (also known as Old Pemart Avenue) north of the intersection of Main Street and Water Street in the City of Peekskill, Westchester County, New York. The parcels that comprised the former site extend from the north end of North Water Street to the Peekskill Bay shoreline. The Annsville Creek confluence with the Hudson River is located approximately 300 feet upstream (north) of the site boundary. A site location map is included as Figure 1. Historical MGP operations were conducted at the site between 1899 and 1931 and primarily included the production of manufactured gas using the Lowe carbureted water gas process. During November and December 2007, an initial sediment investigation was completed in the near-shore area downgradient from and adjacent to the site to determine the extent of MGP-related impacts in subsurface sediments. Sediment cores were collected from within Peekskill Bay at sediment sampling locations SD-1 through SD-25 (Figure 2). The results of the initial sediment investigation are presented in the *Remedial Investigation Addendum Report* (ENSR, 2008), included as Attachment 1.

In general, results of the initial sediment investigation indicated that physical evidence of MGP residuals (including coal tar, sheen, non-aqueous phase liquid [NAPL], etc.) were present in the subsurface sediments at depths ranging from approximately 0.5 to 18 feet below the top of the Peekskill Bay sediment. The area of sediments containing physical evidence of MGP residuals is presented on Figure 2. Based on the results of the initial investigation and the August 2008 NYSDEC and New York State Department of Health (NYSDOH) comments on the *Remedial Investigation Addendum Report*, Con Edison proposed to conduct a supplemental sediment investigation. The *Supplemental Sediment Investigation Work Plan* (*Supplemental Work Plan*) was presented in Con Edison's letter dated December 30, 2010. The proposed sediment sampling program included analysis of surface sediment samples collected from the upper one foot

throughout Peekskill Bay. The *Supplemental Work Plan* was based in part on NYSDEC's letters dated May 14, 2009 and April 9, 2010 and discussions between Con Edison and NYSDEC.

1.2 Supplemental Sediment Investigation Objectives

As indicated in Con Edison December 30, 2010 *Supplemental Work Plan*, the objectives of the supplemental sediment investigation were to

- Establish background concentrations of polycyclic aromatic hydrocarbon compounds (PAHs) in surface sediments in Peekskill Bay; and
- Determine if the surface sediments in Peekskill Bay have been affected by underlying MGP residuals encountered in the subsurface sediments.

1.3 Report Organization

This *Supplemental Sediment Investigation Report* has been organized as presented in the table below.

Section	Description
Section 1 – Introduction	Presents relevant site background and the objectives of the supplemental sediment investigation activities.
Section 2 – Sediment Investigation Activities and Results	Describes the supplemental sediment investigation activities and results.
Section 3 – Supplemental Sediment Evaluation	Presents an evaluation of the supplemental sediment investigation data including a statistical determination of background PAH concentrations, and comparisons of PAH concentrations in surface sediment to NYSDEC screening levels as well as the calculated background concentrations.
Section 4 – Summary and Conclusions	Summarizes the supplemental sediment investigation activities and presents conclusions regarding the statistically derived surface sediment PAH background concentrations as well as the limits of potential areas of MGP-related sediment impacts relative to background and other potential contributors of PAHs to Peekskill Bay.

2. Sediment Investigation Activities and Results

This section describes the field activities that were performed by ARCADIS during the supplemental sediment investigation conducted at the Former Pemart Avenue Works MGP site. The supplemental sediment investigation was conducted from September 28 to September 30, 2011 and included the collection and analysis of surface sediment samples from a total of 43 locations in Peekskill Bay. Supplemental sediment activities were conducted in general accordance with the *Supplemental Work Plan* and ARCADIS' September 2011 *Health and Safety Plan* (HASP) (ARCADIS 2011).

2.1 Sediment Investigation Activities

2.1.1 Utility Clearance

Prior to any intrusive field activities, ARCADIS conducted a utility clearance to identify overhead or subsurface utilities within the sampling area. Utility clearance activities consisted of the following:

- Contacting Dig Safe New York to conduct a utility clearance for the proposed sediment sampling area. Confirmation Ticket No. 09211-167-083 was issued on September 26, 2011 with an expiration date of October 11, 2011.

- Conducting a shoreline reconnaissance to identify utility markers along the shoreline and ascertain their direction beneath the bay.

2.1.2 Sample Collection

In accordance with the *Supplemental Work Plan*, ARCADIS field personnel collected surface sediment samples at:

- Eight locations (SD-26 through SD-33) within the area previously shown to contain MGP residuals.

- Thirty five locations (SD-34 through SD-68) throughout Peekskill Bay outside the area previously shown to contain MGP residuals.

A total of 43 sediment samples (plus quality assurance/quality control [QA/QC] samples) were collected. QA/QC samples consisting of matrix spike/matrix spike duplicate and field duplicate samples were collected at a frequency of one set per 20 samples.

The surface sediments were collected from the 0 to 1 foot interval below the top of the sediment surface using a 3-inch diameter clear disposable Lexan® tube. Each sediment sample was characterized to identify its physical properties (e.g., color, grain, size, etc.) and the presence of potential impacts (odors, staining, residuals, etc.) prior to its homogenization. Sediment sampling equipment was decontaminated by removing any large debris using a brush, followed by a rinse with deionized water. If any physical evidence of contamination was encountered (e.g., odor, staining, sheen, etc.), the sampling device was decontaminated using a solution of water and Simple Green™ followed by a deionized water rinse. Solid waste materials (e.g., personal protective equipment [PPE], polyethylene sheeting, disposables, etc.) generated during the sampling activities were temporarily placed in thick plastic trash bags or in a plastic bucket on the sampling boat. Based on the lack of significant physical evidence of MGP-related impacts (e.g., NAPLs, heavy sheen, strong odors), sediments not retained for laboratory analysis were placed back in the area of the river where they were collected.

2.1.3 Surveying

Surface sediment elevations and horizontal coordinates for each sediment sample location were surveyed via Real Time Kinematic Global Positioning System (RTK GPS) method using a Leica GPS survey grade system with RTK. In addition, water elevations at the time of sampling were surveyed using the RTK method. The coordinates presented in this report are relative to the North America Datum of 1983 (NAD83) New York State Plane Coordinate System, East Zone. The water and sediment elevations presented in this report are in feet using the 1988 U.S. Geological Survey (USGS) North American Vertical Datum (NAVD88).

2.1.4 Sample Analysis

The samples were submitted to Accutest Laboratories, Inc. located in Marlborough, Massachusetts for laboratory analysis for a group of 34 alkyl and parent PAHs (PAH_{34}) identified by the National Oceanic and Atmospheric Administration (NOAA) using United States Environmental Protection Agency (USEPA) method SW8270/8272 with select ion monitoring (SIM) and for total organic carbon (TOC) by the Lloyd-Kahn method. A total of five sediment samples were submitted to Geotechnics, Inc. located in East Pittsburgh, Pennsylvania for grain size analysis using method ASTM D422-63. The sediment samples submitted for grain size testing were selected to be representative of the various sediment types that were encountered during the investigation.

2.1.5 Data Validation

After laboratory analysis, ARCADIS validated the data and prepared an NYSDEC data usability summary report (DUSR) for each individual sample delivery group (SDG) using the most recent versions of the USEPA's Function Guidelines (USEPA, 1999; 2002) and USEPA Region II SOPs for data validation. The DUSRs include an assessment of data accuracy, precision, and completeness; significant quality assurance problems, solutions, corrections, and potential consequences; and analytical data validation reports. DUSRs are provided in Appendix A.

2.1.6 Investigation Support Activities

In support of the sampling activities, ARCADIS obtained a boat permit (Permit No. 254) from the City of Peekskill Department of Parks and Recreation. The Permit allowed for the use of the boat ramp located near the site and for the use of a motorboat in Peekskill Bay.

2.2 Sediment Investigation Results

2.2.1 Physical Characterization

In general, the sediments closer to the shore are coarser grained than those further out in Peekskill Bay. Surface sediment samples collected from near-shore areas were generally more coarse-grained and consisted primarily of fine sand and trace to some silt. At some near-shore locations, sediments contained medium sand, and at a few locations sediments contained little to trace coarse sand, trace gravel, and trace clay. Sediment samples collected away from the shore line were generally more fine-grained and consisted of silt and clay with little to trace fine sand. Trace organics were observed in most sediment samples and at a few locations (SD-33 located near shore , SD-55, and SD-56 located near the mouth of Annsville Creek) more organics (wood, vegetation, and leaves) were observed. Trace shells were also observed randomly at a few locations (SD-26, SD-52, SD-56 and SD-62). Anthropogenic debris (plastic wrapper) was only observed at near-shore sample location SD-31. Tables 1 and 2 present sediment physical characterization and grain size summaries, respectively.

The majority of the sediment samples did not contain any physical evidence (e.g., sheen, staining, NAPL, etc.) of potential impacts. However, observations in four sediment samples indicated potentially impacted sediments:

- SD-26 (0 – 1') - trace sheen

- SD-27 (0 – 1') - faint to moderate degraded petroleum-like odor
- SD-28 (0 – 1') - faint to moderate degraded petroleum-like odor
- SD-34 (0 – 1') - sheen, faint to moderate degraded petroleum-like odor

Core samples SD-26, SD-27 and SD-28 were collected within the area previously shown to MGP residuals in the subsurface sediments, while SD-34 was located approximately 100 feet outside this area to the north. Overall, these observations indicate only slight impacts and the limits of MGP residuals in the subsurface sediments, as defined in the *Remedial Investigation Addendum Report,* were not modified as a result of this investigation. With the exception of shallow sediment sample SD-34, none of the sediment samples collected from outside the area previously shown to contain coal MGP residuals exhibited physical evidence of potential impacts.

2.2.2 Chemical Characterization

A total of 46 surface sediment samples (including duplicates) were collected from 43 locations within Peekskill Bay (eight locations within the area previously shown to contain MGP residuals in subsurface sediments, and 35 locations throughout Peekskill Bay) and analyzed for PAH_{34} and TOC. Sediment samples were obtained from the 0 to 1 foot depth interval at each of the sampling locations. Analytical results for surface sediment samples are presented in Table 3. Surface sediment sampling locations and detected Total PAH_{17} (the sum of the TCL PAHs) and Total PAH_{34} (the sum of the NOAA PAHs) concentrations are shown on Figure 2.

As presented in Section 2.1.2, surface sediment samples were collected within, and outside the limits of the area of sediments containing MGP residuals. Results obtained for the analysis of sediments samples collected from each of the areas are presented below:

Area	Total PAH_{17} (mg/kg)			Total PAH_{34} (mg/kg)			TOC (mg/kg)		
	Range	Mean	Median	Range	Mean	Median	Range	Mean	Median
Within limits of MGP residuals	29.6-177.7	71.1	48.6	45.1-250.4	108.2	76.0	11,500-175,500	76,200	57,800
Outside the limits of MGP residuals	0.2-196.8	16.2	6.4	0.7-393.0	28.5	11.6	18,300-82,700	30,200	27,200

PAH and TOC concentrations were generally higher within the limits of the area of sediments containing MGP residuals relative to the samples collected outside of this area.

2.2.3 Screening Levels

Screening levels presented in the NYSDEC Technical Guidance for Screening Contaminated Sediments (1999) were utilized to evaluate the sediment analytical results. Analytical results for individual PAHs were compared to benthic aquatic life acute toxicity and benthic aquatic life chronic toxicity screening levels. The benthic aquatic acute and chronic toxicity screening levels are presented in micrograms per gram of organic carbon (µg/g OC) and are adjusted for each sample based on sample-specific TOC concentrations. It is important to note that screening level exceedances by themselves should not be considered indicative of potential risk. These screening levels are intended for comparison purposes only and do not represent a sediment remedial cleanup criteria.

The total of the target compound list (TCL) PAHs (Total PAH_{17}) were also compared to Long et al. (1995) effects range-low (ER-L) and effects range-median (ER-M) screening levels for marine and estuarine sediment as presented in the NYSDEC Technical Guidance for Screening Contaminated Sediments. The ER-L and ER-M are based on matching biological and chemical data compiled from numerous studies. Long et al. (1995) arranged the data from these studies in ascending order of concentrations, and calculated the lower 10th percentile of the effects data (the

ER-L) and the median, or 50th percentile, of the effects data (the ER-M). The ER-L and ER-M screening levels define concentration ranges that are said to represent potential for adverse effects. According to Long et al. (1995), “concentrations below the ER-L value represent a minimal-effects range; a range intended to estimate conditions in which effects would rarely be observed. Concentrations equal to and above the ER-L, but below the ER-M, represent a possible-effects range within which effects would occasionally occur. Finally, concentrations equivalent to and above the ER-M value represent a “probable-effects range within which effects would frequently occur”. Screening level exceedances by themselves should not be considered indicative of potential risk, as these values are intended to be used as preliminary screening levels.

Individual analyte concentration comparisons to benthic acute and benthic chronic screening levels as well as Total PAH_{17} concentration comparisons to the ER-L and ER-M are shown in Table 3.

3. Surface Sediment Evaluation

3.1 Statistical Background PAH Determination

Although analysis for both PAH_{17} and PAH_{34} were conducted as part of this investigation, this background PAH determination only used PAH_{17} results because this set of PAHs are more typically used to evaluate impacts associated with former MGP sites. Additionally, previous sediment investigations conducted at this site used the PAH_{17} list, which provides a level of consistency.

The site-specific Total PAH_{17} background concentrations were determined using the respective total PAH concentrations of the following data set:

- Analytical results of surface sediment samples, SD-35 through SD-68, collected outside of the area of sediments previously identified to contain MGP residuals, and excluding samples that contained physical evidence of potential impacts (odors, staining, sheens, residuals, etc.). Specifically sample SD-34, where sheens and odors were observed, was removed from the data set.

Prior to calculating a background concentration, an interquartile range outlier test was conducted in each data set. The interquartile range is defined as the difference between the values (e.g., total PAH concentrations) of the 75th percentile (third quartile) and the 25th percentile (first quartile) data points. Outliers would be considered those data points (i.e., concentrations) that fall further than one and a half times the interquartile range below the first quartile (the 25th percentile) or one and a half times the interquartile range above the third quartile (the 75th percentile). Based on the results of the interquartile range outlier test, the following surface sediment samples were identified as potential outliers for Total PAH_{17}:

Sampling location	Total PAH_{17} Concentration (mg/kg)	Outliers in data set
SD-55	21.1	P
SD-56	73.9	P
SD-57	42.0	P
SD-67	45.8	P
SD-68	32.4	P
	Total number of outliers =	5

Outliers are values in a data set that may not be representative of the set as a whole, usually because they are larger relative to the rest of the data. When outliers arise from unreliable observations, they may need to be removed before the data set is subjected to statistical analysis. However, outliers may represent true values from a variable data set. Removing accurate data can lead to a distorted estimate of summary statistics (USEPA 2006). Since the surface sediment background concentrations were determined from a larger data set, it is likely that some or all of the data points identified as potential outliers during this investigation are accurate data that may be indicative of background PAH sources and should not be treated as outliers. Therefore, the results of the statistical analysis for the calculation of the background concentration in Peekskill Bay are presented both retaining and removing the PAH concentrations for these potential outliers.

Statistical background calculation sheets are included as Appendix B. The site-specific background concentration was defined as the 90th percentile of the data set (i.e., the background concentrations). United States Environmental Protection Agency ProUCL (v.4.4.01) software (USEPA, 2010) was used to calculate the following background concentrations:

Total PAH_{17} (mg/kg) background concentration with potential outliers retained	**Total PAH_{17} (mg/kg) background concentration with potential outliers removed**
29.0	10.5

3.2 Comparison to Screening and Background Levels

Background concentrations with and without outliers were utilized to provide a relative screening of the Total PAH_{17} concentration detected in sediment samples within Peekskill Bay. Hence, the relative screening levels for Total PAH_{17} were divided into three concentration ranges:

Total PAH_{17} < 10.5 mg/kg

10.5 mg/kg< Total PAH_{17} < 29 mg/kg

29 mg/kg <Total PAH_{17}

Total PAH_{17} concentration ranges are presented in Figure 3. Total PAH_{17} and Total PAH_{34} concentrations were distributed as follows:

Area	Number of Total PAH_{17} samples		
	< 10.5 mg/kg	> 10.5 mg/kg, <29 mg/kg	>29 mg/kg
Within limits of subsurface sediments with MGP-residuals	0	0	8
Outside the limits of subsurface sediments with MGP-residuals	26	4	5

The results indicate that Total PAH_{17} surface sediment concentrations were generally lower outside the area of sediment containing MGP residuals and increased towards the shore line. In addition, it was observed that concentrations outside the area of sediment containing MGP residuals increased towards the north and east-southeast of the supplemental sediment sampling area. Based on the data sets utilized for the background concentration evaluation the following samples exceeded the estimated Total PAH_{17} surface sediment background concentrations:

- When outliers were retained in the data set: all of the eight samples (SD-26 through SD-33) in the area of sediment containing MGP residuals, and five samples (SD-34, SD-56, SD-57, SD-67 and SD-68) outside of the area of MGP residuals contained PAHs at concentrations greater than the estimated Total PAH_{17} and Total PAH_{34} background concentrations.

- When outliers were removed: samples containing PAHs at concentrations exceeding background concentrations were the same as when the outliers were retained plus four samples (SD-35, SD-37, SD-54 and SD-55) outside of the area of MGP-residuals. Note that samples SD-35, SD-37, SD-54 had Total PAH_{17} concentrations of 11.4, 11.6 and 11.0 mg/kg, respectively. These concentrations slightly exceeded the estimated PAH_{17} background concentration of 10.5 mg/kg with outliers removed.

A summary of samples exceeding the calculated Total PAH_{17} background concentrations is presented in Table 4.

In general, the samples with PAH concentrations greater than the estimated background concentrations were located along the shore line. PAH concentrations of nearshore sediments are prone to be higher as the result of anthropogenic activities, storm water discharges and surface water runoff. Examples of potential contributors of PAHs to Peekskill Bay near the former MGP site include the following:

- The site is located in a mixed commercial and manufacturing community where the historical land uses likely contributed to higher PAH concentrations in the nearshore sediments in the Peekskill Bay. Specifically, the Peekskill Landing Superfund site is an adjoining property to the south of the former MGP site along the waterfront. Peekskill Landing was used for a variety of purposes including office space, an art foundry, a lumber yard, boat repairing/storage facility, stone crushing operation, stove works, and coal storage. Several contaminants of concern (COC) were identified at the Peekskill Landing Superfund site including PAHs, volatile organic compounds (VOCs), metals, and PCBs (NYSDEC, 2011). Further additional neighboring properties of the MGP site include the following (Con Edison, 2003):

  - Ourem Iron works, to the east;
  - Metro-North Railroad to the southwest;
  - Hudson Valley Heating and Cooling, Stitches for Homes, and a boat yard to the southeast.

- Storm drains located in Old Pemart Avenue capture runoff from the street and then discharge into to the Peekskill Bay from a 12-inch bypass line located just north of the area of MGP residuals. In addition, surface water runoff moves downgradient via sheet flow and then discharges into the Peekskill Bay. Sampling location SD-34 was located near the 12-inch bypass line discharge area, while sampling location SD-35 was located just south of SD-34. In addition, sample location SD-68 was located near a sewer outfall on the south site of the Peekskill Landing Superfund site. Hence, it is likely that samples collected from sampling locations SD-34, SD-35, and SD-68 exhibited PAH concentrations exceeding the estimated Total PAH_{17} background concentration as the result of these storm water discharges and runoff. In general, sewer runoff from the Peekskill area eventually discharges to Peekskill Bay through a combination of overland flow, storm sewer outfalls, and surface water bodies. Overland runoff from urban environments such as Peekskill often contain PAHs and metals from anthropogenic sources such as asphalt,

automobiles, manufacturing facilities, etc. The table below presents a list of sewer outfalls from the Peekskill area that discharge to Peekskill Bay:

Outfall	Location
1	Lockwood Drive - 30' North of catch basin into brook
2	Frost Lane and Oakwood Drive – 20' South of catch basin.
3	Park Street & Finch Street – 20" North of Fire hydrant.
4	Across from 1757 Park Street.
5	Entrance to McGregor Brook – Rear of 1634 Park Street
6	Across From 1317 Park Street
7	Central Avenue (Near garden)
8	Central Avenue (Near garden)
9	Franklin Street & Ringgold Street – 20' South Franklin curb
10	Across from 632 Ringgold Street
11	640 Ringgold Street
12	760 Franklin Street
13	Requa Street – Between Ringgold Street & Depew Street
14	Requa Street – Between Ringgold Street & Depew Street
15	324 Depew Street
16	324 Depew Street
17	324 Depew Street
18	Depew Park (Parking lot horseshoe)
19	Depew Park exit – Hudson Avenue
20	Washington Street & Loomis Avenue
21	Washington Street & Loomis Avenue
22	Washington Street & Loomis Avenue
23	Washington Street & Loomis Avenue
24	Washington Street – In woods behind County Building
25	Washington Street – In woods behind County Building
26	Dead end of Brook Street
27	Dead end of Jackson Street
28	Riverfront Green – Opposite pump station

- A railroad track is located northwest of the site. Water runoff from the railroad likely contributed to increased PAH sediment concentrations in samples collected northwest from the site (SD-54, SD-55, SD-56 and SD-57). In addition, Annsville Creek discharges northwest of the site, near sampling locations SD-54, SD-55, SD-56 and SD-57. Due to the industrial land use around Annsville Creek, discharges from this water body might have further contributed to increased PAH sediment concentrations in samples collected northwest from the site.

- Sampling locations SD-37, SD-67 and SD-68 were close to the shore line and samples collected at these locations may have been impacted by anthropogenic activities, storm water discharges and surface water runoffs. However, due to their close proximity to the shoreline and the Peekskill Landing Superfund site, it is likely that the PAHs in the samples collected at these locations are not related to the MGP site and are likely related to the general shoreline locations and/or the Peekskill Landing site. No sediment investigation was conducted during the investigations of the Peekskill Landing site.

- Several historical storm sewer outfalls that are no longer maintained, but in the past conveyed storm water runoff from the Peekskill area. One of these outfalls can be seen along the shoreline immediately adjacent to the former MGP, which would also have contributed PAHs to sediment in this area.

Examples of potential anthropogenic PAH contributors to Peekskill Bay near the former MGP site are shown on Figure 4.

4. Summary and Recommendations

The data provided in this report address the following objectives:

- Determine if the surface sediments in Peekskill Bay have been affected by underlying coal tar residues detected in the subsurface sediments.

- Establish background PAH concentrations in surface sediments in Peekskill Bay.

To meet objective 1, surface sediment samples were collected from eight sediment sampling locations within the area of sediment containing MGP residuals and thirty five locations throughout Peekskill Bay outside the area of sediment containing MGP residuals. Samples were analyzed for PAH_{17}, PAH_{34} and TOC. In general, surface sediment PAH concentrations were lower than concentrations of PAHs detected in subsurface sediment reported in the *Remedial Investigation Addendum Report (ENSR 2008)*. However, the concentrations of PAHs detected in the surface sediment samples within the area of sediment containing MGP residuals were generally higher than the concentrations detected in sediment samples collected outside the area of sediment containing MGP residuals. In addition to higher PAH concentrations, physical evidence of potential impacts were detected in sediment samples collected from within the area of sediment containing MGP residuals. Trace sheen was observed in sediment sample SD-26. Additionally, a petroleum-like odor was detected in the sediment samples collected from sampling locations SD-27 and SD-28 in the area of sediment containing MGP residuals. Hence, the results presented in this report indicate that surface sediments within the area of sediment containing MGP residuals may have been affected by underlying coal tar residues detected in the subsurface sediments.

Objective 2 was met by using the total PAH_{17} concentrations detected in samples collected outside of the area of sediments containing MGP residuals (locations SD-34 through SD-68), and excluding samples that exhibited physical evidence of potential impacts (i.e., odors, staining, sheens, residuals, etc.). Specifically, sample SD-34, where sheen and petroleum-like odor were detected, was removed from the data set. However, sampling location SD-34 was located near the 12-inch bypass line discharge area, and consequently the sheen and odor exhibited in the sample collected at this may have been the result of storm water discharges and runoff. No physical evidence of potential impacts were detected in remaining samples collected outside the area of sediment containing MGP residue.

A statistical background analysis was performed using USEPA ProUCL (v.4.4.01) software (USEPA, 2010) to calculate the PAH background concentrations. The background concentrations were defined as the 90th percentile of the data set and were calculated for Total PAH_{17} using both a data set with potential outliers removed the full data set of background values. The resulting background concentrations were 10.5 and 29 mg/kg with the potential outliers removed and with potential outliers retained in the data set, respectively. Total PAH_{17} concentrations in surface sediments within the area of sediments containing MGP residuals were higher than the statistically estimated background concentrations. Total PAH_{17} concentrations detected in a few samples (SD-34, SD-55 to SD-57, SD-67 and SD-68) collected outside the area of sediment containing MGP residuals were higher than the statistically estimated background concentrations. However, based on the proximity to the shoreline, outfalls, rail lines, and other sites, it is concluded that the increased PAH concentrations in samples collected outside the area of sediment containing MGP residuals relative to background are the result of input from anthropogenic activities, storm water discharges and surface water runoff and not historical operations of the former MGP.

ARCADIS recommends an Alternatives Analysis Report (AAR) be completed as the next step to identify and evaluate potential remedial alternatives to address the impacted sediments within the area of known to contain MGP residue. The AAR will also include remedial measures to address residual coal tar in the subsurface soils in the adjoining upland areas.

5. References

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Tables

Table 1
Sediment Boring Summary and Physical Characterization

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID	Coordinates [2]		Water [3] Depth (ft)	Water [3] Elevation (ft AMSL)	Interval [4] (ft)	Description
	Northing	Easting				
SD-26	895625.9	648209.0	6.6	2.4	0.0 - 1.0	Gray/brown fine sand, little to trace silt, trace shells, **trace sheen**.
SD-27	895620.8	648124.3	8.2	2.1	0.0 - 1.0	Dark gray fine sand, some silt, trace organics, **faint degraded petroleum-like odor**.
SD-28	895579.3	648220.9	5.0	2.1	0.0 - 1.0	Dark gray medium fine sand, trace silt, coarse sand, coarse medium fine gravel, **moderate degraded petroleum-like odor**.
SD-29	895561.1	648095.5	9.4	1.7	0.0 - 1.0	Dark gray silt, trace fine sand, clay and organics.
SD-30	895543.2	648127.1	3.5	-1.0	0.0 - 1.0	Gray fine sand, little silt, trace organics and medium sand.
SD-31	895498.2	648149.5	5.7	-0.9	0.0 - 1.0	Gray fine sand, some silt, trace organics and plastic wrapper.
SD-32	895498.0	648223.3	1.6	-0.8	0.0 - 1.0	Gray brown fine sand, little medium coarse sand, trace silt and fine gravel.
SD-33	895424.0	648258.3	3.9	-0.8	0.0 - 1.0	Gray/brown organics (wood, vegetation), some fine sand, trace silt and fine gravel.
SD-34	895712.3	648064.2	4.9	-0.8	0.0 - 0.2	Brown silt, trace of organics.
					0.2 - 0.3	Gray coarse sand and fine gravel, trace silt, **sheen and degraded petroleum-like odor**.
					0.3 - 1.0	Brown silt, little to some clay, trace organics.
SD-35	895621.6	647970.1	6.7	-0.8	0.0 - 1.0	Gray silt and some clay.
SD-36	895452.6	647998.9	6.7	-0.7	0.0 - 1.0	Gray silt, some clay, trace organics.
SD-37	895239.0	648126.8	8.0	-0.5	0.0 - 1.0	Gray silt, come clay, trace organics.
SD-38	895232.0	648252.3	6.8	-0.2	0.0 - 1.0	Gray silt, little to some clay, trace organics.
SD-39	896951.8	645540.6	8.6	1.6	0.0 - 1.0	Gray/brown, clay, some silt, trace organics.
SD-40	895699.6	645118.9	7.4	1.3	0.0 - 1.0	Gray/brown. clay and silt, trace organics.
SD-41	894306.2	645256.6	8.3	0.5	0.0 - 0.1	Soft silt, trace of clay (brown)
					0.1 - 1.0	Gray silt and clay, trace organics, fine sandy silt seam at 0.8 ft.
SD-42	892764.4	645218.6	9.7	0.3	0.0 - 0.2	Soft silt, little clay (brown).
					0.2 - 1.0	Gray clay, some silt, trace organics.
SD-43	891862.3	645263.5	6.8	0.0	0.0 - 0.1	Brown soft silt, trace clay, gray silt and clay, trace organics.
					0.1 - 1.0	Gray silt and clay, trace organics.
SD-44	896209.6	646130.8	6.8	-0.2	0.0 - 0.1	Brown soft silt.
					0.1 - 1.0	Grey silt and clay, trace organics.

Table 1
Sediment Boring Summary and Physical Characterization

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID	Coordinates [2]		Water [3] Depth (ft)	Water [3] Elevation (ft AMSL)	Interval [4] (ft)	Description
	Northing	Easting				
SD-45	895165.4	646033.9	5.9	-0.2	0.0 - 0.1	Brown soft silt.
					0.1 - 1.0	Brown silt and clay, trace organics.
SD-46	894484.7	645992.2	5.5	-0.3	0.0 - 0.1	Brown soft silt.
					0.1 -1.0	Gray clay, some silt, trace sand and organics.
SD-47	893698.0	645980.4	5.7	-0.4	0.0 - 0.05	Brown soft silt.
					0.05 - 1.0	Gray clay, some silt, trace organics.
SD-48	893005.7	645945.0	5.8	-0.4	0.0 - 0.1	Brown silt, little clay (soft).
					0.1 - 1.0	Gray silt and clay, trace organics.
SD-49	891576.8	645965.4	6.2	-0.7	0.0 - 0.1	Brown silt, little clay (soft).
					0.1 - 1.0	Gray silt, some clay, trace organics.
SD-50	892496.0	646480.9	6.7	-0.5	0.0 - 0.1	Brown soft silt, little clay.
					0.1 - 1.0	Gray silt and clay, trace organics.
SD-51	893437.0	646832.2	7.1	-0.2	0.0 - 1.0	Gray brown silt and clay.
SD-52	894111.1	646822.0	6.8	0.0	0.0 - 0.1	Brown silt, little clay (soft).
					0.1 - 1.0	Gray silt and clay, trace organics and shells.
SD-53	894820.2	646759.6	6.9	0.2	0.0 - 1.0	Gray/brown silt and clay, trace organics.
SD-54	895611.2	646656.2	7.4	0.3	0.0 - 1.0	Gray silt, some to little clay, little trace fine sand.
SD-55	896208.3	646478.7	12.0	0.8	0.0 - 1.0	Gray silt and organics (leaves), little clay and fine sand.
SD-56	896570.5	646577.8	7.6	1.1	0.0 - 1.0	Gray organics (leaves), little fine sand, trace Silt, trace shell fragments.
SD-57	896176.9	647292.6	8.5	1.8	0.0 - 1.0	Gray silt, some clay, trace organics and fine sand.
SD-58	895621.1	646763.9	9.2	2.0	0.0 - 1.0	Gray silt and clay, trace organics and fine sand.
SD-59	894905.6	646831.4	9.1	2.3	0.0 - 0.1	Brown silt, trace fine sand and clay.
					0.1 - 1.0	Gray silt, little to some clay, trace organics and fine sand.
SD-60	894312.4	646923.2	9.4	2.5	0.0 - 1.0	Gray silt, some clay, trace organics and fine sand.
SD-61	893691.6	647013.9	9.8	2.7	0.0 - 1.0	Gray silt and clay, trace organics.
SD-62	895662.6	647317.5	9.8	3.0	0.0 - 0.1	Brown silt, little clay and organics.
					0.1 - 1.0	Gray silt, some clay, trace organics, shells and fine sand.
SD-63	895083.4	647361.5	10.3	3.2	0.0 - 1.0	Gray silt, little to some clay, trace organics and fine sand.

Table 1
Sediment Boring Summary and Physical Characterization

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID	Coordinates [2]		Water [3] Depth (ft)	Water [3] Elevation (ft AMSL)	Interval [4] (ft)	Description
	Northing	Easting				
SD-64	894506.3	647419.1	10.4	3.4	0.0 - 1.0	Gray/brown silt, little to some clay, trace organics and fine sand.
SD-65	893926.7	647450.6	10.9	4.0	0.0 - 1.0	Gray silt, little to some clay, trace organics and fine sand.
SD-66	895710.7	647809.9	11.3	4.1	0.0 - 1.0	Gray silt, little to some clay, trace organics.
SD-67	895085.1	647902.5	10.8	4.0	0.0 - 1.0	Gray silt, some clay, trace organics and fine sand.
SD-68	894392.0	648001.2	11.1	4.1	0.0 - 1.0	Dark gray silt, little fine sand, trace organics and clay.

Notes:

1. Sediment cores collected by ARCADIS on September 28 and 30, 2011.
2. Coordinates presented relative to the New York State Plane Coordinate System, East Zone using North America Datum of 1983 (NAD83).
3. The water depth and elevation is presented in feet Above Mean Sea Level (AMSL) relative to 1988 USGS National American Vertical Datum (NAVD88).
4. Samples were collected from 0.0 to 1.0 foot interval below the top of the sediment surface using Lexan® tubing.

Table 2
Grain Size Summary Results

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID:		SD-29	SD-32[1]	SD-51	SD-57	SD-68
Sample Depth(Feet):		0-1	0-1	0-1	0-1	0-1
Date Collected:	Units	9/29/2011	9/30/2011	9/29/2011	9/29/2011	9/29/2011
Particle Size						
Clay	%	14.74	--	21.67	18.53	8.66
Coarse Sand	%	0.00	--	0.00	0.00	0.00
Fine Sand	%	0.00	--	0.00	0.00	0.00
Gravel	%	0.00	--	0.00	0.00	0.00
Medium Sand	%	0.00	--	0.00	0.00	0.00
Sand	%	13.82	--	4.26	8.99	40.64
Silt	%	71.44	--	74.07	72.48	50.69
Sieve Size 3 inch	% passing	100.00	100.00	100.00	100.00	100.00
Sieve Size 2 inch	% passing	100.00	100.00	100.00	100.00	100.00
Sieve Size 1.5 inch	% passing	100.00	100.00	100.00	100.00	100.00
Sieve Size 1 inch	% passing	100.00	100.00	100.00	100.00	100.00
Sieve Size 0.75 inch	% passing	100.00	100.00	100.00	100.00	100.00
Sieve Size 0.375 inch	% passing	100.00	97.11	100.00	100.00	100.00
Sieve Size #4	% passing	100.00	87.67	99.85	99.88	99.90
Sieve Size #10	% passing	99.85	70.36	99.67	99.63	99.52
Sieve Size #20	% passing	99.56	61.71	99.46	99.25	98.87
Sieve Size #40	% passing	99.22	56.25	99.27	98.77	97.99
Sieve Size #60	% passing	98.65	38.70	99.04	98.15	96.15
Sieve Size #140	% passing	94.43	6.40	98.42	96.41	78.68
Sieve Size #200	% passing	89.82	3.18	97.42	95.36	64.71
Hydrometer Reading 1	% passing	80.80	--	92.40	83.80	52.90
Hydrometer Reading 2	% passing	72.10	--	83.70	77.70	43.20
Hydrometer Reading 3	% passing	58.00	--	70.50	62.40	32.20
Hydrometer Reading 4	% passing	46.10	--	56.30	50.20	24.90
Hydrometer Reading 5	% passing	34.10	--	44.20	38.00	18.80
Hydrometer Reading 6	% passing	19.10	--	28.00	22.90	10.50
Hydrometer Reading 7	% passing	10.60	--	15.10	14.00	7.00
Solids						
Percent Moisture	%	59.69	24.95	53.17	55.53	45.83
Percent Solids	%	40.31	75.05	46.83	44.47	54.17

Notes:

1. Unable to run Hydrometer due to lack of sample volume.

Table 3
PAH Analytical Result Summary

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID: Sample Depth(Feet): Date Collected:	NYSDEC Contaminated Sediments Benthic Acute (bold)	NYSDEC Contaminated Sediments Benthic Chronic (shade)	Units	SD-26 0 - 1 09/29/11	SD-27 0 - 1 09/29/11	SD-28 0 - 1 09/29/11	SD-29 0 - 1 09/29/11	SD-30 0 - 1 09/30/11	SD-31 0 - 1 09/30/11	SD-32 0 - 1 09/30/11	SD-33 0 - 1 09/30/11	SD-34 0 - 1 09/30/11	SD-35 0 - 1 09/30/11
Semivolatile Organics													
1-Methylnaphthalene	- -	- -	mg/kg	0.612	3.15 [2.61]	0.786	0.188	0.422	0.626	0.373	2.99	1.52	0.0500
2-Methylnaphthalene	304	34	mg/kg	0.725	5.31 [4.10]	0.539	0.335	0.562	0.882	0.316	3.38	3.34	0.0900
Acenaphthene	- -	- -	mg/kg	2.24	6.17 [5.65]	6.20	0.307	0.695	0.647	0.507	2.94	13.2	0.0730
Acenaphthylene	- -	- -	mg/kg	3.46	3.78 [4.41]	1.25	1.65	1.94	1.90	1.34	5.12	8.47	0.404
Anthracene	986	107	mg/kg	2.86	5.08 [5.22]	1.46	1.43	1.94	1.79	1.16	7.56	18.2	0.421
Benzo(a)anthracene	94	12	mg/kg	**3.39**	7.73 J [6.67]	1.84	2.39	4.00	3.66	2.26	14.1	**15.3**	0.783
Benzo(a)pyrene	- -	- -	mg/kg	4.18	7.81 J [6.94]	2.04	3.07	4.74	4.55	2.76	14.7	13.6	1.05
Benzo(b)fluoranthene	- -	- -	mg/kg	2.00	5.34 J [4.56]	1.47	1.87	3.80	3.19	2.12	10.2	5.65	0.907
Benzo(e)pyrene	- -	- -	mg/kg	2.41	4.82 J [4.38]	1.42	1.95	3.17	2.95	1.93	8.97	7.10	0.790
Benzo(g,h,i)perylene	- -	- -	mg/kg	2.27	4.20 J [3.79]	1.33	1.88	3.16	2.86	2.02	8.43	5.56	0.764
Benzo(k)fluoranthene	- -	- -	mg/kg	2.70	5.84 J [4.92]	1.68	2.39	3.72	3.27	2.14	11.0	7.60	0.924
Chrysene	- -	- -	mg/kg	3.18	8.62 J [7.53]	2.10	2.39	4.47	4.06	2.47	13.3	14.0	0.939
Dibenzo(a,h)anthracene	- -	- -	mg/kg	0.758 J	1.52 J [1.46 J]	0.438 J	0.540 J	0.896 J	0.869 J	0.530 J	2.69 J	2.06 J	0.220 J
Fluoranthene	- -	1,020	mg/kg	3.24	10.8 J [10.0]	2.89	2.93	8.13	5.86	3.65	23.0	20.7	1.38
Fluorene	73	8	mg/kg	0.370	2.48 J [2.37]	0.606	0.166	0.438	0.359	0.230	2.23	**7.38**	0.0830
Indeno(1,2,3-cd)pyrene	- -	- -	mg/kg	2.13	4.07 J [3.61]	1.31	1.78	3.14	2.80	1.90	8.81	5.02	0.731
Naphthalene	258	30	mg/kg	**3.28**	16.9 J [11.6]	2.05	0.683	1.31	1.89	0.758	8.65	4.98	0.138
Phenanthrene	- -	120	mg/kg	1.63	8.04 J [7.80]	1.11	0.908	3.52	2.16	1.54	15.8	14.5	0.451
Pyrene	8,775	961	mg/kg	4.72	12.9 J [12.1]	3.32	3.22	7.01	5.78	3.84	20.2	33.5	1.36
C1 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	3.40	6.54 [6.58]	1.39	2.16	2.50	2.88	1.58	8.56	13.7	0.567
C1 - Fluoranthene/Pyrene	- -	- -	mg/kg	6.53	12.7 [11.7]	2.73	3.29	4.41	4.63	2.63	13.8	34.2	0.948
C1 - Fluorene	- -	- -	mg/kg	1.41	2.24 [2.25]	0.838	0.363	0.504	0.547	0.382	1.74	11.4	0.119
C1 - Naphthalene	- -	- -	mg/kg	0.839	5.43 [4.39]	0.853	0.331	0.640	0.957	0.450	4.10	3.12	0.0980
C1 - Phenanthrene/Anthracene	- -	- -	mg/kg	4.26	10.8 J [9.78]	1.59	1.60 J	2.21 J	2.05 J	1.35	9.98 J	38.6	0.366 J
C2 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	1.83	3.31 [3.46]	0.739	1.10	1.39	1.53	0.974	4.50	5.90	0.341
C2 - Fluorene	- -	- -	mg/kg	1.52	2.05 [2.12]	0.656	0.249 J	0.499 J	0.685 J	0.552	1.34 J	11.5	0.0620 J
C2 - Naphthalene	- -	- -	mg/kg	1.29	6.27 [5.69]	2.23	0.465	0.656	0.948	0.560	3.67	10.0	0.201
C2 - Phenanthrene/Anthracene	- -	- -	mg/kg	3.27	7.00 [7.12]	1.43	1.44	1.80	2.13	1.20	6.96	23.5	0.504
C3 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.863	1.77 [1.53]	0.367	0.629	0.780	0.858	0.649	2.54	2.36	0.201
C3 - Fluorene	- -	- -	mg/kg	0.821	1.77 [1.72]	0.587	0.495	0.908	0.816	0.474	2.22	4.84	0.180
C3 - Naphthalene	- -	- -	mg/kg	1.24	3.20 [3.01]	1.33	0.322	0.506	0.760	0.471	2.50	14.6	0.152
C3 - Phenanthrene/Anthracene	- -	- -	mg/kg	1.49	3.31 [3.38]	0.748	0.854	1.06	1.30	0.679	3.26	8.83	0.249
C4 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.261	0.811 [0.698]	0.355	0.310	0.529	0.575	0.545	1.24	0.755	0.263
C4 - Naphthalene	- -	- -	mg/kg	0.797	1.92 [1.80]	0.621	0.291	0.399	0.588	0.336	1.54	7.04	0.118
C4 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.572	1.22 [1.28]	0.315	0.358	0.367	0.605	0.411	1.30	2.74	0.138
Perylene	- -	- -	mg/kg	0.771	1.89 J [1.66]	0.491	1.25	1.22	1.07	0.699	3.42	3.06	1.23
Total PAH	**ER-L Concentration**	**ER-M Concentration**											
Total PAH 17	4	35	mg/kg	**44.8 J**	**116 J [103 J]**	**32.5 J**	**29.6 J**	**56.1 J**	**48.6 J**	**31.2 J**	**178 J**	**197 J**	**11.4 J**
Total PAH 34	- -	- -	mg/kg	76.0 J	188 J [171 J]	49.8 J	45.1 J	76.5 J	71.5 J	45.1 J	250 J	393 J	17.2 J
Miscellaneous													
Total Organic Carbon	- -	- -	mg/kg	11,500	109,000 [115,000]	31,200	57,800	46,500	107,000	32,700	175,000	45,700	30,600

Table 3
PAH Analytical Result Summary

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID: / Sample Depth(Feet): / Date Collected:	NYSDEC Contaminated Sediments Benthic Acute (bold)	NYSDEC Contaminated Sediments Benthic Chronic (shade)	Units	SD-36 0 - 1 09/30/11	SD-37 0 - 1 09/30/11	SD-38 0 - 1 09/30/11	SD-39 0 - 1 09/28/11	SD-40 0 - 1 09/28/11	SD-41 0 - 1 09/28/11	SD-42 0 - 1 09/28/11	SD-43 0 - 1 09/28/11	SD-44 0 - 1 09/28/11	SD-45 0 - 1 09/28/11
Semivolatile Organics													
1-Methylnaphthalene	- -	- -	mg/kg	0.0360	0.0300	0.0220	0.00600 U	0.0170 [0.0170]	0.0190	0.0250	0.0190	0.0510	0.0580
2-Methylnaphthalene	304	34	mg/kg	0.0590	0.0560	0.0360	0.00600 U	0.0370 [0.0380]	0.0450	0.0560	0.0430	0.113	0.108
Acenaphthene	- -	- -	mg/kg	0.0460	0.0440	0.0270	0.00600 U	0.0130 [0.0160]	0.0180	0.0210	0.0140	0.0690	0.0280
Acenaphthylene	- -	- -	mg/kg	0.255	0.234	0.197	0.00600 U	0.0530 [0.0680]	0.0530	0.0570	0.0510	0.164	0.152
Anthracene	986	107	mg/kg	0.320	0.309	0.226	0.00600 U	0.0870 [0.108]	0.120	0.134	0.101	0.191	0.227
Benzo(a)anthracene	94	12	mg/kg	0.713	0.763	0.421	0.00500 J	0.186 [0.250]	0.233	0.281	0.208	0.428	0.461
Benzo(a)pyrene	- -	- -	mg/kg	0.903	0.986	0.491	0.00800	0.231 [0.315]	0.262	0.315	0.240	0.513	0.573
Benzo(b)fluoranthene	- -	- -	mg/kg	0.829	0.980	0.417	0.00700	0.217 [0.287]	0.208	0.239	0.190	0.402	0.453
Benzo(e)pyrene	- -	- -	mg/kg	0.699	0.785	0.363	0.00600 J	0.190 [0.244]	0.191	0.240	0.186	0.392	0.436
Benzo(g,h,i)perylene	- -	- -	mg/kg	0.665	0.761	0.341	0.0240	0.172 [0.217]	0.164	0.205	0.155	0.326	0.394
Benzo(k)fluoranthene	- -	- -	mg/kg	0.852	0.893	0.447	0.00700	0.220 [0.294]	0.222	0.257	0.201	0.412	0.496
Chrysene	- -	- -	mg/kg	0.871	0.997	0.440	0.00800	0.221 [0.286]	0.228	0.290	0.212	0.393	0.480
Dibenzo(a,h)anthracene	- -	- -	mg/kg	0.187	0.230	0.104	0.0360	0.0680 [0.0500]	0.0370	0.0390	0.0340	0.0650	0.0760
Fluoranthene	- -	1,020	mg/kg	1.46	1.66	0.776	0.00600	0.347 [0.454]	0.390	0.421	0.294	0.706	0.756
Fluorene	73	8	mg/kg	0.0760	0.0840	0.0410	0.00700	0.0370 [0.0420]	0.0540	0.0680	0.0440	0.0650	0.0780
Indeno(1,2,3-cd)pyrene	- -	- -	mg/kg	0.641	0.726	0.329	0.0230	0.137 [0.184]	0.125	0.151	0.112	0.249	0.304
Naphthalene	258	30	mg/kg	0.0780	0.0750	0.0510	0.00500 J	0.0530 [0.0460]	0.0730	0.0940	0.0590	0.119	0.130
Phenanthrene	- -	120	mg/kg	0.469	0.536	0.264	0.00800	0.164 [0.194]	0.194	0.258	0.159	0.249	0.382
Pyrene	8,775	961	mg/kg	1.35	1.49	0.761	0.00600	0.342 [0.449]	0.382	0.447	0.321	0.797	0.796
C1 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.437	0.421	0.279	0.00500 J	0.131 [0.188]	0.180	0.228	0.198	0.366	0.387
C1 - Fluoranthene/Pyrene	- -	- -	mg/kg	0.737	0.746	0.464	0.00800	0.209 [0.309]	0.298	0.361	0.304	0.663	0.640
C1 - Fluorene	- -	- -	mg/kg	0.0730	0.0750	0.0520	0.00600	0.0350 [0.0390]	0.0470	0.0560	0.0430	0.111	0.0840
C1 - Naphthalene	- -	- -	mg/kg	0.0620	0.0600	0.0390	0.00600 U	0.0360 [0.0380]	0.0420	0.0540	0.0400	0.107	0.109
C1 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.212 J	0.387 J	0.154 J	0.00900	0.00900 UJ [0.00900 UJ]	0.00700 UJ	0.179 J	0.219 J	0.298	0.574 J
C2 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.223	0.251	0.163	0.00600	0.0790 [0.109]	0.100	0.130	0.121	0.196	0.211
C2 - Fluorene	- -	- -	mg/kg	0.0330 J	0.0260 J	0.0210 J	0.00600 J	0.00900 UJ [0.00900 UJ]	0.00700 UJ	0.0100 UJ	0.00800 UJ	0.122 J	0.00900 UJ
C2 - Naphthalene	- -	- -	mg/kg	0.167	0.172	0.0870	0.00600 U	0.0670 [0.0800]	0.0660	0.0830	0.0590	0.102	0.163
C2 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.361	0.370	0.243	0.00600 U	0.196 [0.228]	0.209	0.274	0.212	0.321	0.381
C3 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.138	0.125	0.0990	0.00600 U	0.0510 [0.0800]	0.0630	0.0860	0.0770	0.106	0.133
C3 - Fluorene	- -	- -	mg/kg	0.173	0.179	0.114	0.00600 U	0.0960 [0.116]	0.0880	0.0970	0.0710	0.114	0.168
C3 - Naphthalene	- -	- -	mg/kg	0.122	0.128	0.0650	0.00600 U	0.0650 [0.0630]	0.0650	0.0840	0.0570	0.0970	0.146
C3 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.180	0.173	0.130	0.00600 U	0.0820 [0.104]	0.102	0.121	0.113	0.161	0.190
C4 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.200	0.167	0.0990	0.00600 U	0.0340 J [0.105 J]	0.0470	0.0520	0.0560	0.0710	0.100
C4 - Naphthalene	- -	- -	mg/kg	0.0870	0.0790	0.0610	0.00600 U	0.0360 [0.0570]	0.0520	0.0540	0.0420	0.0800	0.104
C4 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.102	0.116	0.0740	0.00600 U	0.0440 [0.0700]	0.0680	0.0840	0.0760	0.0830	0.119
Perylene	- -	- -	mg/kg	1.07	1.08	0.432	0.508	1.11 [1.51]	2.62	3.57	2.08	1.38	1.84
Total PAH	**ER-L Concentration**	**ER-M Concentration**											
Total PAH 17	4	35	mg/kg	**10.4**	**11.6**	**5.70**	0.156 J	2.74 [3.50]	2.95	3.52	2.58	**5.54**	**6.22**
Total PAH 34	- -	- -	mg/kg	14.8 J	16.1 J	8.27 J	0.704 J	5.01 J [6.60 J]	7.00	9.03 J	6.35 J	9.92 J	11.6 J
Miscellaneous													
Total Organic Carbon	- -	- -	mg/kg	28,700	32,600	29,700	26,000	23,500 [26,400]	22,500	24,200	23,700	60,500	24,800

Table 3
PAH Analytical Result Summary

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID: Sample Depth(Feet): Date Collected:	NYSDEC Contaminated Sediments Benthic Acute (bold)	NYSDEC Contaminated Sediments Benthic Chronic (shade)	Units	SD-46 0 - 1 09/28/11	SD-47 0 - 1 09/28/11	SD-48 0 - 1 09/28/11	SD-49 0 - 1 09/28/11	SD-50 0 - 1 09/29/11	SD-51 0 - 1 09/29/11	SD-52 0 - 1 09/29/11	SD-53 0 - 1 09/29/11	SD-54 0 - 1 09/29/11
Semivolatile Organics												
1-Methylnaphthalene	- -	- -	mg/kg	0.0160	0.0290 [0.0320]	0.0480	0.0300	0.0360	0.0330	0.0330	0.0590	0.0410
2-Methylnaphthalene	304	34	mg/kg	0.0370	0.0670 [0.0660]	0.109	0.0570	0.0740	0.0750	0.0700	0.123	0.0920
Acenaphthene	- -	- -	mg/kg	0.0120	0.0190 [0.0190]	0.0300	0.0210	0.0270	0.0210	0.0260	0.0380	0.0330
Acenaphthylene	- -	- -	mg/kg	0.0570	0.0970 [0.0920]	0.169	0.0990	0.160	0.126	0.123	0.237	0.295
Anthracene	986	107	mg/kg	0.0860	0.135 [0.137]	0.262	0.147	0.238	0.187	0.187	0.295	0.322
Benzo(a)anthracene	94	12	mg/kg	0.177	0.264 [0.269]	0.505	0.301	0.540	0.430	0.403	0.573	0.842
Benzo(a)pyrene	- -	- -	mg/kg	0.241	0.325 [0.334]	0.649	0.383	0.669	0.539	0.504	0.727	1.12
Benzo(b)fluoranthene	- -	- -	mg/kg	0.194	0.259 [0.292]	0.468	0.343	0.586	0.396	0.409	0.572	0.803
Benzo(e)pyrene	- -	- -	mg/kg	0.183	0.246 [0.262]	0.488	0.302	0.538	0.416	0.382	0.555	0.802
Benzo(g,h,i)perylene	- -	- -	mg/kg	0.167	0.226 [0.233]	0.416	0.275	0.474	0.366	0.350	0.503	0.697
Benzo(k)fluoranthene	- -	- -	mg/kg	0.205	0.264 [0.306]	0.501	0.351	0.629	0.422	0.432	0.626	0.885
Chrysene	- -	- -	mg/kg	0.186	0.279 [0.302]	0.498	0.347	0.562	0.395	0.423	0.617	0.734
Dibenzo(a,h)anthracene	- -	- -	mg/kg	0.0350	0.0460 [0.0470]	0.0840	0.0570	0.0970	0.0710	0.0720	0.0980	0.153
Fluoranthene	- -	1,020	mg/kg	0.283	0.416 [0.463]	0.668	0.568	0.983	0.600	0.705	0.966	1.47
Fluorene	73	8	mg/kg	0.0320	0.0600 [0.0580]	0.0930	0.0520	0.0610	0.0680	0.0620	0.0950	0.0770
Indeno(1,2,3-cd)pyrene	- -	- -	mg/kg	0.135	0.170 [0.188]	0.324	0.215	0.370	0.277	0.280	0.392	0.563
Naphthalene	258	30	mg/kg	0.0470	0.0850 [0.0940]	0.149	0.0780	0.102	0.113	0.0950	0.154	0.120
Phenanthrene	- -	120	mg/kg	0.129	0.225 [0.230]	0.349	0.245	0.339	0.241	0.314	0.465	0.388
Pyrene	8,775	961	mg/kg	0.307	0.448 [0.481]	0.767	0.569	1.02	0.681	0.711	1.04	1.74
C1 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.162	0.232 [0.219]	0.489	0.224	0.435	0.412	0.321	0.517	0.773
C1 - Fluoranthene/Pyrene	- -	- -	mg/kg	0.263	0.382 [0.355]	0.738	0.373	0.701	0.609	0.530	0.855	1.28
C1 - Fluorene	- -	- -	mg/kg	0.0330	0.0570 [0.0550]	0.0890	0.0550	0.0730	0.0710	0.0650	0.113	0.139
C1 - Naphthalene	- -	- -	mg/kg	0.0350	0.0630 [0.0640]	0.101	0.0560	0.0730	0.0710	0.0680	0.122	0.0900
C1 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.00600 UJ	0.297 J [0.00800 UJ]	0.712 J	0.0110 UJ	0.762 J	0.346 J	0.329 J	0.544 J	0.471
C2 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.0960	0.144 [0.139]	0.297	0.132	0.265	0.256	0.174	0.324	0.433
C2 - Fluorene	- -	- -	mg/kg	0.00600 UJ	0.00700 UJ [0.00800 UJ]	0.00900 UJ	0.0110 UJ	0.0100 UJ	0.00700 UJ	0.00700 UJ	0.00800 UJ	0.199
C2 - Naphthalene	- -	- -	mg/kg	0.0550	0.0930 [0.103]	0.136	0.102	0.111	0.0930	0.102	0.175	0.129
C2 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.171	0.255 [0.258]	0.438	0.277	0.429	0.334	0.300	0.519	0.537
C3 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.0670	0.0810 [0.0880]	0.190	0.104	0.167	0.165	0.115	0.197	0.262
C3 - Fluorene	- -	- -	mg/kg	0.0780	0.111 [0.130]	0.179	0.152	0.219	0.133	0.140	0.227	0.200
C3 - Naphthalene	- -	- -	mg/kg	0.0460	0.0880 [0.0930]	0.122	0.0990	0.108	0.0850	0.0900	0.163	0.108
C3 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.0830	0.129 [0.128]	0.246	0.130	0.237	0.187	0.147	0.264	0.302
C4 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.0480	0.0560 [0.0600]	0.139	0.0860	0.104	0.103	0.0600	0.119	0.175
C4 - Naphthalene	- -	- -	mg/kg	0.0420	0.0650 [0.0720]	0.0890	0.0720	0.0950	0.0650	0.0700	0.126	0.118
C4 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.0540	0.0820 [0.0800]	0.154	0.0830	0.141	0.128	0.0830	0.151	0.171
Perylene	- -	- -	mg/kg	1.17	3.00 [2.17]	2.20	1.45	1.72	2.23	1.68	2.01	1.72
Total PAH	**ER-L Concentration**	**ER-M Concentration**										
Total PAH 17	4	35	mg/kg	2.48	3.56 [3.81]	**6.42**	**4.35**	**7.40**	**5.35**	**5.48**	**7.95**	**11.0**
Total PAH 34	- -	- -	mg/kg	4.88	8.70 J [7.82]	12.7 J	7.75	13.0 J	10.6 J	9.75 J	14.4 J	18.2
Miscellaneous												
Total Organic Carbon	- -	- -	mg/kg	24,500	23,500 [26,200]	26,500	25,500	29,200	25,100	22,400	27,800	30,100

Table 3
PAH Analytical Result Summary

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID: Sample Depth(Feet): Date Collected:	NYSDEC Contaminated Sediments Benthic Acute (bold)	NYSDEC Contaminated Sediments Benthic Chronic (shade)	Units	SD-55 0 - 1 09/29/11	SD-56 0 - 1 09/29/11	SD-57 0 - 1 09/29/11	SD-58 0 - 1 09/29/11	SD-59 0 - 1 09/29/11	SD-60 0 - 1 09/29/11	SD-61 0 - 1 09/29/11	SD-62 0 - 1 09/29/11	SD-63 0 - 1 09/29/11	SD-64 0 - 1 09/29/11
Semivolatile Organics													
1-Methylnaphthalene	- -	- -	mg/kg	0.0360	0.199	0.0880	0.0240	0.0740	0.0250	0.00900 U	0.0270	0.0510	0.0500
2-Methylnaphthalene	304	34	mg/kg	0.0580	0.295	0.170	0.0580	0.145	0.0550	0.00700 J	0.0670	0.111	0.108
Acenaphthene	- -	- -	mg/kg	0.0850	0.202	0.244	0.0170	0.0390	0.0200	0.00900 U	0.0250	0.0380	0.0360
Acenaphthylene	- -	- -	mg/kg	0.315	0.364	0.449	0.215	0.265	0.0900	0.00500 J	0.177	0.282	0.253
Anthracene	986	107	mg/kg	0.505	1.10	1.77	0.173	0.313	0.125	0.0130	0.205	0.306	0.298
Benzo(a)anthracene	94	12	mg/kg	1.61	7.06	**3.73**	0.484	0.672	0.302	0.0210	0.716	0.645	0.695
Benzo(a)pyrene	- -	- -	mg/kg	1.87	8.50	3.10	0.694	0.926	0.385	0.0220	0.853	0.852	0.947
Benzo(b)fluoranthene	- -	- -	mg/kg	1.56	6.49	2.21	0.504	0.754	0.318	0.0210	0.637	0.674	0.762
Benzo(e)pyrene	- -	- -	mg/kg	1.30	6.70	1.92	0.534	0.711	0.288	0.0200	0.551	0.652	0.700
Benzo(g,h,i)perylene	- -	- -	mg/kg	1.22	5.16	1.55	0.440	0.645	0.260	0.0160	0.485	0.591	0.646
Benzo(k)fluoranthene	- -	- -	mg/kg	1.57	5.56	2.41	0.523	0.757	0.315	0.0190	0.678	0.694	0.790
Chrysene	- -	- -	mg/kg	1.73	7.83	3.49	0.426	0.714	0.302	0.0230	0.608	0.641	0.728
Dibenzo(a,h)anthracene	- -	- -	mg/kg	0.259	1.20	0.391	0.103	0.141	0.0570	0.00900 U	0.107	0.128	0.139
Fluoranthene	- -	1,020	mg/kg	3.48	8.79	7.68	0.649	1.17	0.511	0.0400	1.06	1.06	1.23
Fluorene	73	8	mg/kg	0.131	0.277	0.377	0.0450	0.0910	0.0470	0.0190	0.0580	0.0890	0.0840
Indeno(1,2,3-cd)pyrene	- -	- -	mg/kg	1.01	3.59	1.23	0.338	0.507	0.206	0.0120	0.408	0.462	0.519
Naphthalene	258	30	mg/kg	0.0900	0.299	0.250	0.0750	0.157	0.0750	0.0100	0.0950	0.147	0.135
Phenanthrene	- -	120	mg/kg	1.27	2.38	4.21	0.183	0.472	0.218	0.0270	0.290	0.420	0.441
Pyrene	8,775	961	mg/kg	3.06	8.40	7.00	0.755	1.27	0.536	0.0430	1.07	1.18	1.28
C1 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.771	11.2	2.07	0.548	0.659	0.269	0.0230	0.524	0.640	0.612
C1 - Fluoranthene/Pyrene	- -	- -	mg/kg	1.55	7.18	4.45	0.770	1.08	0.429	0.0460	0.897	1.04	1.01
C1 - Fluorene	- -	- -	mg/kg	0.121	0.212	0.291	0.0680	0.123	0.0510	0.0170	0.0850	0.112	0.109
C1 - Naphthalene	- -	- -	mg/kg	0.0650	0.316	0.169	0.0530	0.149	0.0540	0.00800 J	0.0630	0.107	0.108
C1 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.939 J	1.56 J	2.82 J	0.224	0.640 J	0.343 J	0.0370	0.00600 UJ	0.481 J	0.650 J
C2 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.440	11.2	0.937	0.337	0.389	0.154	0.0140	0.265	0.382	0.352
C2 - Fluorene	- -	- -	mg/kg	0.00800 UJ	0.0190 UJ	0.252 J	0.0760 J	0.00900 UJ	0.00600 UJ	0.00900 UJ	0.00600 UJ	0.0830 J	0.0110 UJ
C2 - Naphthalene	- -	- -	mg/kg	0.151	0.751	0.228	0.0710	0.219	0.0760	0.0180	0.0920	0.145	0.150
C2 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.634	2.28	1.71	0.302	0.587	0.238	0.0950	0.399	0.553	0.516
C3 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.205	8.96	0.429	0.198	0.259	0.0910	0.00900 U	0.160	0.213	0.219
C3 - Fluorene	- -	- -	mg/kg	0.289	0.662	0.437	0.111	0.275	0.112	0.00900 U	0.148	0.215	0.230
C3 - Naphthalene	- -	- -	mg/kg	0.148	0.638	0.222	0.0570	0.182	0.0660	0.0170	0.0740	0.131	0.131
C3 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.264	2.04	0.774	0.192	0.342	0.123	0.0200	0.217	0.300	0.274
C4 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.143	4.41	0.216	0.162	0.191	0.0930	0.00900 U	0.106	0.175	0.129
C4 - Naphthalene	- -	- -	mg/kg	0.104	0.361	0.188	0.0610	0.153	0.0590	0.0140	0.0750	0.118	0.115
C4 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.131	1.58	0.295	0.119	0.182	0.0730	0.0220	0.0830	0.156	0.136
Perylene	- -	- -	mg/kg	1.05	2.48	2.33	1.13	2.24	2.10	1.99	2.24	1.99	1.95
Total PAH	**ER-L Concentration**	**ER-M Concentration**											
Total PAH 17	4	35	mg/kg	**21.1**	**73.9**	**42.0**	**6.16**	**9.60**	**4.06**	0.311 J	**8.02**	**8.86**	**9.68**
Total PAH 34	- -	- -	mg/kg	28.1 J	130 J	59.8 J	10.6 J	17.3 J	8.39 J	2.63 J	13.5	15.7 J	16.4 J
Miscellaneous													
Total Organic Carbon	- -	- -	mg/kg	51,300	82,700	31,700	21,900	28,800	22,700	18,300	20,400	27,200	27,900

Table 3
PAH Analytical Result Summary

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Location ID: Sample Depth(Feet): Date Collected:	NYSDEC Contaminated Sediments Benthic Acute (bold)	NYSDEC Contaminated Sediments Benthic Chronic (shade)	Units	SD-65 0 - 1 09/29/11	SD-66 0 - 1 09/29/11	SD-67 0 - 1 09/29/11	SD-68 0 - 1 09/29/11
Semivolatile Organics							
1-Methylnaphthalene	- -	- -	mg/kg	0.0460	0.0230	0.123	0.0600
2-Methylnaphthalene	304	34	mg/kg	0.105	0.0430	0.297	0.108
Acenaphthene	- -	- -	mg/kg	0.0340	0.0270	0.189	0.186
Acenaphthylene	- -	- -	mg/kg	0.223	0.110	1.40	0.659
Anthracene	986	107	mg/kg	0.283	0.150	1.30	0.995
Benzo(a)anthracene	94	12	mg/kg	0.691	0.497	**3.69**	2.53
Benzo(a)pyrene	- -	- -	mg/kg	0.915	0.680	4.61	2.87
Benzo(b)fluoranthene	- -	- -	mg/kg	0.744	0.625	3.59	2.17
Benzo(e)pyrene	- -	- -	mg/kg	0.680	0.527	3.21	1.90
Benzo(g,h,i)perylene	- -	- -	mg/kg	0.627	0.510	2.84	1.92
Benzo(k)fluoranthene	- -	- -	mg/kg	0.798	0.619	3.76	2.55
Chrysene	- -	- -	mg/kg	0.693	0.582	3.90	2.66
Dibenzo(a,h)anthracene	- -	- -	mg/kg	0.130	0.0960	0.644	0.579 J
Fluoranthene	- -	1,020	mg/kg	1.20	0.944	5.78	4.95
Fluorene	73	8	mg/kg	0.0820	0.0450	0.303	0.219
Indeno(1,2,3-cd)pyrene	- -	- -	mg/kg	0.506	0.425	2.41	1.94
Naphthalene	258	30	mg/kg	0.129	0.0630	0.470	0.191
Phenanthrene	- -	120	mg/kg	0.431	0.287	1.64	1.73
Pyrene	8,775	961	mg/kg	1.25	0.892	6.05	4.37
C1 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.580	0.307	3.16	1.32
C1 - Fluoranthene/Pyrene	- -	- -	mg/kg	0.950	0.517	5.47	2.50
C1 - Fluorene	- -	- -	mg/kg	0.0940	0.0440	0.496	0.237
C1 - Naphthalene	- -	- -	mg/kg	0.103	0.0470	0.275	0.107
C1 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.609 J	0.231 J	2.08 J	1.36 J
C2 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.336	0.175	1.62	0.677
C2 - Fluorene	- -	- -	mg/kg	0.00900 UJ	0.00800 UJ	0.443 J	0.233
C2 - Naphthalene	- -	- -	mg/kg	0.148	0.0790	0.357	0.209
C2 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.477	0.260	2.22	1.07
C3 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.196	0.127	0.981	0.398
C3 - Fluorene	- -	- -	mg/kg	0.222	0.126	0.819	0.438
C3 - Naphthalene	- -	- -	mg/kg	0.127	0.0610	0.340	0.242
C3 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.244	0.116	1.38	0.488
C4 - Benz(a)anthracene/Chrysene	- -	- -	mg/kg	0.144	0.114	0.462	0.285
C4 - Naphthalene	- -	- -	mg/kg	0.111	0.0560	0.326	0.190
C4 - Phenanthrene/Anthracene	- -	- -	mg/kg	0.139	0.0670	0.659	0.227
Perylene	- -	- -	mg/kg	2.05	1.07	2.32	0.985
Total PAH	**ER-L Concentration**	**ER-M Concentration**					
Total PAH 17	4	35	mg/kg	**9.42**	**7.08**	**45.8**	**32.4 J**
Total PAH 34	- -	- -	mg/kg	15.9 J	10.5 J	69.2 J	43.4 J
Miscellaneous							
Total Organic Carbon	- -	- -	mg/kg	30,600	30,200	31,800	32,600

Table 3
PAH Analytical Result Summary

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Notes:

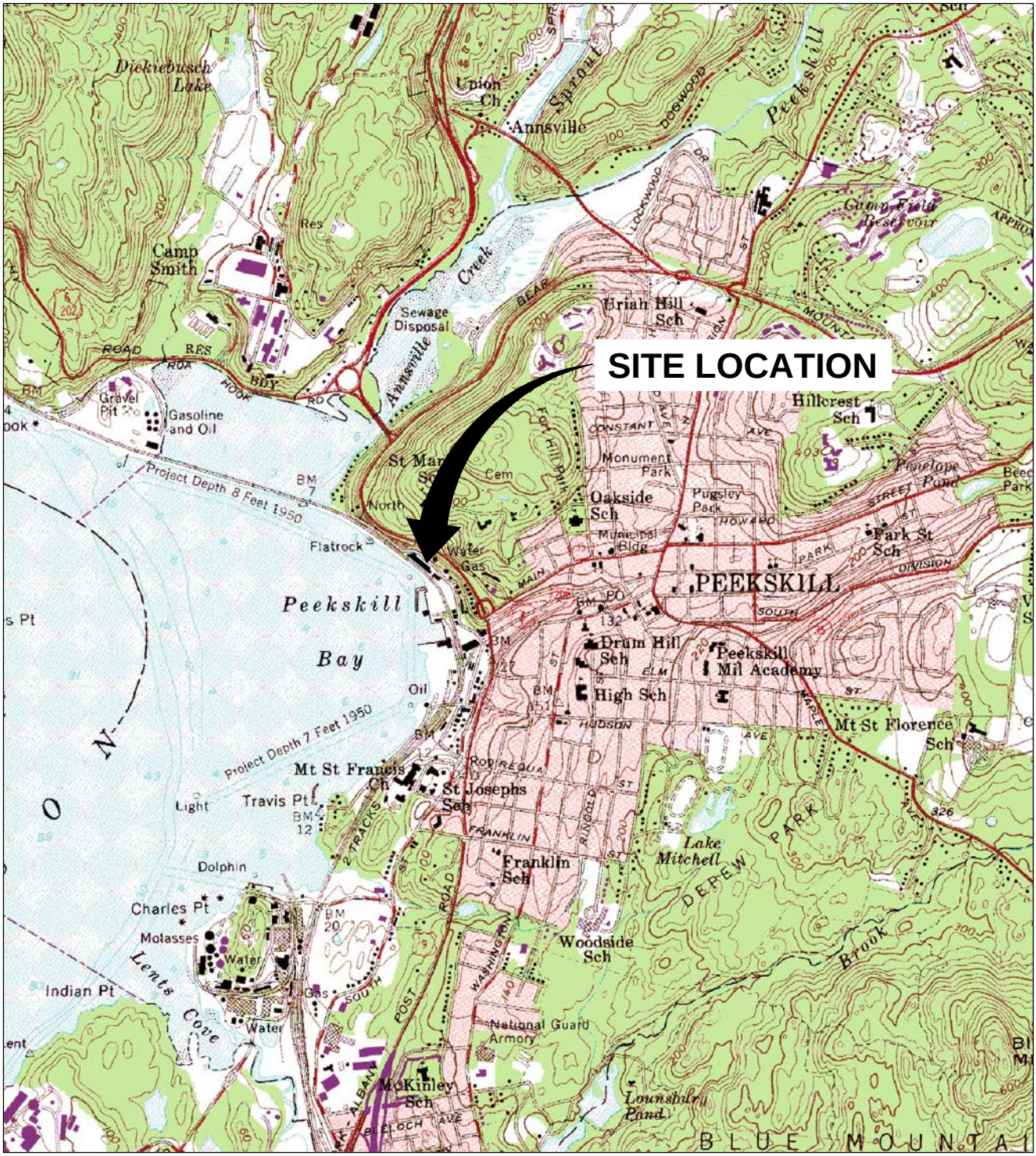
1. Sediment screening levels are from the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance for Screening Contaminated Sediments (1999).
2. Benthic screening levels are presented in micrograms per gram organic carbon (ug/gOC) and adjusted for each sample based on sample-specific Total Organic Carbon (TOC) concentrations. For example, for Anthracene (benthic aquatic life chronic value of 107 ug/g OC and acute value of 986 ug/g OC) and sample SD-26 (TOC of 11.5 g OC/kg), the criteria are adjusted as follows:
    - Benthic Aquatic Life Acute Toxicity: (986 ug/g OC) * (11.5 g OC/kg) = 11,339 ug/kg or 11.3 mg/kg. The latter value is not exceeded by sample SD-26 concentration of 2.86 mg/kg.
    - Benthic Aquatic Life Chronic Toxicity: (107 ug/g OC) * (11.5 g OC/kg) = 1,230.5 ug/kg or 1.2 mg/kg. The latter value is exceeded by sample SD-26 concentration of 2.86 mg/kg (shade).
3. All results are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).
4. PAH = polycyclic aromatic hydrocarbon.
5. Duplicate sample results are shown in brackets.

Data Qualifiers

J indicates an estimated value.
U indicates the compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ARCADIS

Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., PEEKSKILL, NEW YORK, 1957, PHOTOREVISED 1981.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.

CON EDISON
PEMART AVENUE FORMER MGP SITE
PEEKSKILL, NEW YORK
SUPPLEMENTAL SEDIMENT INVESTIGATION REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

CITY:Syracuse DIV/GROUP:EnvCAD DB: D.Howes LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACT\B0043029\0000\0020\DWG\43029N01.dwg LAYOUT: 1 SAVED: 12/23/2011 10:11 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/23/2011 10:12 AM BY: KRAHMER, ERIC
XREFS: IMAGES: PROJECTNAME: ----
NY_Peekskill.tif

CITY:Syracuse DIV/GROUP:EnvCAD DB:A.Schilling, E. KRAHMER LD:(Opt) PIC: M. CARRILLO-SHERIDAN PM: J. BRIEN TM: J. BRIEN TR: D. ALCOCER
G:\ENVCAD\SYRACUSE\ACTIVE\00430291\000\00020\DWG\430291C03.dwg LAYOUT: 2 SAVED: 4/6/2012 10:10 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/6/2012 10:14 AM BY: KOWALCZYK, STEVE
XREFS: 43029X00 IMAGES: 43029X06.tif 43029X07.tif 43029X08.tif 43029X10.tif 43029X11.tif 43029X12.tif 43029X14.tif 43029X15.tif PROJECTNAME: ----

SD-26	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	44.8 J
Total PAH 34 (mg/kg)	76.0 J

SD-28	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	32.5 J
Total PAH 34 (mg/kg)	49.8 J

SD-32	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	31.2 J
Total PAH 34 (mg/kg)	45.1 J

SD-33	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	178 J
Total PAH 34 (mg/kg)	250 J

SD-38	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	5.70
Total PAH 34 (mg/kg)	8.27 J

SD-31	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	48.6 J
Total PAH 34 (mg/kg)	71.5 J

SD-30	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	56.1 J
Total PAH 34 (mg/kg)	76.5 J

SD-27	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	116 J [103 J]
Total PAH 34 (mg/kg)	188 J [171 J]

SD-37	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	11.6
Total PAH 34 (mg/kg)	16.1 J

SD-68	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	32.4 J
Total PAH 34 (mg/kg)	43.4 J

SD-36	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	10.4
Total PAH 34 (mg/kg)	14.8 J

SD-67	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	45.8
Total PAH 34 (mg/kg)	69.2 J

SD-65	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	9.42
Total PAH 34 (mg/kg)	15.9 J

SD-64	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	9.68
Total PAH 34 (mg/kg)	16.4 J

SD-61	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	0.311 J
Total PAH 34 (mg/kg)	2.63 J

SD-34	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	197 J
Total PAH 34 (mg/kg)	393 J

SD-29	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	29.6 J
Total PAH 34 (mg/kg)	45.1 J

SD-35	
Depth(Feet)	(0 – 1')
Date	9/30/2011
Total PAH 17 (mg/kg)	11.4 J
Total PAH 34 (mg/kg)	17.2 J

SD-66	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	7.08
Total PAH 34 (mg/kg)	10.5 J

SD-57	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	42.0
Total PAH 34 (mg/kg)	59.8 J

SD-62	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	8.02
Total PAH 34 (mg/kg)	13.5

SD-56	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	73.9
Total PAH 34 (mg/kg)	130 J

SD-63	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	8.86
Total PAH 34 (mg/kg)	15.7 J

SD-55	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	21.1
Total PAH 34 (mg/kg)	28.1 J

SD-58	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	6.16
Total PAH 34 (mg/kg)	10.6 J

SD-39	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	0.156 J
Total PAH 34 (mg/kg)	0.704 J

SD-54	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	11.0
Total PAH 34 (mg/kg)	18.2

SD-53	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	7.95
Total PAH 34 (mg/kg)	14.4 J

SD-45	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	6.22
Total PAH 34 (mg/kg)	11.6 J

SD-60	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	4.06
Total PAH 34 (mg/kg)	8.39 J

SD-46	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	2.48
Total PAH 34 (mg/kg)	4.88

SD-52	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	5.48
Total PAH 34 (mg/kg)	9.75 J

SD-44	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	5.54
Total PAH 34 (mg/kg)	9.92 J

SD-59	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	9.60
Total PAH 34 (mg/kg)	17.3 J

SD-40	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	2.74 [3.50]
Total PAH 34 (mg/kg)	5.01 J [6.60 J]

SD-41	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	2.95
Total PAH 34 (mg/kg)	7.00

SD-47	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	3.56 [3.81]
Total PAH 34 (mg/kg)	8.70 J [7.82]

SD-51	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	5.35
Total PAH 34 (mg/kg)	10.6 J

SD-50	
Depth(Feet)	(0 – 1')
Date	9/29/2011
Total PAH 17 (mg/kg)	7.40
Total PAH 34 (mg/kg)	13.0 J

SD-49	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	4.35
Total PAH 34 (mg/kg)	7.75

SD-48	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	6.42
Total PAH 34 (mg/kg)	12.7 J

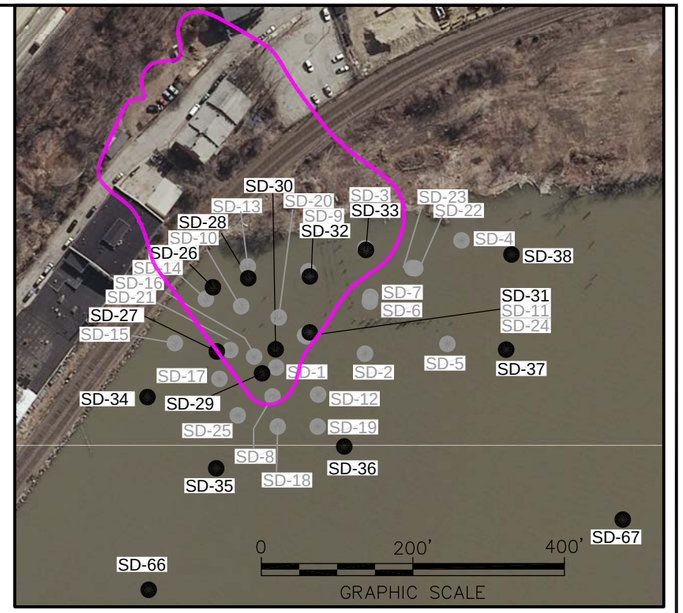
SD-42	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	3.52
Total PAH 34 (mg/kg)	9.03 J

SD-43	
Depth(Feet)	(0 – 1')
Date	9/28/2011
Total PAH 17 (mg/kg)	2.58
Total PAH 34 (mg/kg)	6.35 J

SEE INSET

PEEKSKILL BAY

HUDSON RIVER



LEGEND:

- RI SEDIMENT SAMPLING LOCATION (2007)
- SUPPLEMENTAL SEDIMENT INVESTIGATION SAMPLING LOCATION (2011)
- IDENTIFIED AREA CONTAINING MGP RESIDUALS

0 400' 800'
GRAPHIC SCALE

CON EDISON
PEMART AVENUE FORMER MGP SITE
PEEKSKILL, NEW YORK
SUPPLEMENTAL SEDIMENT INVESTIGATION REPORT

SEDIMENT SAMPLING LOCATIONS AND RESULTS

ARCADIS

FIGURE
2

CITY:Syracuse DIV/GROUP:EnvCAD DB:A.Schilling LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
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XREFS: 43029X00
IMAGES: 43029X06.tif 43029X07.tif 43029X08.tif 43029X10.tif 43029X11.tif 43029X12.tif 43029X14.tif 43029X15.tif
PROJECTNAME: ---

SEE INSET

PEEKSKILL BAY

HUDSON RIVER

SD-1 SD-2 SD-3 SD-4 SD-5 SD-6 SD-7 SD-8 SD-9 SD-10 SD-11 SD-12 SD-13 SD-14 SD-15 SD-16 SD-17 SD-18 SD-19 SD-20 SD-21 SD-22 SD-23 SD-24 SD-25 SD-26 SD-27 SD-28 SD-29 SD-30 SD-31 SD-32 SD-33 SD-34 SD-35 SD-36 SD-37 SD-38 SD-39 SD-40 SD-41 SD-42 SD-43 SD-44 SD-45 SD-46 SD-47 SD-48 SD-49 SD-50 SD-51 SD-52 SD-53 SD-54 SD-55 SD-56 SD-57 SD-58 SD-59 SD-60 SD-61 SD-62 SD-63 SD-64 SD-65 SD-66 SD-67 SD-68

0 200' 400'
GRAPHIC SCALE

LEGEND:

- RI SEDIMENT SAMPLING LOCATION (2007)
- SUPPLEMENTAL SEDIMENT INVESTIGATION SAMPLING LOCATION (2011)
- IDENTIFIED AREA CONTAINING MGP RESIDUALS

PAH_{17} CONCENTRATION

- ≥29 (mg/kg)
- 10.5 – <29 (mg/kg)
- 0 – <10.5 (mg/kg)

NOTES:

1. PAH_{17} BACKGROUND CONCENTRATION WITH POTENTIAL OUTLIERS RETAINED = 29 mg/kg.
2. PAH_{17} BACKGROUND CONCENTRATION WITH POTENTIAL OUTLIERS REMOVED = 10.5 mg/kg.
3. SUSPECTED OUTLIERS: SD–55, SD–56, SD–57, SD–67 AND SD–68.
4. SAMPLE SD–34 WAS REMOVED FROM DATA SET DUE TO VISIBLE IMPACTS.

0 400' 800'
GRAPHIC SCALE

CON EDISON
PEMART AVENUE FORMER MGP SITE
PEEKSKILL, NEW YORK
SUPPLEMENTAL SEDIMENT INVESTIGATION REPORT

SEDIMENT BACKGROUND EVALUATION

ARCADIS

FIGURE
3

LEGEND:

- PEEKSKILL LANDING SUPERFUND SITE
- IDENTIFIED AREA CONTAINING MGP RESIDUALS
- APPROXIMATE LOCATION OF HISTORIC OUTFALLS CURRENTLY NOT MAINTAINED
- ANNSVILLE CREEK DISCHARGE
- APPROXIMATE LOCATION OF SEWER OUTFALLS
- METRO–NORTH RAILROAD
- SUPPLEMENTAL SEDIMENT INVESTIGATION SAMPLING LOCATION (2011)

NOTES:

1. SEWER OUTFALL LOCATIONS OBTAINED FROM THE CITY OF PEEKSKILL, NY ENGINEERING DEPARTMENT LOCATION MAP. DRAWING NO. 72–ED–24, UPDATED 6/22/88.

0 500' 1000'

GRAPHIC SCALE

CON EDISON
PEMART AVENUE FORMER MGP SITE
PEEKSKILL, NEW YORK
SUPPLEMENTAL SEDIMENT INVESTIGATION REPORT

POTENTIAL ANTHROPOGENIC PAH CONTRIBUTORS TO PEEKSKILL BAY

ARCADIS

FIGURE
4

CITY:Syracuse DIV/GROUP:EnvCAD DB:A.Schilling, E. KRAHMER LD:(Opt) PIC: M. CARRILLO-SHERIDAN PM: J. BRIEN TM: J. BRIEN TR: D. ALCOCER LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACTIB00\43029\0000\00020\DWG\43029C04.dwg LAYOUT: 4 SAVED: 4/6/2012 12:07 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: C:\LB-PDF PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/9/2012 3:17 PM BY: KOWALCZYK, STEVE
XREFS: IMAGES: PROJECTNAME: ----
43029X00 43029X06.tif
43029X07.tif
43029X08.tif
43029X10.tif
43029X11.tif
43029X12.tif
43029X14.tif
43029X15.tif

ARCADIS

Appendix A

Data Usability Summary Reports

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

Con Edison - Pemart Avenue Former MGP

Data Usability Summary Report (DUSR)

PEEKSKILL, NEW YORK

Polycyclic Aromatic Hydrocarbon (PAH)
and Total Organic Carbon Analyses

SDG #: MC4196

Analyses Performed By:
Accutest Laboratories
Marlborough, Massachusetts
and
Meta Environmental, Inc.
Watertown, Massachusetts

Report #: 15054R
Review Level: Tier III
Project: B0043029.0000.0020

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # MC4196 for samples collected in association with the Con Ed Pemart Avenue Former MGP site in Peekskill, New York. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	PAH	PCB	MET	MISC
SD-39 (0-12")	MC4196-01	Sediment	9/28/2011			X			X
SD-40 (0-12")	MC4196-02	Sediment	9/28/2011			X			X
SD-41 (0-12")	MC4196-03	Sediment	9/28/2011			X			X
SD-42 (0-12")	MC4196-04	Sediment	9/28/2011			X			X
SD-43 (0-12")	MC4196-05	Sediment	9/28/2011			X			X
SD-44 (0-12")	MC4196-06	Sediment	9/28/2011			X			X
SD-45 (0-12")	MC4196-07	Sediment	9/28/2011			X			X
SD-46 (0-12")	MC4196-08	Sediment	9/28/2011			X			X
SD-47 (0-12")	MC4196-09	Sediment	9/28/2011			X			X
SD-48 (0-12")	MC4196-10	Sediment	9/28/2011			X			X
SD-49 (0-12")	MC4196-11	Sediment	9/28/2011			X			X
DUP-1-9-28-11	MC4196-12	Sediment	9/28/2011	SD-40 (0-12")		X			X
DUP-2-9-28-11	MC4196-13	Sediment	9/28/2011	SD-47 (0-12")		X			X
SD-50 (0-12")	MC4196-14	Sediment	9/29/2011			X			X
SD-51 (0-12")	MC4196-15	Sediment	9/29/2011			X			X
SD-52 (0-12")	MC4196-16	Sediment	9/29/2011			X			X
SD-53 (0-12")	MC4196-17	Sediment	9/29/2011			X			X
SD-54 (0-12")	MC4196-18	Sediment	9/29/2011			X			X
SD-55 (0-12")	MC4196-19	Sediment	9/29/2011			X			X
SD-56 (0-12")	MC4196-20	Sediment	9/29/2011			X			X
SD-57 (0-12")	MC4196-21	Sediment	9/29/2011			X			X
SD-58 (0-12")	MC4196-22	Sediment	9/29/2011			X			X
SD-59 (0-12")	MC4196-23	Sediment	9/29/2011			X			X
SD-60 (0-12")	MC4196-24	Sediment	9/29/2011			X			X
SD-61 (0-12")	MC4196-25	Sediment	9/29/2011			X			X
SD-62 (0-12")	MC4196-26	Sediment	9/29/2011			X			X
SD-63 (0-12")	MC4196-28	Sediment	9/29/2011			X			X
SD-64 (0-12")	MC4196-29	Sediment	9/29/2011			X			X
SD-65 (0-12")	MC4196-30	Sediment	9/29/2011			X			X

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	PAH	PCB	MET	MISC
SD-66 (0-12")	MC4196-31	Sediment	9/29/2011			X			X
SD-67 (0-12")	MC4196-32	Sediment	9/29/2011			X			X
SD-68 (0-12")	MC4196-33	Sediment	9/29/2011			X			X
SD-26 (0-12")	MC4196-34	Sediment	9/29/2011			X			X
SD-27 (0-12")	MC4196-35	Sediment	9/29/2011			X			X
SD-28 (0-12")	MC4196-36	Sediment	9/29/2011			X			X
SD-29 (0-12")	MC4196-37	Sediment	9/29/2011			X			X
DUP-4-9-29-11	MC4196-38	Sediment	9/29/2011	SD-27 (0-12")		X			X
SD-30 (0-12")	MC4196-39	Sediment	9/30/2011			X			X
SD-31 (0-12")	MC4196-40	Sediment	9/30/2011			X			X
SD-32 (0-12")	MC4196-41	Sediment	9/30/2011			X			X
SD-33 (0-12")	MC4196-42	Sediment	9/30/2011			X			X
SD-34 (0-12")	MC4196-43	Sediment	9/30/2011			X			X
SD-35 (0-12")	MC4196-44	Sediment	9/30/2011			X			X
SD-36 (0-12")	MC4196-45	Sediment	9/30/2011			X			X
SD-37 (0-12")	MC4196-46	Sediment	9/30/2011			X			X
SD-38 (0-12")	MC4196-47	Sediment	9/30/2011			X			X

Note: Sample results were reported on a dry-weight basis. Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on sample locations SD-39 (0-12"), SD-46 (0-12"), and SD-27 (0-12").

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8270M/8272 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and USEPA Region II SOPs associated with USEPA SW-846 Validating Semivolatile Organic Compounds by GC/MS SW-846 Method 8270D (SOP HW-22 Revision 3, October 2006).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and

provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

POLYCYCLIC AROMATIC HYDROCARBON (PAH) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270 SW-846 8272	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C
	Sediment	14 days from collection to extraction and 40 days from extraction to analysis	Cool to 4±2 °C

All samples were extracted and analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Target compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution are acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration Verification (ICV)

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (25% for two and three ring PAHs, 30% for four ring PAHs) or a correlation coefficient greater than 0.99, and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration Verification (CCV)

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20% for two and three ring PAHs, 25% for four ring PAHs), and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations		Initial / Continuing	Compound	Criteria
SD-68 (0-12")	SD-26 (0-12")	Continuing Calibration	Dibenz(a,h)anthracene	%D > 25% (increase in sensitivity)
SD-27 (0-12")	SD-28 (0-12")			
SD-29 (0-12")	DUP-4-9-29-11			
SD-34 (0-12")	SD-35 (0-12")			
SD-30 (0-12")	SD-31 (0-12")			
SD-32 (0-12")	SD-33 (0-12")			

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF < 0.05	Non-detect	R
		Detect	J
	RRF < 0.01[1]	Non-detect	R
		Detect	J
	RRF > 0.05 or RRF > 0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 25%/30% or a correlation coefficient < 0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D > 20%/25% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D > 20%/25% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to typically poor responding compounds (e.g. anilines, nitrophenols, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three PAH surrogate compounds exhibit recoveries within the laboratory-established acceptance limits, and that all PAH surrogate recoveries be greater than ten percent.

All surrogate recoveries were within the control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the PAH analysis exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within the control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit recoveries within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS and MSD results must be within the laboratory-established or analytical method-referenced acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the method-referenced control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
SD-27 (0-12")	Naphthalene	AC	< 10%
	Phenanthrene Fluoranthene Pyrene Chrysene	> UL	< LL but > 10%
	Benz(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(e)pyrene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	> UL	AC

UL Upper control limit
LL Lower control limit
AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J

Control Limit	Sample Result	Qualification
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > 4x the MS/MSD spike concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSD results exhibiting RPDs greater than the method-referenced control limit are presented in the following table.

Sample Locations	Compounds
SD-27 (0-12")	Naphthalene Fluorene Phenanthrene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(k)fluoranthene Benzo(a)pyrene

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit recoveries and relative percent differences (RPDs) between the LCS and LCSD results within the laboratory-established or analytical method-referenced acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries and RPDs within the method-referenced control limits.

9. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 100% for soil and sediment matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of three times the RL is applied for soil and sediment matrices.

Results (in mg/kg) for the field duplicate samples are summarized in the following tables.

Sample ID / Duplicate ID	Compounds	Sample Result	Duplicate Result	RPD
SD-40 (0-12") / DUP-1-9-28-11	1-Methylnaphthalene	0.017	0.017	0.0 %
	2-Methylnaphthalene	0.037	0.038	2.6 %
	Acenaphthene	0.013	0.016	20.6 %
	Acenaphthylene	0.053	0.068	24.7 %
	Anthracene	0.087	0.108	21.5 %
	Benz(a)anthracene	0.186	0.25	29.3 %
	Benzo(a)pyrene	0.231	0.315	30.7 %
	Benzo(b)fluoranthene	0.217	0.287	27.7 %
	Benzo(e)pyrene	0.19	0.244	24.8 %
	Benzo(g,h,i)perylene	0.172	0.217	23.1 %
	Benzo(j/k)fluoranthene	0.22	0.294	28.7 %
	C1 - Benz(a)anthracene/Chrysene	0.131	0.188	35.7 %
	C1 - Fluoranthene/Pyrene	0.209	0.309	38.6 %
	C1 - Fluorene	0.035	0.039	10.8 %
	C1 - Naphthalene	0.036	0.038	5.4 %
	C2 - Benz(a)anthracene/Chrysene	0.079	0.109	31.9 %
	C2 - Naphthalene	0.067	0.08	17.6 %
	C2 - Phenanthrene/Anthracene	0.196	0.228	15.0 %
	C3 - Benz(a)anthracene/Chrysene	0.051	0.08	44.2 %
	C3 - Fluorene	0.096	0.116	18.8 %
	C3 - Naphthalene	0.065	0.063	3.1 %
	C3 - Phenanthrene/Anthracene	0.082	0.104	23.6 %
	C4 - Benz(a)anthracene/Chrysene	0.034	0.105	NC
	C4 - Naphthalene	0.036	0.057	45.1 %
	C4 - Phenanthrene/Anthracene	0.044	0.07	45.6 %
	Chrysene	0.221	0.286	25.6 %
	Dibenz(a,h)anthracene	0.068	0.05	30.5 %
	Fluoranthene	0.347	0.454	26.7 %
	Fluorene	0.037	0.042	12.6 %
	Indeno(1,2,3-cd)pyrene	0.137	0.184	29.2 %
	Naphthalene	0.053	0.046	14.1 %
	Perylene	1.11	1.51	30.5 %
	Phenanthrene	0.164	0.194	16.7 %
	Pyrene	0.342	0.449	27.0 %

NC Not compliant

Sample ID / Duplicate ID	Compounds	Sample Result	Duplicate Result	RPD
SD-47 (0-12") / DUP-2-9-28-11	1-Methylnaphthalene	0.029	0.032	9.8 %
	2-Methylnaphthalene	0.067	0.066	1.5 %
	Acenaphthene	0.019	0.019	0.0 %
	Acenaphthylene	0.097	0.092	5.2 %
	Anthracene	0.135	0.137	1.4 %
	Benz(a)anthracene	0.264	0.269	1.8 %
	Benzo(a)pyrene	0.325	0.334	2.7 %
	Benzo(b)fluoranthene	0.259	0.292	11.9 %
	Benzo(e)pyrene	0.246	0.262	6.2 %
	Benzo(g,h,i)perylene	0.226	0.233	3.0 %
	Benzo(j/k)fluoranthene	0.264	0.306	14.7 %
	C1 - Benz(a)anthracene/Chrysene	0.232	0.219	5.7 %
	C1 - Fluoranthene/Pyrene	0.382	0.355	7.3 %
	C1 - Fluorene	0.057	0.055	3.5 %
	C1 - Naphthalene	0.063	0.064	1.5 %
	C1 - Phenanthrene/Anthracene	0.297 I	0.008 U	NC
	C2 - Benz(a)anthracene/Chrysene	0.144	0.139	3.5 %
	C2 - Naphthalene	0.093	0.103	10.2 %
	C2 - Phenanthrene/Anthracene	0.255	0.258	1.1 %
	C3 - Benz(a)anthracene/Chrysene	0.081	0.088	8.2 %
	C3 - Fluorene	0.111	0.13	15.7 %
	C3 - Naphthalene	0.088	0.093	5.5 %
	C3 - Phenanthrene/Anthracene	0.129	0.128	0.7 %
	C4 - Benz(a)anthracene/Chrysene	0.056	0.06	6.8 %
	C4 - Naphthalene	0.065	0.072	10.2 %
	C4 - Phenanthrene/Anthracene	0.082	0.08	2.4 %
	Chrysene	0.279	0.302	7.9 %
	Dibenz(a,h)anthracene	0.046	0.047	2.1 %
	Fluoranthene	0.416	0.463	10.6 %
	Fluorene	0.06	0.058	3.3 %
	Indeno(1,2,3-cd)pyrene	0.17	0.188	10.0 %
	Naphthalene	0.085	0.094	10.0 %
	Perylene	3.00	2.17	32.1 %
	Phenanthrene	0.225	0.23	2.1 %
	Pyrene	0.448	0.481	7.1 %

NC Not compliant
I Interference noted by the laboratory
U Not detected

Sample ID / Duplicate ID	Compounds	Sample Result	Duplicate Result	RPD
SD-27 (0-12") / DUP-4-9-29-11	Naphthalene	16.9	11.6	37.2 %
	2-Methylnaphthalene	5.31	4.1	25.7 %
	1-Methylnaphthalene	3.15	2.61	18.8 %
	C1 - Naphthalene	5.43	4.39	21.2 %
	C2 - Naphthalene	6.27	5.69	9.7 %
	C3 - Naphthalene	3.2	3.01	6.1 %
	C4 - Naphthalene	1.92	1.8	6.5 %
	Acenaphthylene	3.78	4.41	15.4 %
	Acenaphthene	6.17	5.65	8.8 %
	Fluorene	2.48	2.37	4.5 %
	C1 - Fluorene	2.24	2.25	0.4 %
	C2 - Fluorene	2.05	2.12	3.4 %
	C3 - Fluorene	1.77	1.72	2.9 %
	Phenanthrene	8.04	7.8	3.0 %
	Anthracene	5.08	5.22	2.7 %
	C1 - Phenanthrene/Anthracene	10.8	9.78	9.9 %
	C2 - Phenanthrene/Anthracene	7.0	7.12	1.7 %
	C3 - Phenanthrene/Anthracene	3.31	3.38	2.1 %
	C4 - Phenanthrene/Anthracene	1.22	1.28	4.8 %
	Fluoranthene	10.8 I	10.0	7.7 %
	Pyrene	12.9	12.1	6.4 %
	C1 - Fluoranthene/Pyrene	12.7	11.7	8.2 %
	Benz(a)anthracene	7.73	6.67	14.7 %
	Chrysene	8.62	7.53	13.5 %
	C1 - Benz(a)anthracene/Chrysene	6.54	6.58	0.6 %
	C2 - Benz(a)anthracene/Chrysene	3.31	3.46	4.4 %
	C3 - Benz(a)anthracene/Chrysene	1.77	1.53	14.5 %
	C4 - Benz(a)anthracene/Chrysene	0.811	0.698	15.0 %
	Benzo(b)fluoranthene	5.34	4.56	15.8 %
	Benzo(k)fluoranthene	5.84	4.92	17.1 %
	Benzo(e)pyrene	4.82	4.38	9.6 %
	Benzo(a)pyrene	7.81	6.94	11.8 %
	Perylene	1.89	1.66	13.0 %
	Indeno(1,2,3-cd)pyrene	4.07	3.61	12.0 %
	Dibenz(a,h)anthracene	1.52	1.46	4.0 %
	Benzo(g,h,i)perylene	4.2	3.79	10.3 %

I Interference noted by the laboratory

The C4-benz(a)anthracene/chrysene results for field duplicate samples SD-40 (0-12") and DUP-1-9-28-11, and the C1-phenanthrene/anthracene results for field duplicate samples SD-47 (0-12") and DUP-2-9-28-11 exhibited RPDs greater than the control limit. The C4-benz(a)anthracene/chrysene results for SD-40 (0-12") and DUP-1-9-28-11, and the C1-phenanthrene/anthracene results for SD-47 (0-12") and DUP-2-9-28-11 have been qualified as estimated.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria. However, there was interference observed in the ion chromatogram used for the quantitation of several compounds; the laboratory flagged the affected sample results with "I" and the results have been qualified as estimated (J).

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270M/8272	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding Times		X		X	
Reporting Limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD RPD		X	X		
Field/Laboratory Duplicate Sample RPD		X	X		
Surrogate Spike %R		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System Performance and Column Resolution		X		X	
Initial Calibration %RSDs		X		X	
Continuing Calibration RRFs		X		X	
Continuing Calibration %Ds		X	X		
Instrument Tune and Performance Check		X		X	
Ion Abundance Criteria for Each Instrument Used		X		X	
Internal Standards		X		X	
Compound Identification and Quantitation					
A. Reconstructed Ion Chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of Sample Compounds Within the Established RT Windows		X		X	
D. Quantitation transcriptions/calculations		X	X		
E. Reporting Limits Adjusted for Sample Dilutions		X		X	

%R Percent Recovery
RPD Relative Percent Difference
%RSD Relative Standard Deviation
%D Percent Difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Total Organic Carbon (TOC) by EPA Lloyd Kahn	Sediment	14 days from collection to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminants are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Total organic carbon was not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All analytes associated with the initial and continuing calibrations were within the specified control limits. The correct frequency and type of standards were analyzed.

4. Matrix Spike Sample (MS) and Laboratory Duplicate Sample Analyses

MS and laboratory duplicate sample data are used to assess the precision and accuracy of the analytical

method. Sample locations SD-39 (0-12"), SD-46 (0-12"), SD-58 (0-12"), SD-67 (0-12"), and SD-35 (0-12") were used in the MS and laboratory duplicate sample analyses.

4.1 MS Analysis

All analytes must exhibit recoveries within the established acceptance limits of 75% to 125%.

Note: The MS control limits do not apply for MS analyses performed on sample locations where the compound concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. Sample results associated with MS exceedances where the parent samples are not site-specific are not qualified.

The MS exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate sample relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil and sediment matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil and sediment matrices.

The laboratory duplicate sample results exhibited RPDs within the control limit.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit recoveries between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 100% for soil and sediment matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of three times the RL is applied for soil and sediment matrices.

Results (in mg/kg) for the field duplicate samples are summarized in the following tables.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
SD-40 (0-12") / DUP-1-9-28-11	Total Organic Carbon	23500	26400	11.6 %
SD-47 (0-12") / DUP-2-9-28-11	Total Organic Carbon	23500	26200	10.9 %
SD-27 (0-12") / DUP-4-9-29-11	Total Organic Carbon	109000	115000	5.4 %

The field duplicate sample results are acceptable.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA Lloyd-Kahn Method	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) Accuracy (%R)		X		X	
Laboratory Control Sample Duplicate (LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R					X
MS/MSD RPD					X
Laboratory Duplicate Sample RPD		X		X	
Field Duplicate Sample RPD		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Quantitation transcriptions/calculations		X		X	
Reporting limits adjusted for sample dilutions		X		X	

%RSD – relative standard deviation
%R – percent recovery
RPD – relative percent difference
%D – difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	PAH	PCB	MET	MISC	
MC4196	9/28/2011	SW846	SD-39 (0-12")	Sediment	--	Yes	--	--	Yes	
	9/28/2011	SW846	SD-40 (0-12")	Sediment	--	No	--	--	Yes	PAH: Field duplicate RPD, Compound quantitation
	9/28/2011	SW846	SD-41 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	SD-42 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	SD-43 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	SD-44 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	SD-45 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	SD-46 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	SD-47 (0-12")	Sediment	--	No	--	--	Yes	PAH: Field duplicate RPD, Compound quantitation
	9/28/2011	SW846	SD-48 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	SD-49 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/28/2011	SW846	DUP-1-9-28-11	Sediment	--	No	--	--	Yes	PAH: Field duplicate RPD, Compound quantitation
	9/28/2011	SW846	DUP-2-9-28-11	Sediment	--	No	--	--	Yes	PAH: Field duplicate RPD, Compound quantitation
	9/29/2011	SW846	SD-50 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-51 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-52 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-53 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-54 (0-12")	Sediment	--	Yes	--	--	Yes	
	9/29/2011	SW846	SD-55 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-56 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-57 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-58 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	PAH	PCB	MET	MISC	
MC4196	9/29/2011	SW846	SD-59 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-60 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-61 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-62 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-63 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-64 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-65 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-66 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-67 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/29/2011	SW846	SD-68 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D, Compound quantitation
	9/29/2011	SW846	SD-26 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D
	9/29/2011	SW846	SD-27 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D, MS/MSD %R and RPDs, Compound quantitation
	9/29/2011	SW846	SD-28 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D
	9/29/2011	SW846	SD-29 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D, Compound quantitation
	9/29/2011	SW846	DUP-4-9-29-11	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D
	9/30/2011	SW846	SD-30 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D, Compound quantitation
	9/30/2011	SW846	SD-31 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D, Compound quantitation
	9/30/2011	SW846	SD-32 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D
	9/30/2011	SW846	SD-33 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D, Compound quantitation
	9/30/2011	SW846	SD-34 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D
	9/30/2011	SW846	SD-35 (0-12")	Sediment	--	No	--	--	Yes	PAH: Continuing calibration %D, Compound quantitation

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	PAH	PCB	MET	MISC	
MC4196	9/30/2011	SW846	SD-36 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/30/2011	SW846	SD-37 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation
	9/30/2011	SW846	SD-38 (0-12")	Sediment	--	No	--	--	Yes	PAH: Compound quantitation

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

Validation Performed By: Dennis Dyke

Signature: 

Date: November 16, 2011

Peer Review: Joseph C. Houser

Date: November 23, 2011

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Report of Analysis

Client Sample ID:	SD-39 (0-12")		
Lab Sample ID:	MC4196-1	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	54.5
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	54.5		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	26000	1600	mg/kg	1	10/06/11 12:43	CF	LLOYD KAHN 1988

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SD-40 (0-12")		
Lab Sample ID:	MC4196-2	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	41.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	41		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	23500	2400	mg/kg	1	10/06/11 13:01	CF	LLOYD KAHN 1988

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SD-41 (0-12")		
Lab Sample ID:	MC4196-3	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	53.1
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	53.1		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	22500	1700	mg/kg	1	10/06/11 13:19	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-42 (0-12")		
Lab Sample ID:	MC4196-4	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	51.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	51		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	24200	1800	mg/kg	1	10/06/11 13:40	CF	LLOYD KAHN 1988

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SD-43 (0-12")		
Lab Sample ID:	MC4196-5	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	52.3
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	52.3		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	23700	1600	mg/kg	1	10/06/11 13:59	CF	LLOYD KAHN 1988

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SD-44 (0-12")		
Lab Sample ID:	MC4196-6	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	36.2
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	36.2		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	60500	2600	mg/kg	1	10/06/11 15:33	CF	LLOYD KAHN 1988

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SD-45 (0-12")		
Lab Sample ID:	MC4196-7	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	47.1
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	47.1		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	24800	2000	mg/kg	1	10/06/11 15:50	CF	LLOYD KAHN 1988

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SD-46 (0-12")		
Lab Sample ID:	MC4196-8	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	41.5
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	41.5		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	24500	1800	mg/kg	1	10/07/11 16:36	CF	LLOYD KAHN 1988

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SD-47 (0-12")		
Lab Sample ID:	MC4196-9	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	46.8
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	46.8		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	23500	2000	mg/kg	1	10/06/11 16:09	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-48 (0-12")		
Lab Sample ID:	MC4196-10	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	43.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	43		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	26500	2000	mg/kg	1	10/06/11 16:28	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-49 (0-12")		
Lab Sample ID:	MC4196-11	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	39.5
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	39.5		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	25500	2400	mg/kg	1	10/06/11 16:46	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP-1-9-28-11		
Lab Sample ID:	MC4196-12	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	41.5
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	41.5		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	26400	2100	mg/kg	1	10/06/11 17:05	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP-2-9-28-11		
Lab Sample ID:	MC4196-13	**Date Sampled:**	09/28/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	49.3
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	49.3		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	26200	1800	mg/kg	1	10/06/11 17:23	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-50 (0-12")		
Lab Sample ID:	MC4196-14	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	40.8
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	40.8		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	29200	1900	mg/kg	1	10/06/11 17:44	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-51 (0-12")		
Lab Sample ID:	MC4196-15	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	48.9
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	48.9		%	1	10/05/11	HS	SM21 2540 B MOD.
Total Organic Carbon	25100	1800	mg/kg	1	10/06/11 18:03	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-52 (0-12")		
Lab Sample ID:	MC4196-16	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	45.6
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	45.6		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	22400	1800	mg/kg	1	10/07/11 17:35	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-53 (0-12")		
Lab Sample ID:	MC4196-17	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	40.1
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	40.1		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	27800	2100	mg/kg	1	10/07/11 18:09	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-54 (0-12")		
Lab Sample ID:	MC4196-18	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	46.8
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	46.8		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	30100	1300	mg/kg	1	10/07/11 18:35	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-55 (0-12")		
Lab Sample ID:	MC4196-19	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	36.9
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	36.9		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	51300	2000	mg/kg	1	10/07/11 18:57	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-56 (0-12")		
Lab Sample ID:	MC4196-20	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	56.7
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	56.7		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	82700	3000	mg/kg	1	10/13/11 14:04	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-57 (0-12")		
Lab Sample ID:	MC4196-21	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	42.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	42		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	31700	1700	mg/kg	1	10/11/11 14:49	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-58 (0-12")		
Lab Sample ID:	MC4196-22	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	55.1
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	55.1		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	21900	1100	mg/kg	1	10/11/11 13:17	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-59 (0-12")		
Lab Sample ID:	MC4196-23	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	44.8
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	44.8		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	28800	1900	mg/kg	1	10/11/11 15:29	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-60 (0-12")		
Lab Sample ID:	MC4196-24	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	39.9
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	39.9		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	22700	2100	mg/kg	1	10/11/11 15:48	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-61 (0-12")		
Lab Sample ID:	MC4196-25	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	55.5
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	55.5		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	18300	1500	mg/kg	1	10/11/11 16:04	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-62 (0-12")		
Lab Sample ID:	MC4196-26	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	46.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	46		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	20400	1800	mg/kg	1	10/11/11 16:28	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-63 (0-12")		
Lab Sample ID:	MC4196-28	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	42.7
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	42.7		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	27200	2000	mg/kg	1	10/11/11 16:49	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-64 (0-12")		
Lab Sample ID:	MC4196-29	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	40.9
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	40.9		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	27900	1900	mg/kg	1	10/11/11 17:06	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-65 (0-12")		
Lab Sample ID:	MC4196-30	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	40.8
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	40.8		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	30600	1900	mg/kg	1	10/11/11 17:24	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-66 (0-12")		
Lab Sample ID:	MC4196-31	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	37.7
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	37.7		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	30200	1800	mg/kg	1	10/11/11 17:41	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-67 (0-12")		
Lab Sample ID:	MC4196-32	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	50.3
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	50.3		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	31800	1700	mg/kg	1	10/13/11 13:42	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-68 (0-12")		
Lab Sample ID:	MC4196-33	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	53.2
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	53.2		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	32600	1700	mg/kg	1	10/13/11 14:30	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-26 (0-12")		
Lab Sample ID:	MC4196-34	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	72.6
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	72.6		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	11500	910	mg/kg	1	10/13/11 14:54	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-27 (0-12")		
Lab Sample ID:	MC4196-35	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	48.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	48		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	109000	3900	mg/kg	1	10/13/11 16:10	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-28 (0-12")		
Lab Sample ID:	MC4196-36	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	73.3
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	73.3		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	31200	1200	mg/kg	1	10/13/11 16:31	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-29 (0-12")		
Lab Sample ID:	MC4196-37	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	40.3
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	40.3		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	57800	2000	mg/kg	1	10/13/11 17:18	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP-4-9-29-11		
Lab Sample ID:	MC4196-38	**Date Sampled:**	09/29/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	49.1
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	49.1		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	115000	4300	mg/kg	1	10/13/11 17:51	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-30 (0-12")		
Lab Sample ID:	MC4196-39	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	60.2
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	60.2		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	46500	3100	mg/kg	1	10/14/11 10:53	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-31 (0-12")		
Lab Sample ID:	MC4196-40	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	50.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	50		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	107000	2800	mg/kg	1	10/14/11 11:39	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-32 (0-12")		
Lab Sample ID:	MC4196-41	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	79.9
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	79.9		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	32700	2200	mg/kg	1	10/14/11 12:19	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-33 (0-12")		
Lab Sample ID:	MC4196-42	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	46.0
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	46		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	175000	8400	mg/kg	1	10/14/11 15:21	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-34 (0-12")		
Lab Sample ID:	MC4196-43	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	48.6
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	48.6		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	45700	1900	mg/kg	1	10/14/11 13:20	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-35 (0-12")		
Lab Sample ID:	MC4196-44	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	36.9
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	36.9		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	30600	2500	mg/kg	1	10/14/11 10:26	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-36 (0-12")		
Lab Sample ID:	MC4196-45	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	37.3
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	37.3		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	28700	2400	mg/kg	1	10/14/11 13:36	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-37 (0-12")		
Lab Sample ID:	MC4196-46	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	34.7
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	34.7		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	32600	2300	mg/kg	1	10/14/11 13:57	CF	LLOYD KAHN 1988

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	SD-38 (0-12")		
Lab Sample ID:	MC4196-47	**Date Sampled:**	09/30/11
Matrix:	SO - Sediment	**Date Received:**	10/01/11
		Percent Solids:	37.2
Project:	ConEd Pemart Avenue, Peakskill, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	37.2		%	1	10/06/11	HS	SM21 2540 B MOD.
Total Organic Carbon	29700	2700	mg/kg	1	10/14/11 14:29	CF	LLOYD KAHN 1988

RL = Reporting Limit

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-1** SD-39

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-01		
File ID:	G101028.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.633
Date Cleanup:	NA	Percent Solid:	62.8%
Date Analyzed:	10/11/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.005 J	0.006	0.003	
2-Methylnaphthalene	U	0.006	0.003	
1-Methylnaphthalene	U	0.006	0.003	
C1 - Naphthalene	U	0.006	0.003	
C2 - Naphthalene	U	0.006	0.003	
C3 - Naphthalene	U	0.006	0.003	
C4 - Naphthalene	U	0.006	0.003	
Acenaphthylene	U	0.006	0.003	
Acenaphthene	U	0.006	0.003	
Fluorene	0.007	0.006	0.003	
C1 - Fluorene	0.006	0.006	0.003	
C2 - Fluorene	0.006 J	0.006	0.003	
C3 - Fluorene	U	0.006	0.003	
Phenanthrene	0.008	0.006	0.003	
Anthracene	U	0.006	0.003	
C1 - Phenanthrene/Anthracene	0.009	0.006	0.003	
C2 - Phenanthrene/Anthracene	U	0.006	0.003	
C3 - Phenanthrene/Anthracene	U	0.006	0.003	
C4 - Phenanthrene/Anthracene	U	0.006	0.003	
Fluoranthene	0.006	0.006	0.003	
Pyrene	0.006	0.006	0.003	
C1 - Fluoranthene/Pyrene	0.008	0.006	0.003	
Benz(a)anthracene	0.005 J	0.006	0.003	
Chrysene*	0.008	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	0.005 J	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	0.006	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	U	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	U	0.006	0.003	
Benzo(b)fluoranthene	0.007	0.006	0.003	
Benzo(j/k)fluoranthene	0.007	0.006	0.003	
Benzo(e)pyrene	0.006 J	0.006	0.003	
Benzo(a)pyrene	0.008	0.006	0.003	
Perylene	0.508	0.006	0.003	
Indeno(1,2,3-cd)pyrene	0.023	0.006	0.003	
Dibenz(a,h)anthracene	0.036	0.006	0.003	
Benzo(g,h,i)perylene	0.024	0.006	0.003	
Total PAH (16)	0.150	0.006	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-1

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-01		
File ID:	G101028.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.633
Date Cleanup:	NA	Percent Solid:	62.8%
Date Analyzed:	10/11/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	78	50 - 120		
Benzo(a)pyrene-d12	63	50 - 120		
Perylene-d12	72	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-2** SD-40

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-02		
File ID:	G101033.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.323
Date Cleanup:	NA	Percent Solid:	47.5%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.053	0.009	0.005	
2-Methylnaphthalene	0.037	0.009	0.005	
1-Methylnaphthalene	0.017	0.009	0.005	
C1 - Naphthalene	0.036	0.009	0.005	
C2 - Naphthalene	0.067	0.009	0.005	
C3 - Naphthalene	0.065	0.009	0.005	
C4 - Naphthalene	0.036	0.009	0.005	
Acenaphthylene	0.053	0.009	0.005	
Acenaphthene	0.013	0.009	0.005	
Fluorene	0.037	0.009	0.005	
C1 - Fluorene	0.035	0.009	0.005	
C2 - Fluorene	IU J	0.009	0.005	
C3 - Fluorene	0.096	0.009	0.005	
Phenanthrene	0.164	0.009	0.005	
Anthracene	0.087	0.009	0.005	
C1 - Phenanthrene/Anthracene	IU J	0.009	0.005	
C2 - Phenanthrene/Anthracene	0.196	0.009	0.005	
C3 - Phenanthrene/Anthracene	0.082	0.009	0.005	
C4 - Phenanthrene/Anthracene	0.044	0.009	0.005	
Fluoranthene	0.347	0.009	0.005	
Pyrene	0.342	0.009	0.005	
C1 - Fluoranthene/Pyrene	0.209	0.009	0.005	
Benz(a)anthracene	0.186	0.009	0.005	
Chrysene*	0.221	0.009	0.005	
C1 - Benz(a)anthracene/Chrysene	0.131	0.009	0.005	
C2 - Benz(a)anthracene/Chrysene	0.079	0.009	0.005	
C3 - Benz(a)anthracene/Chrysene	0.051	0.009	0.005	
C4 - Benz(a)anthracene/Chrysene	0.034 J	0.009	0.005	
Benzo(b)fluoranthene	0.217	0.009	0.005	
Benzo(j/k)fluoranthene	0.220	0.009	0.005	
Benzo(e)pyrene	0.190	0.009	0.005	
Benzo(a)pyrene	0.231	0.009	0.005	
Perylene	1.11	0.009	0.005	
Indeno(1,2,3-cd)pyrene	0.137	0.009	0.005	
Dibenz(a,h)anthracene	0.068	0.009	0.005	
Benzo(g,h,i)perylene	0.172	0.009	0.005	
Total PAH (16)	2.55	0.009	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-2

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-02		
File ID:	G101033.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.323
Date Cleanup:	NA	Percent Solid:	47.5%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	79	50 - 120		
Benzo(a)pyrene-d12	73	50 - 120		
Perylene-d12	82	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-3** SD-41

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-03		
File ID:	G101034.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.691
Date Cleanup:	NA	Percent Solid:	54.2%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.073	0.007	0.003	
2-Methylnaphthalene	0.045	0.007	0.003	
1-Methylnaphthalene	0.019	0.007	0.003	
C1 - Naphthalene	0.042	0.007	0.003	
C2 - Naphthalene	0.066	0.007	0.003	
C3 - Naphthalene	0.065	0.007	0.003	
C4 - Naphthalene	0.052	0.007	0.003	
Acenaphthylene	0.053	0.007	0.003	
Acenaphthene	0.018	0.007	0.003	
Fluorene	0.054	0.007	0.003	
C1 - Fluorene	0.047	0.007	0.003	
C2 - Fluorene	IU J	0.007	0.003	
C3 - Fluorene	0.088	0.007	0.003	
Phenanthrene	0.194	0.007	0.003	
Anthracene	0.120	0.007	0.003	
C1 - Phenanthrene/Anthracene	IU J	0.007	0.003	
C2 - Phenanthrene/Anthracene	0.209	0.007	0.003	
C3 - Phenanthrene/Anthracene	0.102	0.007	0.003	
C4 - Phenanthrene/Anthracene	0.068	0.007	0.003	
Fluoranthene	0.390	0.007	0.003	
Pyrene	0.382	0.007	0.003	
C1 - Fluoranthene/Pyrene	0.298	0.007	0.003	
Benz(a)anthracene	0.233	0.007	0.003	
Chrysene*	0.228	0.007	0.003	
C1 - Benz(a)anthracene/Chrysene	0.180	0.007	0.003	
C2 - Benz(a)anthracene/Chrysene	0.100	0.007	0.003	
C3 - Benz(a)anthracene/Chrysene	0.063	0.007	0.003	
C4 - Benz(a)anthracene/Chrysene	0.047	0.007	0.003	
Benzo(b)fluoranthene	0.208	0.007	0.003	
Benzo(j/k)fluoranthene	0.222	0.007	0.003	
Benzo(e)pyrene	0.191	0.007	0.003	
Benzo(a)pyrene	0.262	0.007	0.003	
Perylene	2.62	0.007	0.003	
Indeno(1,2,3-cd)pyrene	0.125	0.007	0.003	
Dibenz(a,h)anthracene	0.037	0.007	0.003	
Benzo(g,h,i)perylene	0.164	0.007	0.003	
Total PAH (16)	2.76	0.007	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-3

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-03		
File ID:	G101034.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.691
Date Cleanup:	NA	Percent Solid:	54.2%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	81	50 - 120		
Benzo(a)pyrene-d12	74	50 - 120		
Perylene-d12	83	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-4** SD-42

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-04		
File ID:	G101035.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	1.964
Date Cleanup:	NA	Percent Solid:	50.8%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.094	0.010	0.005	
2-Methylnaphthalene	0.056	0.010	0.005	
1-Methylnaphthalene	0.025	0.010	0.005	
C1 - Naphthalene	0.054	0.010	0.005	
C2 - Naphthalene	0.083	0.010	0.005	
C3 - Naphthalene	0.084	0.010	0.005	
C4 - Naphthalene	0.054	0.010	0.005	
Acenaphthylene	0.057	0.010	0.005	
Acenaphthene	0.021	0.010	0.005	
Fluorene	0.068	0.010	0.005	
C1 - Fluorene	0.056	0.010	0.005	
C2 - Fluorene	IU J	0.010	0.005	
C3 - Fluorene	0.097	0.010	0.005	
Phenanthrene	0.258	0.010	0.005	
Anthracene	0.134	0.010	0.005	
C1 - Phenanthrene/Anthracene	0.179 I J	0.010	0.005	
C2 - Phenanthrene/Anthracene	0.274	0.010	0.005	
C3 - Phenanthrene/Anthracene	0.121	0.010	0.005	
C4 - Phenanthrene/Anthracene	0.084	0.010	0.005	
Fluoranthene	0.421	0.010	0.005	
Pyrene	0.447	0.010	0.005	
C1 - Fluoranthene/Pyrene	0.361	0.010	0.005	
Benz(a)anthracene	0.281	0.010	0.005	
Chrysene*	0.290	0.010	0.005	
C1 - Benz(a)anthracene/Chrysene	0.228	0.010	0.005	
C2 - Benz(a)anthracene/Chrysene	0.130	0.010	0.005	
C3 - Benz(a)anthracene/Chrysene	0.086	0.010	0.005	
C4 - Benz(a)anthracene/Chrysene	0.052	0.010	0.005	
Benzo(b)fluoranthene	0.239	0.010	0.005	
Benzo(j/k)fluoranthene	0.257	0.010	0.005	
Benzo(e)pyrene	0.240	0.010	0.005	
Benzo(a)pyrene	0.315	0.010	0.005	
Perylene	3.57	0.010	0.005	
Indeno(1,2,3-cd)pyrene	0.151	0.010	0.005	
Dibenz(a,h)anthracene	0.039	0.010	0.005	
Benzo(g,h,i)perylene	0.205	0.010	0.005	
Total PAH (16)	3.28	0.010	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-4

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-04		
File ID:	G101035.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	1.964
Date Cleanup:	NA	Percent Solid:	50.8%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	101	50 - 120		
Benzo(a)pyrene-d12	93	50 - 120		
Perylene-d12	104	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-5** SD-43

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-05		
File ID:	G101036.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.480
Date Cleanup:	NA	Percent Solid:	51.1%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.059	0.008	0.004	
2-Methylnaphthalene	0.043	0.008	0.004	
1-Methylnaphthalene	0.019	0.008	0.004	
C1 - Naphthalene	0.040	0.008	0.004	
C2 - Naphthalene	0.059	0.008	0.004	
C3 - Naphthalene	0.057	0.008	0.004	
C4 - Naphthalene	0.042	0.008	0.004	
Acenaphthylene	0.051	0.008	0.004	
Acenaphthene	0.014	0.008	0.004	
Fluorene	0.044	0.008	0.004	
C1 - Fluorene	0.043	0.008	0.004	
C2 - Fluorene	IU J	0.008	0.004	
C3 - Fluorene	0.071	0.008	0.004	
Phenanthrene	0.159	0.008	0.004	
Anthracene	0.101	0.008	0.004	
C1 - Phenanthrene/Anthracene	0.219 I J	0.008	0.004	
C2 - Phenanthrene/Anthracene	0.212	0.008	0.004	
C3 - Phenanthrene/Anthracene	0.113	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.076	0.008	0.004	
Fluoranthene	0.294	0.008	0.004	
Pyrene	0.321	0.008	0.004	
C1 - Fluoranthene/Pyrene	0.304	0.008	0.004	
Benz(a)anthracene	0.208	0.008	0.004	
Chrysene*	0.212	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	0.198	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.121	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.077	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.056	0.008	0.004	
Benzo(b)fluoranthene	0.190	0.008	0.004	
Benzo(j/k)fluoranthene	0.201	0.008	0.004	
Benzo(e)pyrene	0.186	0.008	0.004	
Benzo(a)pyrene	0.240	0.008	0.004	
Perylene	2.08	0.008	0.004	
Indeno(1,2,3-cd)pyrene	0.112	0.008	0.004	
Dibenz(a,h)anthracene	0.034	0.008	0.004	
Benzo(g,h,i)perylene	0.155	0.008	0.004	
Total PAH (16)	2.39	0.008	0.004	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-5

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-05		
File ID:	G101036.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.480
Date Cleanup:	NA	Percent Solid:	51.1%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	82	50 - 120		
Benzo(a)pyrene-d12	79	50 - 120		
Perylene-d12	88	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-6** SD-44

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-06		
File ID:	G101037.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.854
Date Cleanup:	NA	Percent Solid:	51.9%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.119	0.007	0.003	
2-Methylnaphthalene	0.113	0.007	0.003	
1-Methylnaphthalene	0.051	0.007	0.003	
C1 - Naphthalene	0.107	0.007	0.003	
C2 - Naphthalene	0.102	0.007	0.003	
C3 - Naphthalene	0.097	0.007	0.003	
C4 - Naphthalene	0.080	0.007	0.003	
Acenaphthylene	0.164	0.007	0.003	
Acenaphthene	0.069	0.007	0.003	
Fluorene	0.065	0.007	0.003	
C1 - Fluorene	0.111	0.007	0.003	
C2 - Fluorene	0.122 I J	0.007	0.003	
C3 - Fluorene	0.114	0.007	0.003	
Phenanthrene	0.249	0.007	0.003	
Anthracene	0.191	0.007	0.003	
C1 - Phenanthrene/Anthracene	0.298	0.007	0.003	
C2 - Phenanthrene/Anthracene	0.321	0.007	0.003	
C3 - Phenanthrene/Anthracene	0.161	0.007	0.003	
C4 - Phenanthrene/Anthracene	0.083	0.007	0.003	
Fluoranthene	0.706	0.007	0.003	
Pyrene	0.797	0.007	0.003	
C1 - Fluoranthene/Pyrene	0.663	0.007	0.003	
Benz(a)anthracene	0.428	0.007	0.003	
Chrysene*	0.393	0.007	0.003	
C1 - Benz(a)anthracene/Chrysene	0.366	0.007	0.003	
C2 - Benz(a)anthracene/Chrysene	0.196	0.007	0.003	
C3 - Benz(a)anthracene/Chrysene	0.106	0.007	0.003	
C4 - Benz(a)anthracene/Chrysene	0.071	0.007	0.003	
Benzo(b)fluoranthene	0.402	0.007	0.003	
Benzo(j/k)fluoranthene	0.412	0.007	0.003	
Benzo(e)pyrene	0.392	0.007	0.003	
Benzo(a)pyrene	0.513	0.007	0.003	
Perylene	1.38	0.007	0.003	
Indeno(1,2,3-cd)pyrene	0.249	0.007	0.003	
Dibenz(a,h)anthracene	0.065	0.007	0.003	
Benzo(g,h,i)perylene	0.326	0.007	0.003	
Total PAH (16)	5.15	0.007	0.003	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-6

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-06		
File ID:	G101037.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.854
Date Cleanup:	NA	Percent Solid:	51.9%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	79	50 - 120		
Benzo(a)pyrene-d12	74	50 - 120		
Perylene-d12	83	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-7** SD-45

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-07		
File ID:	G101038.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.481
Date Cleanup:	NA	Percent Solid:	43.4%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.130	0.009	0.005	
2-Methylnaphthalene	0.108	0.009	0.005	
1-Methylnaphthalene	0.058	0.009	0.005	
C1 - Naphthalene	0.109	0.009	0.005	
C2 - Naphthalene	0.163	0.009	0.005	
C3 - Naphthalene	0.146	0.009	0.005	
C4 - Naphthalene	0.104	0.009	0.005	
Acenaphthylene	0.152	0.009	0.005	
Acenaphthene	0.028	0.009	0.005	
Fluorene	0.078	0.009	0.005	
C1 - Fluorene	0.084	0.009	0.005	
C2 - Fluorene	IU 5	0.009	0.005	
C3 - Fluorene	0.168	0.009	0.005	
Phenanthrene	0.382	0.009	0.005	
Anthracene	0.227	0.009	0.005	
C1 - Phenanthrene/Anthracene	0.574 I 5	0.009	0.005	
C2 - Phenanthrene/Anthracene	0.381	0.009	0.005	
C3 - Phenanthrene/Anthracene	0.190	0.009	0.005	
C4 - Phenanthrene/Anthracene	0.119	0.009	0.005	
Fluoranthene	0.756	0.009	0.005	
Pyrene	0.796	0.009	0.005	
C1 - Fluoranthene/Pyrene	0.640	0.009	0.005	
Benz(a)anthracene	0.461	0.009	0.005	
Chrysene*	0.480	0.009	0.005	
C1 - Benz(a)anthracene/Chrysene	0.387	0.009	0.005	
C2 - Benz(a)anthracene/Chrysene	0.211	0.009	0.005	
C3 - Benz(a)anthracene/Chrysene	0.133	0.009	0.005	
C4 - Benz(a)anthracene/Chrysene	0.100	0.009	0.005	
Benzo(b)fluoranthene	0.453	0.009	0.005	
Benzo(j/k)fluoranthene	0.496	0.009	0.005	
Benzo(e)pyrene	0.436	0.009	0.005	
Benzo(a)pyrene	0.573	0.009	0.005	
Perylene	1.84	0.009	0.005	
Indeno(1,2,3-cd)pyrene	0.304	0.009	0.005	
Dibenz(a,h)anthracene	0.076	0.009	0.005	
Benzo(g,h,i)perylene	0.394	0.009	0.005	
Total PAH (16)	5.79	0.009	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-7

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-07		
File ID:	G101038.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.481
Date Cleanup:	NA	Percent Solid:	43.4%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	80	50 - 120		
Benzo(a)pyrene-d12	77	50 - 120		
Perylene-d12	86	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-8** SD-46

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-08		
File ID:	G101313.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.546
Date Cleanup:	NA	Percent Solid:	65.8%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.047	0.006	0.003	
2-Methylnaphthalene	0.037	0.006	0.003	
1-Methylnaphthalene	0.016	0.006	0.003	
C1 - Naphthalene	0.035	0.006	0.003	
C2 - Naphthalene	0.055	0.006	0.003	
C3 - Naphthalene	0.046	0.006	0.003	
C4 - Naphthalene	0.042	0.006	0.003	
Acenaphthylene	0.057	0.006	0.003	
Acenaphthene	0.012	0.006	0.003	
Fluorene	0.032	0.006	0.003	
C1 - Fluorene	0.033	0.006	0.003	
C2 - Fluorene	IU J	0.006	0.003	
C3 - Fluorene	0.078	0.006	0.003	
Phenanthrene	0.129	0.006	0.003	
Anthracene	0.086	0.006	0.003	
C1 - Phenanthrene/Anthracene	IU J	0.006	0.003	
C2 - Phenanthrene/Anthracene	0.171	0.006	0.003	
C3 - Phenanthrene/Anthracene	0.083	0.006	0.003	
C4 - Phenanthrene/Anthracene	0.054	0.006	0.003	
Fluoranthene	0.283	0.006	0.003	
Pyrene	0.307	0.006	0.003	
C1 - Fluoranthene/Pyrene	0.263	0.006	0.003	
Benz(a)anthracene	0.177	0.006	0.003	
Chrysene*	0.186	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	0.162	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	0.096	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	0.067	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	0.048	0.006	0.003	
Benzo(b)fluoranthene	0.194	0.006	0.003	
Benzo(j/k)fluoranthene	0.205	0.006	0.003	
Benzo(e)pyrene	0.183	0.006	0.003	
Benzo(a)pyrene	0.241	0.006	0.003	
Perylene	1.17	0.006	0.003	
Indeno(1,2,3-cd)pyrene	0.135	0.006	0.003	
Dibenz(a,h)anthracene	0.035	0.006	0.003	
Benzo(g,h,i)perylene	0.167	0.006	0.003	
Total PAH (16)	2.29	0.006	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-8

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-08		
File ID:	G101313.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.546
Date Cleanup:	NA	Percent Solid:	65.8%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	93	50 - 120		
Benzo(a)pyrene-d12	86	50 - 120		
Perylene-d12	95	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

SD-47

Field ID: **MC4196-9**

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-09		
File ID:	G101039.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.681
Date Cleanup:	NA	Percent Solid:	51.7%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.085	0.007	0.004	
2-Methylnaphthalene	0.067	0.007	0.004	
1-Methylnaphthalene	0.029	0.007	0.004	
C1 - Naphthalene	0.063	0.007	0.004	
C2 - Naphthalene	0.093	0.007	0.004	
C3 - Naphthalene	0.088	0.007	0.004	
C4 - Naphthalene	0.065	0.007	0.004	
Acenaphthylene	0.097	0.007	0.004	
Acenaphthene	0.019	0.007	0.004	
Fluorene	0.060	0.007	0.004	
C1 - Fluorene	0.057	0.007	0.004	
C2 - Fluorene	IU J	0.007	0.004	
C3 - Fluorene	0.111	0.007	0.004	
Phenanthrene	0.225	0.007	0.004	
Anthracene	0.135	0.007	0.004	
C1 - Phenanthrene/Anthracene	0.297 I J	0.007	0.004	
C2 - Phenanthrene/Anthracene	0.255	0.007	0.004	
C3 - Phenanthrene/Anthracene	0.129	0.007	0.004	
C4 - Phenanthrene/Anthracene	0.082	0.007	0.004	
Fluoranthene	0.416	0.007	0.004	
Pyrene	0.448	0.007	0.004	
C1 - Fluoranthene/Pyrene	0.382	0.007	0.004	
Benz(a)anthracene	0.264	0.007	0.004	
Chrysene*	0.279	0.007	0.004	
C1 - Benz(a)anthracene/Chrysene	0.232	0.007	0.004	
C2 - Benz(a)anthracene/Chrysene	0.144	0.007	0.004	
C3 - Benz(a)anthracene/Chrysene	0.081	0.007	0.004	
C4 - Benz(a)anthracene/Chrysene	0.056	0.007	0.004	
Benzo(b)fluoranthene	0.259	0.007	0.004	
Benzo(j/k)fluoranthene	0.264	0.007	0.004	
Benzo(e)pyrene	0.246	0.007	0.004	
Benzo(a)pyrene	0.325	0.007	0.004	
Perylene	3.0	0.007	0.004	
Indeno(1,2,3-cd)pyrene	0.170	0.007	0.004	
Dibenz(a,h)anthracene	0.046	0.007	0.004	
Benzo(g,h,i)perylene	0.226	0.007	0.004	
Total PAH (16)	3.32	0.007	0.004	

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-9

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-09		
File ID:	G101039.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.681
Date Cleanup:	NA	Percent Solid:	51.7%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	88	50 - 120		
Benzo(a)pyrene-d12	84	50 - 120		
Perylene-d12	94	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-10** SD-48

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-10		
File ID:	G101040.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.495
Date Cleanup:	NA	Percent Solid:	43.4%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.149	0.009	0.005	
2-Methylnaphthalene	0.109	0.009	0.005	
1-Methylnaphthalene	0.048	0.009	0.005	
C1 - Naphthalene	0.101	0.009	0.005	
C2 - Naphthalene	0.136	0.009	0.005	
C3 - Naphthalene	0.122	0.009	0.005	
C4 - Naphthalene	0.089	0.009	0.005	
Acenaphthylene	0.169	0.009	0.005	
Acenaphthene	0.030	0.009	0.005	
Fluorene	0.093	0.009	0.005	
C1 - Fluorene	0.089	0.009	0.005	
C2 - Fluorene	IU J	0.009	0.005	
C3 - Fluorene	0.179	0.009	0.005	
Phenanthrene	0.349	0.009	0.005	
Anthracene	0.262	0.009	0.005	
C1 - Phenanthrene/Anthracene	0.712 I J	0.009	0.005	
C2 - Phenanthrene/Anthracene	0.438	0.009	0.005	
C3 - Phenanthrene/Anthracene	0.246	0.009	0.005	
C4 - Phenanthrene/Anthracene	0.154	0.009	0.005	
Fluoranthene	0.668	0.009	0.005	
Pyrene	0.767	0.009	0.005	
C1 - Fluoranthene/Pyrene	0.738	0.009	0.005	
Benz(a)anthracene	0.505	0.009	0.005	
Chrysene*	0.498	0.009	0.005	
C1 - Benz(a)anthracene/Chrysene	0.489	0.009	0.005	
C2 - Benz(a)anthracene/Chrysene	0.297	0.009	0.005	
C3 - Benz(a)anthracene/Chrysene	0.190	0.009	0.005	
C4 - Benz(a)anthracene/Chrysene	0.139	0.009	0.005	
Benzo(b)fluoranthene	0.468	0.009	0.005	
Benzo(j/k)fluoranthene	0.501	0.009	0.005	
Benzo(e)pyrene	0.488	0.009	0.005	
Benzo(a)pyrene	0.649	0.009	0.005	
Perylene	2.2	0.009	0.005	
Indeno(1,2,3-cd)pyrene	0.324	0.009	0.005	
Dibenz(a,h)anthracene	0.084	0.009	0.005	
Benzo(g,h,i)perylene	0.416	0.009	0.005	
Total PAH (16)	5.93	0.009	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-10

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-10		
File ID:	G101040.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.495
Date Cleanup:	NA	Percent Solid:	43.4%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	79	50 - 120		
Benzo(a)pyrene-d12	74	50 - 120		
Perylene-d12	82	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-11** SD-49

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-11		
File ID:	G101041.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.296
Date Cleanup:	NA	Percent Solid:	39.9%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.078	0.011	0.005	
2-Methylnaphthalene	0.057	0.011	0.005	
1-Methylnaphthalene	0.030	0.011	0.005	
C1 - Naphthalene	0.056	0.011	0.005	
C2 - Naphthalene	0.102	0.011	0.005	
C3 - Naphthalene	0.099	0.011	0.005	
C4 - Naphthalene	0.072	0.011	0.005	
Acenaphthylene	0.099	0.011	0.005	
Acenaphthene	0.021	0.011	0.005	
Fluorene	0.052	0.011	0.005	
C1 - Fluorene	0.055	0.011	0.005	
C2 - Fluorene	IU J	0.011	0.005	
C3 - Fluorene	0.152	0.011	0.005	
Phenanthrene	0.245	0.011	0.005	
Anthracene	0.147	0.011	0.005	
C1 - Phenanthrene/Anthracene	IU J	0.011	0.005	
C2 - Phenanthrene/Anthracene	0.277	0.011	0.005	
C3 - Phenanthrene/Anthracene	0.130	0.011	0.005	
C4 - Phenanthrene/Anthracene	0.083	0.011	0.005	
Fluoranthene	0.568	0.011	0.005	
Pyrene	0.569	0.011	0.005	
C1 - Fluoranthene/Pyrene	0.373	0.011	0.005	
Benz(a)anthracene	0.301	0.011	0.005	
Chrysene*	0.347	0.011	0.005	
C1 - Benz(a)anthracene/Chrysene	0.224	0.011	0.005	
C2 - Benz(a)anthracene/Chrysene	0.132	0.011	0.005	
C3 - Benz(a)anthracene/Chrysene	0.104	0.011	0.005	
C4 - Benz(a)anthracene/Chrysene	0.086	0.011	0.005	
Benzo(b)fluoranthene	0.343	0.011	0.005	
Benzo(j/k)fluoranthene	0.351	0.011	0.005	
Benzo(e)pyrene	0.302	0.011	0.005	
Benzo(a)pyrene	0.383	0.011	0.005	
Perylene	1.45	0.011	0.005	
Indeno(1,2,3-cd)pyrene	0.215	0.011	0.005	
Dibenz(a,h)anthracene	0.057	0.011	0.005	
Benzo(g,h,i)perylene	0.275	0.011	0.005	
Total PAH (16)	4.05	0.011	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-11

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-11		
File ID:	G101041.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.296
Date Cleanup:	NA	Percent Solid:	39.9%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	79	50 - 120		
Benzo(a)pyrene-d12	74	50 - 120		
Perylene-d12	82	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-12** DUP-1

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-12		
File ID:	G101310.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.534
Date Cleanup:	NA	Percent Solid:	42.2%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.046	0.009	0.005	
2-Methylnaphthalene	0.038	0.009	0.005	
1-Methylnaphthalene	0.017	0.009	0.005	
C1 - Naphthalene	0.038	0.009	0.005	
C2 - Naphthalene	0.080	0.009	0.005	
C3 - Naphthalene	0.063	0.009	0.005	
C4 - Naphthalene	0.057	0.009	0.005	
Acenaphthylene	0.068	0.009	0.005	
Acenaphthene	0.016	0.009	0.005	
Fluorene	0.042	0.009	0.005	
C1 - Fluorene	0.039	0.009	0.005	
C2 - Fluorene	IU J	0.009	0.005	
C3 - Fluorene	0.116	0.009	0.005	
Phenanthrene	0.194	0.009	0.005	
Anthracene	0.108	0.009	0.005	
C1 - Phenanthrene/Anthracene	IU J	0.009	0.005	
C2 - Phenanthrene/Anthracene	0.228	0.009	0.005	
C3 - Phenanthrene/Anthracene	0.104	0.009	0.005	
C4 - Phenanthrene/Anthracene	0.070	0.009	0.005	
Fluoranthene	0.454	0.009	0.005	
Pyrene	0.449	0.009	0.005	
C1 - Fluoranthene/Pyrene	0.309	0.009	0.005	
Benz(a)anthracene	0.250	0.009	0.005	
Chrysene*	0.286	0.009	0.005	
C1 - Benz(a)anthracene/Chrysene	0.188	0.009	0.005	
C2 - Benz(a)anthracene/Chrysene	0.109	0.009	0.005	
C3 - Benz(a)anthracene/Chrysene	0.080	0.009	0.005	
C4 - Benz(a)anthracene/Chrysene	0.105 J	0.009	0.005	
Benzo(b)fluoranthene	0.287	0.009	0.005	
Benzo(j/k)fluoranthene	0.294	0.009	0.005	
Benzo(e)pyrene	0.244	0.009	0.005	
Benzo(a)pyrene	0.315	0.009	0.005	
Perylene	1.51	0.009	0.005	
Indeno(1,2,3-cd)pyrene	0.184	0.009	0.005	
Dibenz(a,h)anthracene	0.050	0.009	0.005	
Benzo(g,h,i)perylene	0.217	0.009	0.005	
Total PAH (16)	3.26	0.009	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-12

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-12		
File ID:	G101310.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.534
Date Cleanup:	NA	Percent Solid:	42.2%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	97	50 - 120		
Benzo(a)pyrene-d12	91	50 - 120		
Perylene-d12	100	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-13** DUP-2

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-13		
File ID:	G101042.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.725
Date Cleanup:	NA	Percent Solid:	43.6%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.094	0.008	0.004	
2-Methylnaphthalene	0.066	0.008	0.004	
1-Methylnaphthalene	0.032	0.008	0.004	
C1 - Naphthalene	0.064	0.008	0.004	
C2 - Naphthalene	0.103	0.008	0.004	
C3 - Naphthalene	0.093	0.008	0.004	
C4 - Naphthalene	0.072	0.008	0.004	
Acenaphthylene	0.092	0.008	0.004	
Acenaphthene	0.019	0.008	0.004	
Fluorene	0.058	0.008	0.004	
C1 - Fluorene	0.055	0.008	0.004	
C2 - Fluorene	IU 3	0.008	0.004	
C3 - Fluorene	0.130	0.008	0.004	
Phenanthrene	0.230	0.008	0.004	
Anthracene	0.137	0.008	0.004	
C1 - Phenanthrene/Anthracene	IU 3	0.008	0.004	
C2 - Phenanthrene/Anthracene	0.258	0.008	0.004	
C3 - Phenanthrene/Anthracene	0.128	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.080	0.008	0.004	
Fluoranthene	0.463	0.008	0.004	
Pyrene	0.481	0.008	0.004	
C1 - Fluoranthene/Pyrene	0.355	0.008	0.004	
Benz(a)anthracene	0.269	0.008	0.004	
Chrysene*	0.302	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	0.219	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.139	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.088	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.060	0.008	0.004	
Benzo(b)fluoranthene	0.292	0.008	0.004	
Benzo(j/k)fluoranthene	0.306	0.008	0.004	
Benzo(e)pyrene	0.262	0.008	0.004	
Benzo(a)pyrene	0.334	0.008	0.004	
Perylene	2.17	0.008	0.004	
Indeno(1,2,3-cd)pyrene	0.188	0.008	0.004	
Dibenz(a,h)anthracene	0.047	0.008	0.004	
Benzo(g,h,i)perylene	0.233	0.008	0.004	
Total PAH (16)	3.54	0.008	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-13

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-13		
File ID:	G101042.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/28/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.725
Date Cleanup:	NA	Percent Solid:	43.6%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	91	50 - 120		
Benzo(a)pyrene-d12	84	50 - 120		
Perylene-d12	94	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-14** SD-50

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-14		
File ID:	G101046.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.596
Date Cleanup:	NA	Percent Solid:	39.3%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.102	0.010	0.005	
2-Methylnaphthalene	0.074	0.010	0.005	
1-Methylnaphthalene	0.036	0.010	0.005	
C1 - Naphthalene	0.073	0.010	0.005	
C2 - Naphthalene	0.111	0.010	0.005	
C3 - Naphthalene	0.108	0.010	0.005	
C4 - Naphthalene	0.095	0.010	0.005	
Acenaphthylene	0.160	0.010	0.005	
Acenaphthene	0.027	0.010	0.005	
Fluorene	0.061	0.010	0.005	
C1 - Fluorene	0.073	0.010	0.005	
C2 - Fluorene	IU J	0.010	0.005	
C3 - Fluorene	0.219	0.010	0.005	
Phenanthrene	0.339	0.010	0.005	
Anthracene	0.238	0.010	0.005	
C1 - Phenanthrene/Anthracene	0.762 I J	0.010	0.005	
C2 - Phenanthrene/Anthracene	0.429	0.010	0.005	
C3 - Phenanthrene/Anthracene	0.237	0.010	0.005	
C4 - Phenanthrene/Anthracene	0.141	0.010	0.005	
Fluoranthene	0.983	0.010	0.005	
Pyrene	1.02	0.010	0.005	
C1 - Fluoranthene/Pyrene	0.701	0.010	0.005	
Benz(a)anthracene	0.540	0.010	0.005	
Chrysene*	0.562	0.010	0.005	
C1 - Benz(a)anthracene/Chrysene	0.435	0.010	0.005	
C2 - Benz(a)anthracene/Chrysene	0.265	0.010	0.005	
C3 - Benz(a)anthracene/Chrysene	0.167	0.010	0.005	
C4 - Benz(a)anthracene/Chrysene	0.104	0.010	0.005	
Benzo(b)fluoranthene	0.586	0.010	0.005	
Benzo(j/k)fluoranthene	0.629	0.010	0.005	
Benzo(e)pyrene	0.538	0.010	0.005	
Benzo(a)pyrene	0.669	0.010	0.005	
Perylene	1.72	0.010	0.005	
Indeno(1,2,3-cd)pyrene	0.370	0.010	0.005	
Dibenz(a,h)anthracene	0.097	0.010	0.005	
Benzo(g,h,i)perylene	0.474	0.010	0.005	
Total PAH (16)	6.86	0.010	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-14

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-14		
File ID:	G101046.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.596
Date Cleanup:	NA	Percent Solid:	39.3%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	82	50 - 120		
Benzo(a)pyrene-d12	80	50 - 120		
Perylene-d12	90	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-15** SD-51

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-15		
File ID:	G101047.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.995
Date Cleanup:	NA	Percent Solid:	46.7%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.113	0.007	0.004	
2-Methylnaphthalene	0.075	0.007	0.004	
1-Methylnaphthalene	0.033	0.007	0.004	
C1 - Naphthalene	0.071	0.007	0.004	
C2 - Naphthalene	0.093	0.007	0.004	
C3 - Naphthalene	0.085	0.007	0.004	
C4 - Naphthalene	0.065	0.007	0.004	
Acenaphthylene	0.126	0.007	0.004	
Acenaphthene	0.021	0.007	0.004	
Fluorene	0.068	0.007	0.004	
C1 - Fluorene	0.071	0.007	0.004	
C2 - Fluorene	IU J	0.007	0.004	
C3 - Fluorene	0.133	0.007	0.004	
Phenanthrene	0.241	0.007	0.004	
Anthracene	0.187	0.007	0.004	
C1 - Phenanthrene/Anthracene	0.346 I J	0.007	0.004	
C2 - Phenanthrene/Anthracene	0.334	0.007	0.004	
C3 - Phenanthrene/Anthracene	0.187	0.007	0.004	
C4 - Phenanthrene/Anthracene	0.128	0.007	0.004	
Fluoranthene	0.600	0.007	0.004	
Pyrene	0.681	0.007	0.004	
C1 - Fluoranthene/Pyrene	0.609	0.007	0.004	
Benz(a)anthracene	0.430	0.007	0.004	
Chrysene*	0.395	0.007	0.004	
C1 - Benz(a)anthracene/Chrysene	0.412	0.007	0.004	
C2 - Benz(a)anthracene/Chrysene	0.256	0.007	0.004	
C3 - Benz(a)anthracene/Chrysene	0.165	0.007	0.004	
C4 - Benz(a)anthracene/Chrysene	0.103	0.007	0.004	
Benzo(b)fluoranthene	0.396	0.007	0.004	
Benzo(j/k)fluoranthene	0.422	0.007	0.004	
Benzo(e)pyrene	0.416	0.007	0.004	
Benzo(a)pyrene	0.539	0.007	0.004	
Perylene	2.23	0.007	0.004	
Indeno(1,2,3-cd)pyrene	0.277	0.007	0.004	
Dibenz(a,h)anthracene	0.071	0.007	0.004	
Benzo(g,h,i)perylene	0.366	0.007	0.004	
Total PAH (16)	4.93	0.007	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-15

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-15		
File ID:	G101047.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.995
Date Cleanup:	NA	Percent Solid:	46.7%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	99	50 - 120		
Benzo(a)pyrene-d12	94	50 - 120		
Perylene-d12	105	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-16** SD-52

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-16		
File ID:	G101048.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	3.154
Date Cleanup:	NA	Percent Solid:	44.1%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.095	0.007	0.004	
2-Methylnaphthalene	0.070	0.007	0.004	
1-Methylnaphthalene	0.033	0.007	0.004	
C1 - Naphthalene	0.068	0.007	0.004	
C2 - Naphthalene	0.102	0.007	0.004	
C3 - Naphthalene	0.090	0.007	0.004	
C4 - Naphthalene	0.070	0.007	0.004	
Acenaphthylene	0.123	0.007	0.004	
Acenaphthene	0.026	0.007	0.004	
Fluorene	0.062	0.007	0.004	
C1 - Fluorene	0.065	0.007	0.004	
C2 - Fluorene	IU J	0.007	0.004	
C3 - Fluorene	0.140	0.007	0.004	
Phenanthrene	0.314	0.007	0.004	
Anthracene	0.187	0.007	0.004	
C1 - Phenanthrene/Anthracene	0.329 I J	0.007	0.004	
C2 - Phenanthrene/Anthracene	0.300	0.007	0.004	
C3 - Phenanthrene/Anthracene	0.147	0.007	0.004	
C4 - Phenanthrene/Anthracene	0.083	0.007	0.004	
Fluoranthene	0.705	0.007	0.004	
Pyrene	0.711	0.007	0.004	
C1 - Fluoranthene/Pyrene	0.530	0.007	0.004	
Benz(a)anthracene	0.403	0.007	0.004	
Chrysene*	0.423	0.007	0.004	
C1 - Benz(a)anthracene/Chrysene	0.321	0.007	0.004	
C2 - Benz(a)anthracene/Chrysene	0.174	0.007	0.004	
C3 - Benz(a)anthracene/Chrysene	0.115	0.007	0.004	
C4 - Benz(a)anthracene/Chrysene	0.060	0.007	0.004	
Benzo(b)fluoranthene	0.409	0.007	0.004	
Benzo(j/k)fluoranthene	0.432	0.007	0.004	
Benzo(e)pyrene	0.382	0.007	0.004	
Benzo(a)pyrene	0.504	0.007	0.004	
Perylene	1.68	0.007	0.004	
Indeno(1,2,3-cd)pyrene	0.280	0.007	0.004	
Dibenz(a,h)anthracene	0.072	0.007	0.004	
Benzo(g,h,i)perylene	0.350	0.007	0.004	
Total PAH (16)	5.1	0.007	0.004	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-16

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-16		
File ID:	G101048.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	3.154
Date Cleanup:	NA	Percent Solid:	44.1%
Date Analyzed:	10/12/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	77	50 - 120		
Benzo(a)pyrene-d12	72	50 - 120		
Perylene-d12	80	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-17** SD-53

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-17		
File ID:	G101049.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	3.014
Date Cleanup:	NA	Percent Solid:	42.5%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.154	0.008	0.004	
2-Methylnaphthalene	0.123	0.008	0.004	
1-Methylnaphthalene	0.059	0.008	0.004	
C1 - Naphthalene	0.122	0.008	0.004	
C2 - Naphthalene	0.175	0.008	0.004	
C3 - Naphthalene	0.163	0.008	0.004	
C4 - Naphthalene	0.126	0.008	0.004	
Acenaphthylene	0.237	0.008	0.004	
Acenaphthene	0.038	0.008	0.004	
Fluorene	0.095	0.008	0.004	
C1 - Fluorene	0.113	0.008	0.004	
C2 - Fluorene	IU J	0.008	0.004	
C3 - Fluorene	0.227	0.008	0.004	
Phenanthrene	0.465	0.008	0.004	
Anthracene	0.295	0.008	0.004	
C1 - Phenanthrene/Anthracene	0.544 I J	0.008	0.004	
C2 - Phenanthrene/Anthracene	0.519	0.008	0.004	
C3 - Phenanthrene/Anthracene	0.264	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.151	0.008	0.004	
Fluoranthene	0.966	0.008	0.004	
Pyrene	1.04	0.008	0.004	
C1 - Fluoranthene/Pyrene	0.855	0.008	0.004	
Benz(a)anthracene	0.573	0.008	0.004	
Chrysene*	0.617	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	0.517	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.324	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.197	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.119	0.008	0.004	
Benzo(b)fluoranthene	0.572	0.008	0.004	
Benzo(j/k)fluoranthene	0.626	0.008	0.004	
Benzo(e)pyrene	0.555	0.008	0.004	
Benzo(a)pyrene	0.727	0.008	0.004	
Perylene	2.01	0.008	0.004	
Indeno(1,2,3-cd)pyrene	0.392	0.008	0.004	
Dibenz(a,h)anthracene	0.098	0.008	0.004	
Benzo(g,h,i)perylene	0.503	0.008	0.004	
Total PAH (16)	7.4	0.008	0.004	

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-17**

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID:	AY111007-17		
File ID:	G101049.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	3.014
Date Cleanup:	NA	Percent Solid:	42.5%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	92	50 - 120		
Benzo(a)pyrene-d12	85	50 - 120		
Perylene-d12	95	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

SD-54

Field ID: MC4196-18

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-18		
File ID:	G101311.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.577
Date Cleanup:	NA	Percent Solid:	47.8%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.120	0.008	0.004	
2-Methylnaphthalene	0.092	0.008	0.004	
1-Methylnaphthalene	0.041	0.008	0.004	
C1 - Naphthalene	0.090	0.008	0.004	
C2 - Naphthalene	0.129	0.008	0.004	
C3 - Naphthalene	0.108	0.008	0.004	
C4 - Naphthalene	0.118	0.008	0.004	
Acenaphthylene	0.295	0.008	0.004	
Acenaphthene	0.033	0.008	0.004	
Fluorene	0.077	0.008	0.004	
C1 - Fluorene	0.139	0.008	0.004	
C2 - Fluorene	0.199	0.008	0.004	
C3 - Fluorene	0.200	0.008	0.004	
Phenanthrene	0.388	0.008	0.004	
Anthracene	0.322	0.008	0.004	
C1 - Phenanthrene/Anthracene	0.471	0.008	0.004	
C2 - Phenanthrene/Anthracene	0.537	0.008	0.004	
C3 - Phenanthrene/Anthracene	0.302	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.171	0.008	0.004	
Fluoranthene	1.47	0.008	0.004	
Pyrene	1.74	0.008	0.004	
C1 - Fluoranthene/Pyrene	1.28	0.008	0.004	
Benz(a)anthracene	0.842	0.008	0.004	
Chrysene*	0.734	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	0.773	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.433	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.262	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.175	0.008	0.004	
Benzo(b)fluoranthene	0.803	0.008	0.004	
Benzo(j/k)fluoranthene	0.885	0.008	0.004	
Benzo(e)pyrene	0.802	0.008	0.004	
Benzo(a)pyrene	1.12	0.008	0.004	
Perylene	1.72	0.008	0.004	
Indeno(1,2,3-cd)pyrene	0.563	0.008	0.004	
Dibenz(a,h)anthracene	0.153	0.008	0.004	
Benzo(g,h,i)perylene	0.697	0.008	0.004	
Total PAH (16)	10.2	0.008	0.004	

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-18

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-18		
File ID:	G101311.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.577
Date Cleanup:	NA	Percent Solid:	47.8%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	97	50 - 120		
Benzo(a)pyrene-d12	93	50 - 120		
Perylene-d12	102	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-19** SD-55

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-19		
File ID:	G101050.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	3.412
Date Cleanup:	NA	Percent Solid:	37.4%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.090	0.008	0.004	
2-Methylnaphthalene	0.058	0.008	0.004	
1-Methylnaphthalene	0.036	0.008	0.004	
C1 - Naphthalene	0.065	0.008	0.004	
C2 - Naphthalene	0.151	0.008	0.004	
C3 - Naphthalene	0.148	0.008	0.004	
C4 - Naphthalene	0.104	0.008	0.004	
Acenaphthylene	0.315	0.008	0.004	
Acenaphthene	0.085	0.008	0.004	
Fluorene	0.131	0.008	0.004	
C1 - Fluorene	0.121	0.008	0.004	
C2 - Fluorene	IU J	0.008	0.004	
C3 - Fluorene	0.289	0.008	0.004	
Phenanthrene	1.27	0.008	0.004	
Anthracene	0.505	0.008	0.004	
C1 - Phenanthrene/Anthracene	0.939 J	0.008	0.004	
C2 - Phenanthrene/Anthracene	0.634	0.008	0.004	
C3 - Phenanthrene/Anthracene	0.264	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.131	0.008	0.004	
Fluoranthene	3.48	0.008	0.004	
Pyrene	3.06	0.008	0.004	
C1 - Fluoranthene/Pyrene	1.55	0.008	0.004	
Benz(a)anthracene	1.61	0.008	0.004	
Chrysene*	1.73	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	0.771	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.440	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.205	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.143	0.008	0.004	
Benzo(b)fluoranthene	1.56	0.008	0.004	
Benzo(j/k)fluoranthene	1.57	0.008	0.004	
Benzo(e)pyrene	1.3	0.008	0.004	
Benzo(a)pyrene	1.87	0.008	0.004	
Perylene	1.05	0.008	0.004	
Indeno(1,2,3-cd)pyrene	1.01	0.008	0.004	
Dibenz(a,h)anthracene	0.259	0.008	0.004	
Benzo(g,h,i)perylene	1.22	0.008	0.004	
Total PAH (16)	19.8	0.008	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-19

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-19		
File ID:	G101050.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	3.412
Date Cleanup:	NA	Percent Solid:	37.4%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	90	50 - 120		
Benzo(a)pyrene-d12	86	50 - 120		
Perylene-d12	94	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-20** SD-56

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-20		
File ID:	G101051.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.882
Date Cleanup:	NA	Percent Solid:	18.7%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.299	0.019	0.009	
2-Methylnaphthalene	0.295	0.019	0.009	
1-Methylnaphthalene	0.199	0.019	0.009	
C1 - Naphthalene	0.316	0.019	0.009	
C2 - Naphthalene	0.751	0.019	0.009	
C3 - Naphthalene	0.638	0.019	0.009	
C4 - Naphthalene	0.361	0.019	0.009	
Acenaphthylene	0.364	0.019	0.009	
Acenaphthene	0.202	0.019	0.009	
Fluorene	0.277	0.019	0.009	
C1 - Fluorene	0.212	0.019	0.009	
C2 - Fluorene	IU J	0.019	0.009	
C3 - Fluorene	0.662	0.019	0.009	
Phenanthrene	2.38	0.019	0.009	
Anthracene	1.1	0.019	0.009	
C1 - Phenanthrene/Anthracene	1.56 J	0.019	0.009	
C2 - Phenanthrene/Anthracene	2.28	0.019	0.009	
C3 - Phenanthrene/Anthracene	2.04	0.019	0.009	
C4 - Phenanthrene/Anthracene	1.58	0.019	0.009	
Fluoranthene	8.79	0.019	0.009	
Pyrene	8.4	0.019	0.009	
C1 - Fluoranthene/Pyrene	7.18	0.019	0.009	
Benz(a)anthracene	7.06	0.019	0.009	
Chrysene*	7.83	0.019	0.009	
C1 - Benz(a)anthracene/Chrysene	11.2	0.019	0.009	
C2 - Benz(a)anthracene/Chrysene	11.2	0.019	0.009	
C3 - Benz(a)anthracene/Chrysene	8.96	0.019	0.009	
C4 - Benz(a)anthracene/Chrysene	4.41	0.019	0.009	
Benzo(b)fluoranthene	6.49	0.019	0.009	
Benzo(j/k)fluoranthene	5.56	0.019	0.009	
Benzo(e)pyrene	6.7	0.019	0.009	
Benzo(a)pyrene	8.5	0.019	0.009	
Perylene	2.48	0.019	0.009	
Indeno(1,2,3-cd)pyrene	3.59	0.019	0.009	
Dibenz(a,h)anthracene	1.2	0.019	0.009	
Benzo(g,h,i)perylene	5.16	0.019	0.009	
Total PAH (16)	67.2	0.019	0.009	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-20

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-20		
File ID:	G101051.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/7/2011	Sample Size (g):	2.882
Date Cleanup:	NA	Percent Solid:	18.7%
Date Analyzed:	10/13/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111007-SB2		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	89	50 - 120		
Benzo(a)pyrene-d12	84	50 - 120		
Perylene-d12	93	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-21** SD-57

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-21		
File ID:	G101312.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.503
Date Cleanup:	NA	Percent Solid:	42.9%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.250	0.009	0.005	
2-Methylnaphthalene	0.170	0.009	0.005	
1-Methylnaphthalene	0.088	0.009	0.005	
C1 - Naphthalene	0.169	0.009	0.005	
C2 - Naphthalene	0.228	0.009	0.005	
C3 - Naphthalene	0.222	0.009	0.005	
C4 - Naphthalene	0.188	0.009	0.005	
Acenaphthylene	0.449	0.009	0.005	
Acenaphthene	0.244	0.009	0.005	
Fluorene	0.377	0.009	0.005	
C1 - Fluorene	0.291	0.009	0.005	
C2 - Fluorene	0.252 I J	0.009	0.005	
C3 - Fluorene	0.437	0.009	0.005	
Phenanthrene	4.21	0.009	0.005	
Anthracene	1.77	0.009	0.005	
C1 - Phenanthrene/Anthracene	2.82 I J	0.009	0.005	
C2 - Phenanthrene/Anthracene	1.71	0.009	0.005	
C3 - Phenanthrene/Anthracene	0.774	0.009	0.005	
C4 - Phenanthrene/Anthracene	0.295	0.009	0.005	
Fluoranthene	7.68	0.009	0.005	
Pyrene	7.0	0.009	0.005	
C1 - Fluoranthene/Pyrene	4.45	0.009	0.005	
Benz(a)anthracene	3.73	0.009	0.005	
Chrysene*	3.49	0.009	0.005	
C1 - Benz(a)anthracene/Chrysene	2.07	0.009	0.005	
C2 - Benz(a)anthracene/Chrysene	0.937	0.009	0.005	
C3 - Benz(a)anthracene/Chrysene	0.429	0.009	0.005	
C4 - Benz(a)anthracene/Chrysene	0.216	0.009	0.005	
Benzo(b)fluoranthene	2.21	0.009	0.005	
Benzo(j/k)fluoranthene	2.41	0.009	0.005	
Benzo(e)pyrene	1.92	0.009	0.005	
Benzo(a)pyrene	3.1	0.009	0.005	
Perylene	2.33	0.009	0.005	
Indeno(1,2,3-cd)pyrene	1.23	0.009	0.005	
Dibenz(a,h)anthracene	0.391	0.009	0.005	
Benzo(g,h,i)perylene	1.55	0.009	0.005	
Total PAH (16)	40.1	0.009	0.005	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-21

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-21		
File ID:	G101312.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.503
Date Cleanup:	NA	Percent Solid:	42.9%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	92	50 - 120		
Benzo(a)pyrene-d12	89	50 - 120		
Perylene-d12	98	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-22** SD-58

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-22		
File ID:	G101318.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.864
Date Cleanup:	NA	Percent Solid:	49.9%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.075	0.007	0.003	
2-Methylnaphthalene	0.058	0.007	0.003	
1-Methylnaphthalene	0.024	0.007	0.003	
C1 - Naphthalene	0.053	0.007	0.003	
C2 - Naphthalene	0.071	0.007	0.003	
C3 - Naphthalene	0.057	0.007	0.003	
C4 - Naphthalene	0.061	0.007	0.003	
Acenaphthylene	0.215	0.007	0.003	
Acenaphthene	0.017	0.007	0.003	
Fluorene	0.045	0.007	0.003	
C1 - Fluorene	0.068	0.007	0.003	
C2 - Fluorene	0.076 I J	0.007	0.003	
C3 - Fluorene	0.111	0.007	0.003	
Phenanthrene	0.183	0.007	0.003	
Anthracene	0.173	0.007	0.003	
C1 - Phenanthrene/Anthracene	0.224	0.007	0.003	
C2 - Phenanthrene/Anthracene	0.302	0.007	0.003	
C3 - Phenanthrene/Anthracene	0.192	0.007	0.003	
C4 - Phenanthrene/Anthracene	0.119	0.007	0.003	
Fluoranthene	0.649	0.007	0.003	
Pyrene	0.755	0.007	0.003	
C1 - Fluoranthene/Pyrene	0.770	0.007	0.003	
Benz(a)anthracene	0.484	0.007	0.003	
Chrysene*	0.426	0.007	0.003	
C1 - Benz(a)anthracene/Chrysene	0.548	0.007	0.003	
C2 - Benz(a)anthracene/Chrysene	0.337	0.007	0.003	
C3 - Benz(a)anthracene/Chrysene	0.198	0.007	0.003	
C4 - Benz(a)anthracene/Chrysene	0.162	0.007	0.003	
Benzo(b)fluoranthene	0.504	0.007	0.003	
Benzo(j/k)fluoranthene	0.523	0.007	0.003	
Benzo(e)pyrene	0.534	0.007	0.003	
Benzo(a)pyrene	0.694	0.007	0.003	
Perylene	1.13	0.007	0.003	
Indeno(1,2,3-cd)pyrene	0.338	0.007	0.003	
Dibenz(a,h)anthracene	0.103	0.007	0.003	
Benzo(g,h,i)perylene	0.440	0.007	0.003	
Total PAH (16)	5.62	0.007	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-22

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-22		
File ID:	G101318.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.864
Date Cleanup:	NA	Percent Solid:	49.9%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	82	50 - 120		
Benzo(a)pyrene-d12	80	50 - 120		
Perylene-d12	90	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-23** SD-59

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-23		
File ID:	G101319.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.828
Date Cleanup:	NA	Percent Solid:	41.1%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.157	0.009	0.004	
2-Methylnaphthalene	0.145	0.009	0.004	
1-Methylnaphthalene	0.074	0.009	0.004	
C1 - Naphthalene	0.149	0.009	0.004	
C2 - Naphthalene	0.219	0.009	0.004	
C3 - Naphthalene	0.182	0.009	0.004	
C4 - Naphthalene	0.153	0.009	0.004	
Acenaphthylene	0.265	0.009	0.004	
Acenaphthene	0.039	0.009	0.004	
Fluorene	0.091	0.009	0.004	
C1 - Fluorene	0.123	0.009	0.004	
C2 - Fluorene	IU J	0.009	0.004	
C3 - Fluorene	0.275	0.009	0.004	
Phenanthrene	0.472	0.009	0.004	
Anthracene	0.313	0.009	0.004	
C1 - Phenanthrene/Anthracene	0.640 I J	0.009	0.004	
C2 - Phenanthrene/Anthracene	0.587	0.009	0.004	
C3 - Phenanthrene/Anthracene	0.342	0.009	0.004	
C4 - Phenanthrene/Anthracene	0.182	0.009	0.004	
Fluoranthene	1.17	0.009	0.004	
Pyrene	1.27	0.009	0.004	
C1 - Fluoranthene/Pyrene	1.08	0.009	0.004	
Benz(a)anthracene	0.672	0.009	0.004	
Chrysene*	0.714	0.009	0.004	
C1 - Benz(a)anthracene/Chrysene	0.659	0.009	0.004	
C2 - Benz(a)anthracene/Chrysene	0.389	0.009	0.004	
C3 - Benz(a)anthracene/Chrysene	0.259	0.009	0.004	
C4 - Benz(a)anthracene/Chrysene	0.191	0.009	0.004	
Benzo(b)fluoranthene	0.754	0.009	0.004	
Benzo(j/k)fluoranthene	0.757	0.009	0.004	
Benzo(e)pyrene	0.711	0.009	0.004	
Benzo(a)pyrene	0.926	0.009	0.004	
Perylene	2.24	0.009	0.004	
Indeno(1,2,3-cd)pyrene	0.507	0.009	0.004	
Dibenz(a,h)anthracene	0.141	0.009	0.004	
Benzo(g,h,i)perylene	0.645	0.009	0.004	
Total PAH (16)	8.89	0.009	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-23

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-23		
File ID:	G101319.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.828
Date Cleanup:	NA	Percent Solid:	41.1%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	90	50 - 120		
Benzo(a)pyrene-d12	84	50 - 120		
Perylene-d12	94	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-24** SD-60

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-24		
File ID:	G101320.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	3.113
Date Cleanup:	NA	Percent Solid:	52.0%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.075	0.006	0.003	
2-Methylnaphthalene	0.055	0.006	0.003	
1-Methylnaphthalene	0.025	0.006	0.003	
C1 - Naphthalene	0.054	0.006	0.003	
C2 - Naphthalene	0.076	0.006	0.003	
C3 - Naphthalene	0.066	0.006	0.003	
C4 - Naphthalene	0.059	0.006	0.003	
Acenaphthylene	0.090	0.006	0.003	
Acenaphthene	0.020	0.006	0.003	
Fluorene	0.047	0.006	0.003	
C1 - Fluorene	0.051	0.006	0.003	
C2 - Fluorene	IU J	0.006	0.003	
C3 - Fluorene	0.112	0.006	0.003	
Phenanthrene	0.218	0.006	0.003	
Anthracene	0.125	0.006	0.003	
C1 - Phenanthrene/Anthracene	0.343 I J	0.006	0.003	
C2 - Phenanthrene/Anthracene	0.238	0.006	0.003	
C3 - Phenanthrene/Anthracene	0.123	0.006	0.003	
C4 - Phenanthrene/Anthracene	0.073	0.006	0.003	
Fluoranthene	0.511	0.006	0.003	
Pyrene	0.536	0.006	0.003	
C1 - Fluoranthene/Pyrene	0.429	0.006	0.003	
Benz(a)anthracene	0.302	0.006	0.003	
Chrysene*	0.302	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	0.269	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	0.154	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	0.091	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	0.093	0.006	0.003	
Benzo(b)fluoranthene	0.318	0.006	0.003	
Benzo(j/k)fluoranthene	0.315	0.006	0.003	
Benzo(e)pyrene	0.288	0.006	0.003	
Benzo(a)pyrene	0.385	0.006	0.003	
Perylene	2.1	0.006	0.003	
Indeno(1,2,3-cd)pyrene	0.206	0.006	0.003	
Dibenz(a,h)anthracene	0.057	0.006	0.003	
Benzo(g,h,i)perylene	0.260	0.006	0.003	
Total PAH (16)	3.77	0.006	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-24

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-24		
File ID:	G101320.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	3.113
Date Cleanup:	NA	Percent Solid:	52.0%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	94	50 - 120		
Benzo(a)pyrene-d12	87	50 - 120		
Perylene-d12	96	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-25** SD-61

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-25		
File ID:	G101321.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.623
Date Cleanup:	NA	Percent Solid:	40.9%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	0.010		0.009	0.005	
2-Methylnaphthalene	0.007	J	0.009	0.005	
1-Methylnaphthalene		U	0.009	0.005	
C1 - Naphthalene	0.008	J	0.009	0.005	
C2 - Naphthalene	0.018		0.009	0.005	
C3 - Naphthalene	0.017		0.009	0.005	
C4 - Naphthalene	0.014		0.009	0.005	
Acenaphthylene	0.005	J	0.009	0.005	
Acenaphthene		U	0.009	0.005	
Fluorene	0.019		0.009	0.005	
C1 - Fluorene	0.017		0.009	0.005	
C2 - Fluorene		IU J	0.009	0.005	
C3 - Fluorene		U	0.009	0.005	
Phenanthrene	0.027		0.009	0.005	
Anthracene	0.013		0.009	0.005	
C1 - Phenanthrene/Anthracene	0.037		0.009	0.005	
C2 - Phenanthrene/Anthracene	0.095		0.009	0.005	
C3 - Phenanthrene/Anthracene	0.020		0.009	0.005	
C4 - Phenanthrene/Anthracene	0.022		0.009	0.005	
Fluoranthene	0.040		0.009	0.005	
Pyrene	0.043		0.009	0.005	
C1 - Fluoranthene/Pyrene	0.046		0.009	0.005	
Benz(a)anthracene	0.021		0.009	0.005	
Chrysene*	0.023		0.009	0.005	
C1 - Benz(a)anthracene/Chrysene	0.023		0.009	0.005	
C2 - Benz(a)anthracene/Chrysene	0.014		0.009	0.005	
C3 - Benz(a)anthracene/Chrysene		U	0.009	0.005	
C4 - Benz(a)anthracene/Chrysene		U	0.009	0.005	
Benzo(b)fluoranthene	0.021		0.009	0.005	
Benzo(j/k)fluoranthene	0.019		0.009	0.005	
Benzo(e)pyrene	0.020		0.009	0.005	
Benzo(a)pyrene	0.022		0.009	0.005	
Perylene	1.99		0.009	0.005	
Indeno(1,2,3-cd)pyrene	0.012		0.009	0.005	
Dibenz(a,h)anthracene		U	0.009	0.005	
Benzo(g,h,i)perylene	0.016		0.009	0.005	
Total PAH (16)	0.291		0.009	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-25

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-25		
File ID:	G101321.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.623
Date Cleanup:	NA	Percent Solid:	40.9%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	93	50 - 120		
Benzo(a)pyrene-d12	89	50 - 120		
Perylene-d12	98	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-26** SD-62

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-26		
File ID:	G101322.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	3.657
Date Cleanup:	NA	Percent Solid:	47.4%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.095	0.006	0.003	
2-Methylnaphthalene	0.067	0.006	0.003	
1-Methylnaphthalene	0.027	0.006	0.003	
C1 - Naphthalene	0.063	0.006	0.003	
C2 - Naphthalene	0.092	0.006	0.003	
C3 - Naphthalene	0.074	0.006	0.003	
C4 - Naphthalene	0.075	0.006	0.003	
Acenaphthylene	0.177	0.006	0.003	
Acenaphthene	0.025	0.006	0.003	
Fluorene	0.058	0.006	0.003	
C1 - Fluorene	0.085	0.006	0.003	
C2 - Fluorene	IU J	0.006	0.003	
C3 - Fluorene	0.148	0.006	0.003	
Phenanthrene	0.290	0.006	0.003	
Anthracene	0.205	0.006	0.003	
C1 - Phenanthrene/Anthracene	IU J	0.006	0.003	
C2 - Phenanthrene/Anthracene	0.399	0.006	0.003	
C3 - Phenanthrene/Anthracene	0.217	0.006	0.003	
C4 - Phenanthrene/Anthracene	0.083	0.006	0.003	
Fluoranthene	1.06	0.006	0.003	
Pyrene	1.07	0.006	0.003	
C1 - Fluoranthene/Pyrene	0.897	0.006	0.003	
Benz(a)anthracene	0.716	0.006	0.003	
Chrysene*	0.608	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	0.524	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	0.265	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	0.160	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	0.106	0.006	0.003	
Benzo(b)fluoranthene	0.637	0.006	0.003	
Benzo(j/k)fluoranthene	0.678	0.006	0.003	
Benzo(e)pyrene	0.551	0.006	0.003	
Benzo(a)pyrene	0.853	0.006	0.003	
Perylene	2.24	0.006	0.003	
Indeno(1,2,3-cd)pyrene	0.408	0.006	0.003	
Dibenz(a,h)anthracene	0.107	0.006	0.003	
Benzo(g,h,i)perylene	0.485	0.006	0.003	
Total PAH (16)	7.47	0.006	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-26

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-26		
File ID:	G101322.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	3.657
Date Cleanup:	NA	Percent Solid:	47.4%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	91	50 - 120		
Benzo(a)pyrene-d12	86	50 - 120		
Perylene-d12	95	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

SD-63

Field ID: **MC4196-28**

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-28		
File ID:	G101323.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.395
Date Cleanup:	NA	Percent Solid:	41.5%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.147	0.010	0.005	
2-Methylnaphthalene	0.111	0.010	0.005	
1-Methylnaphthalene	0.051	0.010	0.005	
C1 - Naphthalene	0.107	0.010	0.005	
C2 - Naphthalene	0.145	0.010	0.005	
C3 - Naphthalene	0.131	0.010	0.005	
C4 - Naphthalene	0.118	0.010	0.005	
Acenaphthylene	0.282	0.010	0.005	
Acenaphthene	0.038	0.010	0.005	
Fluorene	0.089	0.010	0.005	
C1 - Fluorene	0.112	0.010	0.005	
C2 - Fluorene	0.083 I J	0.010	0.005	
C3 - Fluorene	0.215	0.010	0.005	
Phenanthrene	0.420	0.010	0.005	
Anthracene	0.306	0.010	0.005	
C1 - Phenanthrene/Anthracene	0.481 I J	0.010	0.005	
C2 - Phenanthrene/Anthracene	0.553	0.010	0.005	
C3 - Phenanthrene/Anthracene	0.300	0.010	0.005	
C4 - Phenanthrene/Anthracene	0.156	0.010	0.005	
Fluoranthene	1.06	0.010	0.005	
Pyrene	1.18	0.010	0.005	
C1 - Fluoranthene/Pyrene	1.04	0.010	0.005	
Benz(a)anthracene	0.645	0.010	0.005	
Chrysene*	0.641	0.010	0.005	
C1 - Benz(a)anthracene/Chrysene	0.640	0.010	0.005	
C2 - Benz(a)anthracene/Chrysene	0.382	0.010	0.005	
C3 - Benz(a)anthracene/Chrysene	0.213	0.010	0.005	
C4 - Benz(a)anthracene/Chrysene	0.175	0.010	0.005	
Benzo(b)fluoranthene	0.674	0.010	0.005	
Benzo(j/k)fluoranthene	0.694	0.010	0.005	
Benzo(e)pyrene	0.652	0.010	0.005	
Benzo(a)pyrene	0.852	0.010	0.005	
Perylene	1.99	0.010	0.005	
Indeno(1,2,3-cd)pyrene	0.462	0.010	0.005	
Dibenz(a,h)anthracene	0.128	0.010	0.005	
Benzo(g,h,i)perylene	0.591	0.010	0.005	
Total PAH (16)	8.21	0.010	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-28

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-28		
File ID:	G101323.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.395
Date Cleanup:	NA	Percent Solid:	41.5%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	95	50 - 120		
Benzo(a)pyrene-d12	89	50 - 120		
Perylene-d12	98	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-29** SD-64

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-29		
File ID:	G101324.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.388
Date Cleanup:	NA	Percent Solid:	39.7%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.135	0.011	0.005	
2-Methylnaphthalene	0.108	0.011	0.005	
1-Methylnaphthalene	0.050	0.011	0.005	
C1 - Naphthalene	0.108	0.011	0.005	
C2 - Naphthalene	0.150	0.011	0.005	
C3 - Naphthalene	0.131	0.011	0.005	
C4 - Naphthalene	0.115	0.011	0.005	
Acenaphthylene	0.253	0.011	0.005	
Acenaphthene	0.036	0.011	0.005	
Fluorene	0.084	0.011	0.005	
C1 - Fluorene	0.109	0.011	0.005	
C2 - Fluorene	IU J	0.011	0.005	
C3 - Fluorene	0.230	0.011	0.005	
Phenanthrene	0.441	0.011	0.005	
Anthracene	0.298	0.011	0.005	
C1 - Phenanthrene/Anthracene	0.650 I J	0.011	0.005	
C2 - Phenanthrene/Anthracene	0.516	0.011	0.005	
C3 - Phenanthrene/Anthracene	0.274	0.011	0.005	
C4 - Phenanthrene/Anthracene	0.136	0.011	0.005	
Fluoranthene	1.23	0.011	0.005	
Pyrene	1.28	0.011	0.005	
C1 - Fluoranthene/Pyrene	1.01	0.011	0.005	
Benz(a)anthracene	0.695	0.011	0.005	
Chrysene*	0.728	0.011	0.005	
C1 - Benz(a)anthracene/Chrysene	0.612	0.011	0.005	
C2 - Benz(a)anthracene/Chrysene	0.352	0.011	0.005	
C3 - Benz(a)anthracene/Chrysene	0.219	0.011	0.005	
C4 - Benz(a)anthracene/Chrysene	0.129	0.011	0.005	
Benzo(b)fluoranthene	0.762	0.011	0.005	
Benzo(j/k)fluoranthene	0.790	0.011	0.005	
Benzo(e)pyrene	0.700	0.011	0.005	
Benzo(a)pyrene	0.947	0.011	0.005	
Perylene	1.95	0.011	0.005	
Indeno(1,2,3-cd)pyrene	0.519	0.011	0.005	
Dibenz(a,h)anthracene	0.139	0.011	0.005	
Benzo(g,h,i)perylene	0.646	0.011	0.005	
Total PAH (16)	8.98	0.011	0.005	

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-29

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-29		
File ID:	G101324.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.388
Date Cleanup:	NA	Percent Solid:	39.7%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	94	50 - 120		
Benzo(a)pyrene-d12	88	50 - 120		
Perylene-d12	98	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-30** SD-65

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-30		
File ID:	G101325.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.931
Date Cleanup:	NA	Percent Solid:	36.2%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.129	0.009	0.005	
2-Methylnaphthalene	0.105	0.009	0.005	
1-Methylnaphthalene	0.046	0.009	0.005	
C1 - Naphthalene	0.103	0.009	0.005	
C2 - Naphthalene	0.148	0.009	0.005	
C3 - Naphthalene	0.127	0.009	0.005	
C4 - Naphthalene	0.111	0.009	0.005	
Acenaphthylene	0.223	0.009	0.005	
Acenaphthene	0.034	0.009	0.005	
Fluorene	0.082	0.009	0.005	
C1 - Fluorene	0.094	0.009	0.005	
C2 - Fluorene	IU J	0.009	0.005	
C3 - Fluorene	0.222	0.009	0.005	
Phenanthrene	0.431	0.009	0.005	
Anthracene	0.283	0.009	0.005	
C1 - Phenanthrene/Anthracene	0.609 I J	0.009	0.005	
C2 - Phenanthrene/Anthracene	0.477	0.009	0.005	
C3 - Phenanthrene/Anthracene	0.244	0.009	0.005	
C4 - Phenanthrene/Anthracene	0.139	0.009	0.005	
Fluoranthene	1.2	0.009	0.005	
Pyrene	1.25	0.009	0.005	
C1 - Fluoranthene/Pyrene	0.950	0.009	0.005	
Benz(a)anthracene	0.691	0.009	0.005	
Chrysene*	0.693	0.009	0.005	
C1 - Benz(a)anthracene/Chrysene	0.580	0.009	0.005	
C2 - Benz(a)anthracene/Chrysene	0.336	0.009	0.005	
C3 - Benz(a)anthracene/Chrysene	0.196	0.009	0.005	
C4 - Benz(a)anthracene/Chrysene	0.144	0.009	0.005	
Benzo(b)fluoranthene	0.744	0.009	0.005	
Benzo(j/k)fluoranthene	0.798	0.009	0.005	
Benzo(e)pyrene	0.680	0.009	0.005	
Benzo(a)pyrene	0.915	0.009	0.005	
Perylene	2.05	0.009	0.005	
Indeno(1,2,3-cd)pyrene	0.506	0.009	0.005	
Dibenz(a,h)anthracene	0.130	0.009	0.005	
Benzo(g,h,i)perylene	0.627	0.009	0.005	
Total PAH (16)	8.74	0.009	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-30

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-30		
File ID:	G101325.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.931
Date Cleanup:	NA	Percent Solid:	36.2%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	87	50 - 120		
Benzo(a)pyrene-d12	81	50 - 120		
Perylene-d12	90	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-31** SD-66

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-31		
File ID:	G101326.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.346
Date Cleanup:	NA	Percent Solid:	55.5%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.063	0.008	0.004	
2-Methylnaphthalene	0.043	0.008	0.004	
1-Methylnaphthalene	0.023	0.008	0.004	
C1 - Naphthalene	0.047	0.008	0.004	
C2 - Naphthalene	0.079	0.008	0.004	
C3 - Naphthalene	0.061	0.008	0.004	
C4 - Naphthalene	0.056	0.008	0.004	
Acenaphthylene	0.110	0.008	0.004	
Acenaphthene	0.027	0.008	0.004	
Fluorene	0.045	0.008	0.004	
C1 - Fluorene	0.044	0.008	0.004	
C2 - Fluorene	IU J	0.008	0.004	
C3 - Fluorene	0.126	0.008	0.004	
Phenanthrene	0.287	0.008	0.004	
Anthracene	0.150	0.008	0.004	
C1 - Phenanthrene/Anthracene	0.231 J	0.008	0.004	
C2 - Phenanthrene/Anthracene	0.260	0.008	0.004	
C3 - Phenanthrene/Anthracene	0.116	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.067	0.008	0.004	
Fluoranthene	0.944	0.008	0.004	
Pyrene	0.892	0.008	0.004	
C1 - Fluoranthene/Pyrene	0.517	0.008	0.004	
Benz(a)anthracene	0.497	0.008	0.004	
Chrysene*	0.582	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	0.307	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.175	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.127	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.114	0.008	0.004	
Benzo(b)fluoranthene	0.625	0.008	0.004	
Benzo(j/k)fluoranthene	0.619	0.008	0.004	
Benzo(e)pyrene	0.527	0.008	0.004	
Benzo(a)pyrene	0.680	0.008	0.004	
Perylene	1.07	0.008	0.004	
Indeno(1,2,3-cd)pyrene	0.425	0.008	0.004	
Dibenz(a,h)anthracene	0.096	0.008	0.004	
Benzo(g,h,i)perylene	0.510	0.008	0.004	
Total PAH (16)	6.55	0.008	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-31

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-31		
File ID:	G101326.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.346
Date Cleanup:	NA	Percent Solid:	55.5%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	100	50 - 120		
Benzo(a)pyrene-d12	94	50 - 120		
Perylene-d12	103	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

SD-67

Field ID: **MC4196-32**

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-32		
File ID:	G101327.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	3.235
Date Cleanup:	NA	Percent Solid:	44.3%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.470	0.007	0.003	
2-Methylnaphthalene	0.297	0.007	0.003	
1-Methylnaphthalene	0.123	0.007	0.003	
C1 - Naphthalene	0.275	0.007	0.003	
C2 - Naphthalene	0.357	0.007	0.003	
C3 - Naphthalene	0.340	0.007	0.003	
C4 - Naphthalene	0.326	0.007	0.003	
Acenaphthylene	1.4	0.007	0.003	
Acenaphthene	0.189	0.007	0.003	
Fluorene	0.303	0.007	0.003	
C1 - Fluorene	0.496	0.007	0.003	
C2 - Fluorene	0.443 I J	0.007	0.003	
C3 - Fluorene	0.819	0.007	0.003	
Phenanthrene	1.64	0.007	0.003	
Anthracene	1.3	0.007	0.003	
C1 - Phenanthrene/Anthracene	2.08 I J	0.007	0.003	
C2 - Phenanthrene/Anthracene	2.22	0.007	0.003	
C3 - Phenanthrene/Anthracene	1.38	0.007	0.003	
C4 - Phenanthrene/Anthracene	0.659	0.007	0.003	
Fluoranthene	5.78	0.007	0.003	
Pyrene	6.05	0.007	0.003	
C1 - Fluoranthene/Pyrene	5.47	0.007	0.003	
Benz(a)anthracene	3.69	0.007	0.003	
Chrysene*	3.9	0.007	0.003	
C1 - Benz(a)anthracene/Chrysene	3.16	0.007	0.003	
C2 - Benz(a)anthracene/Chrysene	1.62	0.007	0.003	
C3 - Benz(a)anthracene/Chrysene	0.981	0.007	0.003	
C4 - Benz(a)anthracene/Chrysene	0.462	0.007	0.003	
Benzo(b)fluoranthene	3.59	0.007	0.003	
Benzo(j/k)fluoranthene	3.76	0.007	0.003	
Benzo(e)pyrene	3.21	0.007	0.003	
Benzo(a)pyrene	4.61	0.007	0.003	
Perylene	2.32	0.007	0.003	
Indeno(1,2,3-cd)pyrene	2.41	0.007	0.003	
Dibenz(a,h)anthracene	0.644	0.007	0.003	
Benzo(g,h,i)perylene	2.84	0.007	0.003	
Total PAH (16)	42.6	0.007	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-32

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-32		
File ID:	G101327.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	3.235
Date Cleanup:	NA	Percent Solid:	44.3%
Date Analyzed:	10/14/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	93	50 - 120		
Benzo(a)pyrene-d12	89	50 - 120		
Perylene-d12	100	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-33** SD-68

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-33		
File ID:	G102006.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.753
Date Cleanup:	NA	Percent Solid:	71.7%
Date Analyzed:	10/20/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	0.191		0.005	0.003	
2-Methylnaphthalene	0.108		0.005	0.003	
1-Methylnaphthalene	0.060		0.005	0.003	
C1 - Naphthalene	0.107		0.005	0.003	
C2 - Naphthalene	0.209		0.005	0.003	
C3 - Naphthalene	0.242		0.005	0.003	
C4 - Naphthalene	0.190		0.005	0.003	
Acenaphthylene	0.659		0.005	0.003	
Acenaphthene	0.186		0.005	0.003	
Fluorene	0.219		0.005	0.003	
C1 - Fluorene	0.237		0.005	0.003	
C2 - Fluorene	0.233		0.005	0.003	
C3 - Fluorene	0.438		0.005	0.003	
Phenanthrene	1.73		0.005	0.003	
Anthracene	0.995		0.005	0.003	
C1 - Phenanthrene/Anthracene	1.36 I	J	0.005	0.003	
C2 - Phenanthrene/Anthracene	1.07		0.005	0.003	
C3 - Phenanthrene/Anthracene	0.488		0.005	0.003	
C4 - Phenanthrene/Anthracene	0.227		0.005	0.003	
Fluoranthene	4.95		0.005	0.003	
Pyrene	4.37		0.005	0.003	
C1 - Fluoranthene/Pyrene	2.5		0.005	0.003	
Benz(a)anthracene	2.53		0.005	0.003	
Chrysene*	2.66		0.005	0.003	
C1 - Benz(a)anthracene/Chrysene	1.32		0.005	0.003	
C2 - Benz(a)anthracene/Chrysene	0.677		0.005	0.003	
C3 - Benz(a)anthracene/Chrysene	0.398		0.005	0.003	
C4 - Benz(a)anthracene/Chrysene	0.285		0.005	0.003	
Benzo(b)fluoranthene	2.17		0.005	0.003	
Benzo(j/k)fluoranthene	2.55		0.005	0.003	
Benzo(e)pyrene	1.9		0.005	0.003	
Benzo(a)pyrene	2.87		0.005	0.003	
Perylene	0.985		0.005	0.003	
Indeno(1,2,3-cd)pyrene	1.94		0.005	0.003	
Dibenz(a,h)anthracene	0.579	J	0.005	0.003	
Benzo(g,h,i)perylene	1.92		0.005	0.003	
Total PAH (16)	30.5		0.005	0.003	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-33

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-33		
File ID:	G102006.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.753
Date Cleanup:	NA	Percent Solid:	71.7%
Date Analyzed:	10/20/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	67	50 - 120		
Benzo(a)pyrene-d12	61	50 - 120		
Perylene-d12	67	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-34** SD-26

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-34		
File ID:	G102007.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.403
Date Cleanup:	NA	Percent Solid:	55.1%
Date Analyzed:	10/20/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	3.28		0.008	0.004	
2-Methylnaphthalene	0.725		0.008	0.004	
1-Methylnaphthalene	0.612		0.008	0.004	
C1 - Naphthalene	0.839		0.008	0.004	
C2 - Naphthalene	1.29		0.008	0.004	
C3 - Naphthalene	1.24		0.008	0.004	
C4 - Naphthalene	0.797		0.008	0.004	
Acenaphthylene	3.46		0.008	0.004	
Acenaphthene	2.24		0.008	0.004	
Fluorene	0.370		0.008	0.004	
C1 - Fluorene	1.41		0.008	0.004	
C2 - Fluorene	1.52		0.008	0.004	
C3 - Fluorene	0.821		0.008	0.004	
Phenanthrene	1.63		0.008	0.004	
Anthracene	2.86		0.008	0.004	
C1 - Phenanthrene/Anthracene	4.26		0.008	0.004	
C2 - Phenanthrene/Anthracene	3.27		0.008	0.004	
C3 - Phenanthrene/Anthracene	1.49		0.008	0.004	
C4 - Phenanthrene/Anthracene	0.572		0.008	0.004	
Fluoranthene	3.24		0.008	0.004	
Pyrene	4.72		0.008	0.004	
C1 - Fluoranthene/Pyrene	6.53		0.008	0.004	
Benz(a)anthracene	3.39		0.008	0.004	
Chrysene*	3.18		0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	3.4		0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	1.83		0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.863		0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.261		0.008	0.004	
Benzo(b)fluoranthene	2.0		0.008	0.004	
Benzo(j/k)fluoranthene	2.7		0.008	0.004	
Benzo(e)pyrene	2.41		0.008	0.004	
Benzo(a)pyrene	4.18		0.008	0.004	
Perylene	0.771		0.008	0.004	
Indeno(1,2,3-cd)pyrene	2.13		0.008	0.004	
Dibenz(a,h)anthracene	0.758	J	0.008	0.004	
Benzo(g,h,i)perylene	2.27		0.008	0.004	
Total PAH (16)	42.4		0.008	0.004	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-34

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-34		
File ID:	G102007.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/10/2011	Sample Size (g):	2.403
Date Cleanup:	NA	Percent Solid:	55.1%
Date Analyzed:	10/20/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111010-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	87	50 - 120		
Benzo(a)pyrene-d12	82	50 - 120		
Perylene-d12	89	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-35** SD-27

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-35		
File ID:	G102008.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.072
Date Cleanup:	NA	Percent Solid:	73.1%
Date Analyzed:	10/20/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	16.9	J	0.004	0.002	
2-Methylnaphthalene	5.31		0.004	0.002	
1-Methylnaphthalene	3.15		0.004	0.002	
C1 - Naphthalene	5.43		0.004	0.002	
C2 - Naphthalene	6.27		0.004	0.002	
C3 - Naphthalene	3.2		0.004	0.002	
C4 - Naphthalene	1.92		0.004	0.002	
Acenaphthylene	3.78		0.004	0.002	
Acenaphthene	6.17		0.004	0.002	
Fluorene	2.48	J	0.004	0.002	
C1 - Fluorene	2.24		0.004	0.002	
C2 - Fluorene	2.05		0.004	0.002	
C3 - Fluorene	1.77		0.004	0.002	
Phenanthrene	8.04	J	0.004	0.002	
Anthracene	5.08		0.004	0.002	
C1 - Phenanthrene/Anthracene	10.8	J	0.004	0.002	
C2 - Phenanthrene/Anthracene	7.0		0.004	0.002	
C3 - Phenanthrene/Anthracene	3.31		0.004	0.002	
C4 - Phenanthrene/Anthracene	1.22		0.004	0.002	
Fluoranthene	10.8	J	0.004	0.002	
Pyrene	12.9	J	0.004	0.002	
C1 - Fluoranthene/Pyrene	12.7		0.004	0.002	
Benz(a)anthracene	7.73	J	0.004	0.002	
Chrysene*	8.62	J	0.004	0.002	
C1 - Benz(a)anthracene/Chrysene	6.54		0.004	0.002	
C2 - Benz(a)anthracene/Chrysene	3.31		0.004	0.002	
C3 - Benz(a)anthracene/Chrysene	1.77		0.004	0.002	
C4 - Benz(a)anthracene/Chrysene	0.811		0.004	0.002	
Benzo(b)fluoranthene	5.34	J	0.004	0.002	
Benzo(j/k)fluoranthene	5.84	J	0.004	0.002	
Benzo(e)pyrene	4.82	J	0.004	0.002	
Benzo(a)pyrene	7.81	J	0.004	0.002	
Perylene	1.89	J	0.004	0.002	
Indeno(1,2,3-cd)pyrene	4.07	J	0.004	0.002	
Dibenz(a,h)anthracene	1.52	J	0.004	0.002	
Benzo(g,h,i)perylene	4.2	J	0.004	0.002	
Total PAH (16)	111		0.004	0.002	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-35

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-35		
File ID:	G102008.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.072
Date Cleanup:	NA	Percent Solid:	73.1%
Date Analyzed:	10/20/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	88	50 - 120		
Benzo(a)pyrene-d12	79	50 - 120		
Perylene-d12	88	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-36** SD-28

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-36		
File ID:	G102011.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.416
Date Cleanup:	NA	Percent Solid:	39.7%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	2.05		0.010	0.005	
2-Methylnaphthalene	0.539		0.010	0.005	
1-Methylnaphthalene	0.786		0.010	0.005	
C1 - Naphthalene	0.853		0.010	0.005	
C2 - Naphthalene	2.23		0.010	0.005	
C3 - Naphthalene	1.33		0.010	0.005	
C4 - Naphthalene	0.621		0.010	0.005	
Acenaphthylene	1.25		0.010	0.005	
Acenaphthene	6.2		0.010	0.005	
Fluorene	0.606		0.010	0.005	
C1 - Fluorene	0.838		0.010	0.005	
C2 - Fluorene	0.656		0.010	0.005	
C3 - Fluorene	0.587		0.010	0.005	
Phenanthrene	1.11		0.010	0.005	
Anthracene	1.46		0.010	0.005	
C1 - Phenanthrene/Anthracene	1.59		0.010	0.005	
C2 - Phenanthrene/Anthracene	1.43		0.010	0.005	
C3 - Phenanthrene/Anthracene	0.748		0.010	0.005	
C4 - Phenanthrene/Anthracene	0.315		0.010	0.005	
Fluoranthene	2.89		0.010	0.005	
Pyrene	3.32		0.010	0.005	
C1 - Fluoranthene/Pyrene	2.73		0.010	0.005	
Benz(a)anthracene	1.84		0.010	0.005	
Chrysene*	2.1		0.010	0.005	
C1 - Benz(a)anthracene/Chrysene	1.39		0.010	0.005	
C2 - Benz(a)anthracene/Chrysene	0.739		0.010	0.005	
C3 - Benz(a)anthracene/Chrysene	0.367		0.010	0.005	
C4 - Benz(a)anthracene/Chrysene	0.355		0.010	0.005	
Benzo(b)fluoranthene	1.47		0.010	0.005	
Benzo(j/k)fluoranthene	1.68		0.010	0.005	
Benzo(e)pyrene	1.42		0.010	0.005	
Benzo(a)pyrene	2.04		0.010	0.005	
Perylene	0.491		0.010	0.005	
Indeno(1,2,3-cd)pyrene	1.31		0.010	0.005	
Dibenz(a,h)anthracene	0.438	J	0.010	0.005	
Benzo(g,h,i)perylene	1.33		0.010	0.005	
Total PAH (16)	31.1		0.010	0.005	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-36

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-36		
File ID:	G102011.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.416
Date Cleanup:	NA	Percent Solid:	39.7%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	83	50 - 120		
Benzo(a)pyrene-d12	76	50 - 120		
Perylene-d12	82	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-37** SD-29

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-37		
File ID:	G102012.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.776
Date Cleanup:	NA	Percent Solid:	50.9%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.683	0.007	0.004	
2-Methylnaphthalene	0.335	0.007	0.004	
1-Methylnaphthalene	0.188	0.007	0.004	
C1 - Naphthalene	0.331	0.007	0.004	
C2 - Naphthalene	0.465	0.007	0.004	
C3 - Naphthalene	0.322	0.007	0.004	
C4 - Naphthalene	0.291	0.007	0.004	
Acenaphthylene	1.65	0.007	0.004	
Acenaphthene	0.307	0.007	0.004	
Fluorene	0.166	0.007	0.004	
C1 - Fluorene	0.363	0.007	0.004	
C2 - Fluorene	0.249 J	0.007	0.004	
C3 - Fluorene	0.495	0.007	0.004	
Phenanthrene	0.908	0.007	0.004	
Anthracene	1.43	0.007	0.004	
C1 - Phenanthrene/Anthracene	1.6 J	0.007	0.004	
C2 - Phenanthrene/Anthracene	1.44	0.007	0.004	
C3 - Phenanthrene/Anthracene	0.854	0.007	0.004	
C4 - Phenanthrene/Anthracene	0.358	0.007	0.004	
Fluoranthene	2.93	0.007	0.004	
Pyrene	3.22	0.007	0.004	
C1 - Fluoranthene/Pyrene	3.29	0.007	0.004	
Benz(a)anthracene	2.39	0.007	0.004	
Chrysene*	2.39	0.007	0.004	
C1 - Benz(a)anthracene/Chrysene	2.16	0.007	0.004	
C2 - Benz(a)anthracene/Chrysene	1.1	0.007	0.004	
C3 - Benz(a)anthracene/Chrysene	0.629	0.007	0.004	
C4 - Benz(a)anthracene/Chrysene	0.310	0.007	0.004	
Benzo(b)fluoranthene	1.87	0.007	0.004	
Benzo(j/k)fluoranthene	2.39	0.007	0.004	
Benzo(e)pyrene	1.95	0.007	0.004	
Benzo(a)pyrene	3.07	0.007	0.004	
Perylene	1.25	0.007	0.004	
Indeno(1,2,3-cd)pyrene	1.78	0.007	0.004	
Dibenz(a,h)anthracene	0.540 J	0.007	0.004	
Benzo(g,h,i)perylene	1.88	0.007	0.004	
Total PAH (16)	27.6	0.007	0.004	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-37

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-37		
File ID:	G102012.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.776
Date Cleanup:	NA	Percent Solid:	50.9%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	82	50 - 120		
Benzo(a)pyrene-d12	75	50 - 120		
Perylene-d12	82	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-38** ~~SD-30~~ DUP-4

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-38		
File ID:	G102013.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.393
Date Cleanup:	NA	Percent Solid:	61.7%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	11.6		0.007	0.003	
2-Methylnaphthalene	4.1		0.007	0.003	
1-Methylnaphthalene	2.61		0.007	0.003	
C1 - Naphthalene	4.39		0.007	0.003	
C2 - Naphthalene	5.69		0.007	0.003	
C3 - Naphthalene	3.01		0.007	0.003	
C4 - Naphthalene	1.8		0.007	0.003	
Acenaphthylene	4.41		0.007	0.003	
Acenaphthene	5.65		0.007	0.003	
Fluorene	2.37		0.007	0.003	
C1 - Fluorene	2.25		0.007	0.003	
C2 - Fluorene	2.12		0.007	0.003	
C3 - Fluorene	1.72		0.007	0.003	
Phenanthrene	7.8		0.007	0.003	
Anthracene	5.22		0.007	0.003	
C1 - Phenanthrene/Anthracene	9.78		0.007	0.003	
C2 - Phenanthrene/Anthracene	7.12		0.007	0.003	
C3 - Phenanthrene/Anthracene	3.38		0.007	0.003	
C4 - Phenanthrene/Anthracene	1.28		0.007	0.003	
Fluoranthene	10.0		0.007	0.003	
Pyrene	12.1		0.007	0.003	
C1 - Fluoranthene/Pyrene	11.7		0.007	0.003	
Benz(a)anthracene	6.67		0.007	0.003	
Chrysene*	7.53		0.007	0.003	
C1 - Benz(a)anthracene/Chrysene	6.58		0.007	0.003	
C2 - Benz(a)anthracene/Chrysene	3.46		0.007	0.003	
C3 - Benz(a)anthracene/Chrysene	1.53		0.007	0.003	
C4 - Benz(a)anthracene/Chrysene	0.698		0.007	0.003	
Benzo(b)fluoranthene	4.56		0.007	0.003	
Benzo(j/k)fluoranthene	4.92		0.007	0.003	
Benzo(e)pyrene	4.38		0.007	0.003	
Benzo(a)pyrene	6.94		0.007	0.003	
Perylene	1.66		0.007	0.003	
Indeno(1,2,3-cd)pyrene	3.61		0.007	0.003	
Dibenz(a,h)anthracene	1.46	J	0.007	0.003	
Benzo(g,h,i)perylene	3.79		0.007	0.003	
Total PAH (16)	98.6		0.007	0.003	

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-38

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-38		
File ID:	G102013.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/29/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.393
Date Cleanup:	NA	Percent Solid:	61.7%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	85	50 - 120		
Benzo(a)pyrene-d12	77	50 - 120		
Perylene-d12	86	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-39** SD-30

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-39		
File ID:	G102418.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.684
Date Cleanup:	NA	Percent Solid:	46.8%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	1.31	0.008	0.004	
2-Methylnaphthalene	0.562	0.008	0.004	
1-Methylnaphthalene	0.422	0.008	0.004	
C1 - Naphthalene	0.640	0.008	0.004	
C2 - Naphthalene	0.656	0.008	0.004	
C3 - Naphthalene	0.506	0.008	0.004	
C4 - Naphthalene	0.399	0.008	0.004	
Acenaphthylene	1.94	0.008	0.004	
Acenaphthene	0.695	0.008	0.004	
Fluorene	0.438	0.008	0.004	
C1 - Fluorene	0.504	0.008	0.004	
C2 - Fluorene	0.499 I J	0.008	0.004	
C3 - Fluorene	0.908	0.008	0.004	
Phenanthrene	3.52	0.008	0.004	
Anthracene	1.94	0.008	0.004	
C1 - Phenanthrene/Anthracene	2.21 I J	0.008	0.004	
C2 - Phenanthrene/Anthracene	1.8	0.008	0.004	
C3 - Phenanthrene/Anthracene	1.06	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.367	0.008	0.004	
Fluoranthene	8.13	0.008	0.004	
Pyrene	7.01	0.008	0.004	
C1 - Fluoranthene/Pyrene	4.41	0.008	0.004	
Benz(a)anthracene	4.0	0.008	0.004	
Chrysene*	4.47	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	2.5	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	1.39	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.780	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.529	0.008	0.004	
Benzo(b)fluoranthene	3.8	0.008	0.004	
Benzo(j/k)fluoranthene	3.72	0.008	0.004	
Benzo(e)pyrene	3.17	0.008	0.004	
Benzo(a)pyrene	4.74	0.008	0.004	
Perylene	1.22	0.008	0.004	
Indeno(1,2,3-cd)pyrene	3.14	0.008	0.004	
Dibenz(a,h)anthracene	0.896 J	0.008	0.004	
Benzo(g,h,i)perylene	3.16	0.008	0.004	
Total PAH (16)	52.9	0.008	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-39

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-39		
File ID:	G102418.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.684
Date Cleanup:	NA	Percent Solid:	46.8%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	77	50 - 120		
Benzo(a)pyrene-d12	72	50 - 120		
Perylene-d12	78	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

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Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-40** SD-31

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-40		
File ID:	G102419.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.112
Date Cleanup:	NA	Percent Solid:	77.2%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	1.89	0.004	0.002	
2-Methylnaphthalene	0.882	0.004	0.002	
1-Methylnaphthalene	0.626	0.004	0.002	
C1 - Naphthalene	0.957	0.004	0.002	
C2 - Naphthalene	0.948	0.004	0.002	
C3 - Naphthalene	0.760	0.004	0.002	
C4 - Naphthalene	0.588	0.004	0.002	
Acenaphthylene	1.9	0.004	0.002	
Acenaphthene	0.647	0.004	0.002	
Fluorene	0.359	0.004	0.002	
C1 - Fluorene	0.547	0.004	0.002	
C2 - Fluorene	0.685 I J	0.004	0.002	
C3 - Fluorene	0.816	0.004	0.002	
Phenanthrene	2.16	0.004	0.002	
Anthracene	1.79	0.004	0.002	
C1 - Phenanthrene/Anthracene	2.05 I J	0.004	0.002	
C2 - Phenanthrene/Anthracene	2.13	0.004	0.002	
C3 - Phenanthrene/Anthracene	1.3	0.004	0.002	
C4 - Phenanthrene/Anthracene	0.605	0.004	0.002	
Fluoranthene	5.86	0.004	0.002	
Pyrene	5.78	0.004	0.002	
C1 - Fluoranthene/Pyrene	4.63	0.004	0.002	
Benz(a)anthracene	3.66	0.004	0.002	
Chrysene*	4.06	0.004	0.002	
C1 - Benz(a)anthracene/Chrysene	2.88	0.004	0.002	
C2 - Benz(a)anthracene/Chrysene	1.53	0.004	0.002	
C3 - Benz(a)anthracene/Chrysene	0.858	0.004	0.002	
C4 - Benz(a)anthracene/Chrysene	0.575	0.004	0.002	
Benzo(b)fluoranthene	3.19	0.004	0.002	
Benzo(j/k)fluoranthene	3.27	0.004	0.002	
Benzo(e)pyrene	2.95	0.004	0.002	
Benzo(a)pyrene	4.55	0.004	0.002	
Perylene	1.07	0.004	0.002	
Indeno(1,2,3-cd)pyrene	2.8	0.004	0.002	
Dibenz(a,h)anthracene	0.869 J	0.004	0.002	
Benzo(g,h,i)perylene	2.86	0.004	0.002	
Total PAH (16)	45.6	0.004	0.002	

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-40

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-40		
File ID:	G102419.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.112
Date Cleanup:	NA	Percent Solid:	77.2%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	80	50 - 120		
Benzo(a)pyrene-d12	77	50 - 120		
Perylene-d12	84	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-41** SD32

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-41		
File ID:	G102420.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.072
Date Cleanup:	NA	Percent Solid:	42.1%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	0.758		0.008	0.004	
2-Methylnaphthalene	0.316		0.008	0.004	
1-Methylnaphthalene	0.373		0.008	0.004	
C1 - Naphthalene	0.450		0.008	0.004	
C2 - Naphthalene	0.560		0.008	0.004	
C3 - Naphthalene	0.471		0.008	0.004	
C4 - Naphthalene	0.336		0.008	0.004	
Acenaphthylene	1.34		0.008	0.004	
Acenaphthene	0.507		0.008	0.004	
Fluorene	0.230		0.008	0.004	
C1 - Fluorene	0.382		0.008	0.004	
C2 - Fluorene	0.552		0.008	0.004	
C3 - Fluorene	0.474		0.008	0.004	
Phenanthrene	1.54		0.008	0.004	
Anthracene	1.16		0.008	0.004	
C1 - Phenanthrene/Anthracene	1.35		0.008	0.004	
C2 - Phenanthrene/Anthracene	1.2		0.008	0.004	
C3 - Phenanthrene/Anthracene	0.679		0.008	0.004	
C4 - Phenanthrene/Anthracene	0.411		0.008	0.004	
Fluoranthene	3.65		0.008	0.004	
Pyrene	3.84		0.008	0.004	
C1 - Fluoranthene/Pyrene	2.63		0.008	0.004	
Benz(a)anthracene	2.26		0.008	0.004	
Chrysene*	2.47		0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	1.58		0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.974		0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.649		0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.545		0.008	0.004	
Benzo(b)fluoranthene	2.12		0.008	0.004	
Benzo(j/k)fluoranthene	2.14		0.008	0.004	
Benzo(e)pyrene	1.93		0.008	0.004	
Benzo(a)pyrene	2.76		0.008	0.004	
Perylene	0.699		0.008	0.004	
Indeno(1,2,3-cd)pyrene	1.9		0.008	0.004	
Dibenz(a,h)anthracene	0.530	J	0.008	0.004	
Benzo(g,h,i)perylene	2.02		0.008	0.004	
Total PAH (16)	29.2		0.008	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-41

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-41		
File ID:	G102420.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.072
Date Cleanup:	NA	Percent Solid:	42.1%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	83	50 - 120		
Benzo(a)pyrene-d12	78	50 - 120		
Perylene-d12	85	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

SD-33

Field ID: **MC4196-42**

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-42		
File ID:	G102421.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.516
Date Cleanup:	NA	Percent Solid:	45.8%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	8.65	0.009	0.004	
2-Methylnaphthalene	3.38	0.009	0.004	
1-Methylnaphthalene	2.99	0.009	0.004	
C1 - Naphthalene	4.1	0.009	0.004	
C2 - Naphthalene	3.67	0.009	0.004	
C3 - Naphthalene	2.5	0.009	0.004	
C4 - Naphthalene	1.54	0.009	0.004	
Acenaphthylene	5.12	0.009	0.004	
Acenaphthene	2.94	0.009	0.004	
Fluorene	2.23	0.009	0.004	
C1 - Fluorene	1.74	0.009	0.004	
C2 - Fluorene	1.34 I J	0.009	0.004	
C3 - Fluorene	2.22	0.009	0.004	
Phenanthrene	15.8	0.009	0.004	
Anthracene	7.56	0.009	0.004	
C1 - Phenanthrene/Anthracene	9.98 I J	0.009	0.004	
C2 - Phenanthrene/Anthracene	6.96	0.009	0.004	
C3 - Phenanthrene/Anthracene	3.26	0.009	0.004	
C4 - Phenanthrene/Anthracene	1.3	0.009	0.004	
Fluoranthene	23.0	0.009	0.004	
Pyrene	20.2	0.009	0.004	
C1 - Fluoranthene/Pyrene	13.8	0.009	0.004	
Benz(a)anthracene	14.1	0.009	0.004	
Chrysene*	13.3	0.009	0.004	
C1 - Benz(a)anthracene/Chrysene	8.56	0.009	0.004	
C2 - Benz(a)anthracene/Chrysene	4.5	0.009	0.004	
C3 - Benz(a)anthracene/Chrysene	2.54	0.009	0.004	
C4 - Benz(a)anthracene/Chrysene	1.24	0.009	0.004	
Benzo(b)fluoranthene	10.2	0.009	0.004	
Benzo(j/k)fluoranthene	11.0	0.009	0.004	
Benzo(e)pyrene	8.97	0.009	0.004	
Benzo(a)pyrene	14.7	0.009	0.004	
Perylene	3.42	0.009	0.004	
Indeno(1,2,3-cd)pyrene	8.81	0.009	0.004	
Dibenz(a,h)anthracene	2.69 J	0.009	0.004	
Benzo(g,h,i)perylene	8.43	0.009	0.004	
Total PAH (16)	169	0.009	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-42

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-42		
File ID:	G102421.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.516
Date Cleanup:	NA	Percent Solid:	45.8%
Date Analyzed:	10/25/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	91	50 - 120		
Benzo(a)pyrene-d12	86	50 - 120		
Perylene-d12	95	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-43** SD-34

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-43		
File ID:	G102014.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.242
Date Cleanup:	NA	Percent Solid:	37.6%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Naphthalene	4.98		0.012	0.006	
2-Methylnaphthalene	3.34		0.012	0.006	
1-Methylnaphthalene	1.52		0.012	0.006	
C1 - Naphthalene	3.12		0.012	0.006	
C2 - Naphthalene	10.0		0.012	0.006	
C3 - Naphthalene	14.6		0.012	0.006	
C4 - Naphthalene	7.04		0.012	0.006	
Acenaphthylene	8.47		0.012	0.006	
Acenaphthene	13.2		0.012	0.006	
Fluorene	7.38		0.012	0.006	
C1 - Fluorene	11.4		0.012	0.006	
C2 - Fluorene	11.5		0.012	0.006	
C3 - Fluorene	4.84		0.012	0.006	
Phenanthrene	14.5		0.012	0.006	
Anthracene	18.2		0.012	0.006	
C1 - Phenanthrene/Anthracene	38.6		0.012	0.006	
C2 - Phenanthrene/Anthracene	23.5		0.012	0.006	
C3 - Phenanthrene/Anthracene	8.83		0.012	0.006	
C4 - Phenanthrene/Anthracene	2.74		0.012	0.006	
Fluoranthene	20.7		0.012	0.006	
Pyrene	33.5		0.012	0.006	
C1 - Fluoranthene/Pyrene	34.2		0.012	0.006	
Benz(a)anthracene	15.3		0.012	0.006	
Chrysene*	14.0		0.012	0.006	
C1 - Benz(a)anthracene/Chrysene	13.7		0.012	0.006	
C2 - Benz(a)anthracene/Chrysene	5.9		0.012	0.006	
C3 - Benz(a)anthracene/Chrysene	2.36		0.012	0.006	
C4 - Benz(a)anthracene/Chrysene	0.755		0.012	0.006	
Benzo(b)fluoranthene	5.65		0.012	0.006	
Benzo(j/k)fluoranthene	7.6		0.012	0.006	
Benzo(e)pyrene	7.1		0.012	0.006	
Benzo(a)pyrene	13.6		0.012	0.006	
Perylene	3.06		0.012	0.006	
Indeno(1,2,3-cd)pyrene	5.02		0.012	0.006	
Dibenz(a,h)anthracene	2.06	J	0.012	0.006	
Benzo(g,h,i)perylene	5.56		0.012	0.006	
Total PAH (16)	190		0.012	0.006	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-43

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-43		
File ID:	G102014.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.242
Date Cleanup:	NA	Percent Solid:	37.6%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	83	50 - 120		
Benzo(a)pyrene-d12	78	50 - 120		
Perylene-d12	87	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-44** SD-35

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-44		
File ID:	G102015.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.221
Date Cleanup:	NA	Percent Solid:	40.2%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.138	0.011	0.006	
2-Methylnaphthalene	0.090	0.011	0.006	
1-Methylnaphthalene	0.050	0.011	0.006	
C1 - Naphthalene	0.098	0.011	0.006	
C2 - Naphthalene	0.201	0.011	0.006	
C3 - Naphthalene	0.152	0.011	0.006	
C4 - Naphthalene	0.118	0.011	0.006	
Acenaphthylene	0.404	0.011	0.006	
Acenaphthene	0.073	0.011	0.006	
Fluorene	0.083	0.011	0.006	
C1 - Fluorene	0.119	0.011	0.006	
C2 - Fluorene	0.062 I J	0.011	0.006	
C3 - Fluorene	0.180	0.011	0.006	
Phenanthrene	0.451	0.011	0.006	
Anthracene	0.421	0.011	0.006	
C1 - Phenanthrene/Anthracene	0.366 I J	0.011	0.006	
C2 - Phenanthrene/Anthracene	0.504	0.011	0.006	
C3 - Phenanthrene/Anthracene	0.249	0.011	0.006	
C4 - Phenanthrene/Anthracene	0.138	0.011	0.006	
Fluoranthene	1.38	0.011	0.006	
Pyrene	1.36	0.011	0.006	
C1 - Fluoranthene/Pyrene	0.948	0.011	0.006	
Benz(a)anthracene	0.783	0.011	0.006	
Chrysene*	0.939	0.011	0.006	
C1 - Benz(a)anthracene/Chrysene	0.567	0.011	0.006	
C2 - Benz(a)anthracene/Chrysene	0.341	0.011	0.006	
C3 - Benz(a)anthracene/Chrysene	0.201	0.011	0.006	
C4 - Benz(a)anthracene/Chrysene	0.263	0.011	0.006	
Benzo(b)fluoranthene	0.907	0.011	0.006	
Benzo(j/k)fluoranthene	0.924	0.011	0.006	
Benzo(e)pyrene	0.790	0.011	0.006	
Benzo(a)pyrene	1.05	0.011	0.006	
Perylene	1.23	0.011	0.006	
Indeno(1,2,3-cd)pyrene	0.731	0.011	0.006	
Dibenz(a,h)anthracene	0.220 J	0.011	0.006	
Benzo(g,h,i)perylene	0.764	0.011	0.006	
Total PAH (16)	10.6	0.011	0.006	

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-44

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-44		
File ID:	G102015.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.221
Date Cleanup:	NA	Percent Solid:	40.2%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	89	50 - 120		
Benzo(a)pyrene-d12	78	50 - 120		
Perylene-d12	85	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: **MC4196-45** SD-36

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-45		
File ID:	G102018.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.046
Date Cleanup:	NA	Percent Solid:	39.4%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.078	0.008	0.004	
2-Methylnaphthalene	0.059	0.008	0.004	
1-Methylnaphthalene	0.036	0.008	0.004	
C1 - Naphthalene	0.062	0.008	0.004	
C2 - Naphthalene	0.167	0.008	0.004	
C3 - Naphthalene	0.122	0.008	0.004	
C4 - Naphthalene	0.087	0.008	0.004	
Acenaphthylene	0.255	0.008	0.004	
Acenaphthene	0.046	0.008	0.004	
Fluorene	0.076	0.008	0.004	
C1 - Fluorene	0.073	0.008	0.004	
C2 - Fluorene	0.033 I J	0.008	0.004	
C3 - Fluorene	0.173	0.008	0.004	
Phenanthrene	0.469	0.008	0.004	
Anthracene	0.320	0.008	0.004	
C1 - Phenanthrene/Anthracene	0.212 I J	0.008	0.004	
C2 - Phenanthrene/Anthracene	0.361	0.008	0.004	
C3 - Phenanthrene/Anthracene	0.180	0.008	0.004	
C4 - Phenanthrene/Anthracene	0.102	0.008	0.004	
Fluoranthene	1.46	0.008	0.004	
Pyrene	1.35	0.008	0.004	
C1 - Fluoranthene/Pyrene	0.737	0.008	0.004	
Benz(a)anthracene	0.713	0.008	0.004	
Chrysene*	0.871	0.008	0.004	
C1 - Benz(a)anthracene/Chrysene	0.437	0.008	0.004	
C2 - Benz(a)anthracene/Chrysene	0.223	0.008	0.004	
C3 - Benz(a)anthracene/Chrysene	0.138	0.008	0.004	
C4 - Benz(a)anthracene/Chrysene	0.200	0.008	0.004	
Benzo(b)fluoranthene	0.829	0.008	0.004	
Benzo(j/k)fluoranthene	0.852	0.008	0.004	
Benzo(e)pyrene	0.699	0.008	0.004	
Benzo(a)pyrene	0.903	0.008	0.004	
Perylene	1.07	0.008	0.004	
Indeno(1,2,3-cd)pyrene	0.641	0.008	0.004	
Dibenz(a,h)anthracene	0.187	0.008	0.004	
Benzo(g,h,i)perylene	0.665	0.008	0.004	
Total PAH (16)	9.72	0.008	0.004	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-45

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-45		
File ID:	G102018.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	3.046
Date Cleanup:	NA	Percent Solid:	39.4%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	86	50 - 120		
Benzo(a)pyrene-d12	71	50 - 120		
Perylene-d12	78	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

SD-37

Field ID: **MC4196-46**

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-46		
File ID:	G102020.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.432
Date Cleanup:	NA	Percent Solid:	40.9%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.075	0.010	0.005	
2-Methylnaphthalene	0.056	0.010	0.005	
1-Methylnaphthalene	0.030	0.010	0.005	
C1 - Naphthalene	0.060	0.010	0.005	
C2 - Naphthalene	0.172	0.010	0.005	
C3 - Naphthalene	0.128	0.010	0.005	
C4 - Naphthalene	0.079	0.010	0.005	
Acenaphthylene	0.234	0.010	0.005	
Acenaphthene	0.044	0.010	0.005	
Fluorene	0.084	0.010	0.005	
C1 - Fluorene	0.075	0.010	0.005	
C2 - Fluorene	0.026 I J	0.010	0.005	
C3 - Fluorene	0.179	0.010	0.005	
Phenanthrene	0.536	0.010	0.005	
Anthracene	0.309	0.010	0.005	
C1 - Phenanthrene/Anthracene	0.387 I J	0.010	0.005	
C2 - Phenanthrene/Anthracene	0.370	0.010	0.005	
C3 - Phenanthrene/Anthracene	0.173	0.010	0.005	
C4 - Phenanthrene/Anthracene	0.116	0.010	0.005	
Fluoranthene	1.66	0.010	0.005	
Pyrene	1.49	0.010	0.005	
C1 - Fluoranthene/Pyrene	0.746	0.010	0.005	
Benz(a)anthracene	0.763	0.010	0.005	
Chrysene*	0.997	0.010	0.005	
C1 - Benz(a)anthracene/Chrysene	0.421	0.010	0.005	
C2 - Benz(a)anthracene/Chrysene	0.251	0.010	0.005	
C3 - Benz(a)anthracene/Chrysene	0.125	0.010	0.005	
C4 - Benz(a)anthracene/Chrysene	0.167	0.010	0.005	
Benzo(b)fluoranthene	0.980	0.010	0.005	
Benzo(j/k)fluoranthene	0.893	0.010	0.005	
Benzo(e)pyrene	0.785	0.010	0.005	
Benzo(a)pyrene	0.986	0.010	0.005	
Perylene	1.08	0.010	0.005	
Indeno(1,2,3-cd)pyrene	0.726	0.010	0.005	
Dibenz(a,h)anthracene	0.230	0.010	0.005	
Benzo(g,h,i)perylene	0.761	0.010	0.005	
Total PAH (16)	10.8	0.010	0.005	

META

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-46

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-46		
File ID:	G102020.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	2.432
Date Cleanup:	NA	Percent Solid:	40.9%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	79	50 - 120		
Benzo(a)pyrene-d12	63	50 - 120		
Perylene-d12	69	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Semivolatile Organics
META Environmental, Inc.

SD-38

Field ID: **MC4196-47**

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-47		
File ID:	G102021.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	1.962
Date Cleanup:	NA	Percent Solid:	94.8%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Naphthalene	0.051	0.005	0.003	
2-Methylnaphthalene	0.036	0.005	0.003	
1-Methylnaphthalene	0.022	0.005	0.003	
C1 - Naphthalene	0.039	0.005	0.003	
C2 - Naphthalene	0.087	0.005	0.003	
C3 - Naphthalene	0.065	0.005	0.003	
C4 - Naphthalene	0.061	0.005	0.003	
Acenaphthylene	0.197	0.005	0.003	
Acenaphthene	0.027	0.005	0.003	
Fluorene	0.041	0.005	0.003	
C1 - Fluorene	0.052	0.005	0.003	
C2 - Fluorene	0.021 I J	0.005	0.003	
C3 - Fluorene	0.114	0.005	0.003	
Phenanthrene	0.264	0.005	0.003	
Anthracene	0.226	0.005	0.003	
C1 - Phenanthrene/Anthracene	0.154 I J	0.005	0.003	
C2 - Phenanthrene/Anthracene	0.243	0.005	0.003	
C3 - Phenanthrene/Anthracene	0.130	0.005	0.003	
C4 - Phenanthrene/Anthracene	0.074	0.005	0.003	
Fluoranthene	0.776	0.005	0.003	
Pyrene	0.761	0.005	0.003	
C1 - Fluoranthene/Pyrene	0.464	0.005	0.003	
Benz(a)anthracene	0.421	0.005	0.003	
Chrysene*	0.440	0.005	0.003	
C1 - Benz(a)anthracene/Chrysene	0.279	0.005	0.003	
C2 - Benz(a)anthracene/Chrysene	0.163	0.005	0.003	
C3 - Benz(a)anthracene/Chrysene	0.099	0.005	0.003	
C4 - Benz(a)anthracene/Chrysene	0.099	0.005	0.003	
Benzo(b)fluoranthene	0.417	0.005	0.003	
Benzo(j/k)fluoranthene	0.447	0.005	0.003	
Benzo(e)pyrene	0.363	0.005	0.003	
Benzo(a)pyrene	0.491	0.005	0.003	
Perylene	0.432	0.005	0.003	
Indeno(1,2,3-cd)pyrene	0.329	0.005	0.003	
Dibenz(a,h)anthracene	0.104	0.005	0.003	
Benzo(g,h,i)perylene	0.341	0.005	0.003	
Total PAH (16)	5.33	0.005	0.003	

Analytical Results for Semivolatile Organics
META Environmental, Inc.

Field ID: MC4196-47

Client:	Accutest	Preparation Method:	EPA 3570
Project:	MC4196	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	AY111007-47		
File ID:	G102021.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	9/30/2011	Decanted:	None
Date Received:	10/7/2011		
Date Prepared:	10/11/2011	Sample Size (g):	1.962
Date Cleanup:	NA	Percent Solid:	94.8%
Date Analyzed:	10/21/2011	Extract Volume (µl):	2000
Instrument:	GTO	Prep DF:	1
Operator:	CAM	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC111011-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
Extraction Surrogate Recoveries (%)		Limits		
Phenanthrene-d10	73	50 - 120		
Benzo(a)pyrene-d12	59	50 - 120		
Perylene-d12	65	50 - 120		

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and EDL.
U - Analyte not detected above EDL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

ARCADIS
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ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 4

Quote MC4196

Lab Work Order #: KGS/2011-284 REV 2

Send Results to:	Contact & Company Name:	Telephone:
	J.Brien/Arcadis	(315) 671-9114
	Address:	Fax:
	6723 Towpath Rd	
	City / State / Zip	E-mail Address:
	Syracuse NY 13214	Jason.Brien@arcadis-us.com
	Project Name/Location (City, State):	Project #:
	ConEd - Pennant Ave/Peekskill	B0043029.0005
	Sampler's Printed Name:	Sampler's Signature:
	David Cornell	

Preservative
Filtered (Y)
# of Containers
Container Information

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	8270C	34 Alkyl Hetero PAH	Lloyd Kahn 1995 TOC					REMARKS
SD-39 (0-12") MS/MSD	9/28/11	14:44	✓		SE	2	2					-1/SD	
SD-40 (0-12")		15:09	✓		SE	1	1					-2	
SD-41 (0-12")		15:33	✓		SE	1	1					-3	
SD-42 (0-12")		15:55	✓		SE	1	1					-4	
SD-43 (0-12")		16:05	✓		SE	1	1					-5	
SD-44 (0-12")		16:32	✓		SE	1	1					-6	
SD-45 (0-12")		16:45	✓		SE	1	1					-7	
SD-46 (0-12") MS/MSD		16:55	✓		SE	2	2					-8/SD	
SD-47 (0-12")		17:05	✓		SE	1	1					-9	
SD-48 (0-12")		17:15	✓		SE	1	1					-10	
SD-49 (0-12")		17:25	✓		SE	1	1					-11	
Dup-1-9-28-11	9/28/11	—	✓		SE	1	1					-12	
Dup-2-9-28-11	9/28/11	—	✓		SE	1	1					-13	2.2°C 1.9°C, 2.2°C, 2.2°C
												-14	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

SYRACUSE SC 15b

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓)	Printed Name: David Cornell	Printed Name: James Murphy	Printed Name: James Murphy	Printed Name: FedEx
☐ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: Accutest	Firm/Courier: Accutest	Firm: Accutest
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 9/30/11 1500	Date/Time: 9/30/11 15:00	Date/Time: 9/30/11 16:30	Date/Time: 10-1-11

20730626 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

MC4196: Chain of Custody

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Quote MC4196

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ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

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Lab Work Order # KG8/2011-284 REV 2

Send Results to:

Contact & Company Name: J.Brien/Arcadis
Telephone: (315) 671-9114
Address: 6723 Towpath Rd
Fax:
City / State / Zip: Syracuse, NY 13214
E-mail Address: Jason.Brien@arcadis-us.com
Project Name/Location (City, State): ConEd-Pament Ave-Peekskill
Project #: B0043029.0000
Sampler's Printed Name: David Cornell
Sampler's Signature: [signature]

Preservative / Filtered (✓) / # of Containers / Container Information

PARAMETER ANALYSIS & METHOD: 8270C; 34 Alkylated PAH; Lloyd Kahn 1998 TOC

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil, W - Water, T - Tissue, SE - Sediment, SL - Sludge, A - Air, NL - NAPL/Oil, SW - Sample Wipe, Other:

Sample ID	Collection Date	Collection Time	Type Comp	Type Grab	Matrix	8270C	34 Alkylated PAH	Lloyd Kahn 1998 TOC					REMARKS
SD-50 (0-12")	9/29/11	0800	✓		SE	1	1					-14	
SD-51 (0-12")		0810	✓		SE	1	1					-15	
SD-52 (0-12")		0820	✓		SE	2	2					-16	
SD-53 (0-12")		0835	✓		SE	1	1					-17	
SD-54 (0-12")		0845	✓		SE	1	1					-18	
SD-55 (0-12")		0855	✓		SE	1	1					-19	
SD-56 (0-12")		0905	✓		SE	1	1					-20	
SD-57 (0-12")		0930	✓		SE	1	1					-21	
SD-58 (0-12")		0950	✓		SE	1	1					-22	
SD-59 (0-12")		10:00	✓		SE	1	1					-23	
SD-60 (0-12")		10:10	✓		SE	1	1					-24	
SD-61 (0-12")		1020	✓		SE	1	1					-25	
SD-62 (0-12")	↓	1030	✓		SE	1	1					-26	
Dup-3-9-29-11	9/29/11	—	✓		SE	1	1					-27	→ HOLD Analysis

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

SYRACUSE SC

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓)	Printed Name: David Cornell	Printed Name: James Murphy	Printed Name: James Murphy	Printed Name: Fess Ea
☐ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: [signature]
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: Accutest	Firm/Courier: Accutest	Firm: Accutest
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 9/30/11 1500	Date/Time: 9/30/11 15:01	Date/Time: 9/30/11 16:31	Date/Time: 10-1-11

20730826 CofC AR Form 01.12.2007 Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

4.1 4

MC4196: Chain of Custody
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ARCADIS
Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 3 of 4

MC4196

Lab Work Order #

Send Results to:	
Contact & Company Name:	J. Brien/Arcadis
Address:	6723 Towpath Rd
City / State / Zip	Syracuse, NY 13214
Telephone:	(315) 671-9114
Fax:	
E-mail Address:	Jason.Brien@arcadis-us.com
Project Name/Location (City, State):	ConEd - Pemart Ave - Peekskill
Project #:	B0043029.0000
Sampler's Printed Name:	David Cornell
Sampler's Signature:	[signature]

Preservative / Filtered (✓) / # of Containers / Container Information

PARAMETER ANALYSIS & METHOD: 8270 C; 31 Alkylated PAHs; Lloyd Kahn 1998 TOC

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil, W - Water, T - Tissue, SE - Sediment, SL - Sludge, A - Air, NL - NAPL/Oil, SW - Sample Wipe, Other:

Sample ID	Collection Date	Collection Time	Comp	Grab	Matrix	8270 C	31 Alkylated PAHs / Lloyd Kahn 1998 TOC					REMARKS
SD-63 (0-12")	9/29/11	1045	✓		SE	1	1				-28	
SD-64 (0-12")	↓	1055	✓		SE	1	1				-29	
SD-65 (0-12")	↓	1215	✓		SE	1	1				-30	
SD-66 (0-12")	↓	1225	✓		SE	1	1				-31	
SD-67 (0-12")	↓	1235	✓		SE	1	1				-32	
SD-68 (0-12")	↓	1245	✓		SE	1	1				-33	
SD-26 (0-12")	↓	1430	✓		SE	1	1				-34	
SD-27 (0-12")	↓	1445	✓		SE	1	1				-35	
SD-28 (0-12")	↓	1500	✓		SE	1	1				-36	
SD-29 (0-12")	↓	1515	✓		SE	1	1				-37	
Dup-4-9-29-11	9/29/11	—	✓		SE	1	1				-38	
SD-30 (0-12")	9/30/11	0740	✓		SE	1	1				-39	
SD-31 (0-12")	9/30/11	0750	✓		SE	1	1				-40	
SD-32 (0-12")	9/30/11	0805	✓		SE	1	1				-41	

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

SYRACUSE SC

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓)	Printed Name: David Cornell	Printed Name: James Murphy	Printed Name: James Murphy	Printed Name: Fed Ex
☐ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: [signature]
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: Accutest	Firm/Courier: Accutest	Firm: Accutest
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 9/30/11 1500	Date/Time: 9/30/11 15:00	Date/Time: 9/30/11 16:50	Date/Time: 10-1-11

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4.1

4

MC4196: Chain of Custody
Page 3 of 5

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Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 4 of 4

Quote MC4196

Lab Work Order #: KG8/2011-284 REV2

Send Results to:
Contact & Company Name: J. Brien/Arcadis
Address: 6723 Towpath Rd
City: Syracuse State: NY Zip: 13214
Telephone: (315) 671-9114
Fax:
E-mail Address: Jason.Brien@arcadis-us.com
Project Name/Location (City, State): Conrail-Pennsylvania Ave-Pedrick II
Project #: B0043029.0000
Sampler's Printed Name: David Cornell
Sampler's Signature:

Keys

Preservation Key: A. H2SO4 B. HCL C. HNO3 D. NaOH E. None F. Other: G. Other: H. Other:

Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: 10. Other:

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	B270 C	34 Alkalinity/PAHs Lloyd Kahn 1998	TOC					REMARKS
SD-33 (0-12")	9/30/11	0810	✓		SE			1	1							-42	
SD-34 (0-12")		0820	✓		SE			1	1							-43	
SD-35 (0-12")		0830	✓		SE			1	1							-44	
SD-36 (0-12")		0840	✓		SE			1	1							-45	
SD-37 (0-12")		0850	✓		SE			1	1							-46	
SD-38 (0-12")	9/30/11	0900	✓		SE			1	1							-47	

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

SYRACUSE SC

Laboratory Information and Receipt
Lab Name:
☐ Cooler packed with ice (✓)
Specify Turnaround Requirements:
Shipping Tracking #:
Cooler Custody Seal (✓): ☐ Intact ☐ Not Intact
Sample Receipt:
Condition/Cooler Temp:

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: David Cornell	Printed Name: James Murphy	Printed Name: James Murphy	Printed Name: FED Ex
Signature:	Signature:	Signature:	Signature:
Firm: Arcadis	Firm/Courier: Accutest	Firm/Courier: Accutest	Firm: accutest
Date/Time: 9/30/11 1500	Date/Time: 9/30/11 15:30	Date/Time: 9/30/11 16:30	Date/Time: 10-1-11

20730826 CofC AR Form 01.12.2007

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MC4196: Chain of Custody
Page 4 of 5

CHAIN OF CUSTODY

7975-8477-1956 P1966

ACCUTEST
4036 Youngfield St.. Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #:	
Accutest Quote #:	MC4196 P1966
AMS P.O. #:	
Project No.:	

Client Information	Subcontract Laboratory Information	Analytical Information
Name: Accutest New England	Name: Accutest - New Jersey	
Address: 50 D'Angelo Drive	Address: 2235 Route 130	
City: Marlborough State: MA Zip: 01752	City: Dayton State: NJ Zip: 08810	
Send Report to: Any questions contact: Jeremy Vinneau	Contact: Sample Management	
Phone/Fax #: (508)481-6200 / (508)481-7753	Phone: (732) 329-0200	

Field ID / Point of Collection	Collection Date			Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	SB7363PAH					LAB ID: Comments
MC4196 -1				SED							X					AY111007-01
MC4196 -1D				SED							X					AY111007-01MS
MC4196 -1S				SED							X					MSD
MC4196 -2				SED							X					AY111007-02
MC4196 -3				SED							X					-03
MC4196 -4				SED							X					-04
MC4196 -5				SED							X					-05
MC4196 -6				SED							X					-06
MC4196 -7				SED							X					-07
MC4196 -8				SED							X					-08

Turnaround Information

x DUE 10/17/11

☐ Other _____ (Days)

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☐ Commercial "B" ☐ Compact Disk Deliverable
☐ Commercial "BN" ☐ Electronic Delivery:
☐ Reduced Tier 1 ☐ State Forms
☐ Full Tier 1 ☐ Other (Specify)

Comments / Remarks: **DUE 10/17/11**

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: 1	10/4/11	Received By: 1 FedEx	Date & Time: 1
Relinquished by: 2 FEDEX	10-5-11 930	Received By: 2	Date & Time: 2 10-5-11 930
Relinquished by: 3	Date & Time: 10/6/11 1700	Received By: 3 FedEx	Date & Time: 3 10/6/11 1700

Seal #: Headspace: Yes ☐ No ☐ NA ☐

Preserved where applicable: ☐

Temperature °C 2.8 On Ice ☐ 2.2 2.4

FMP

MF

CHAIN OF CUSTODY

ACCUTEST

4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #: P20680
Accutest Quote #: MC4196
AMS P.O. #:
Project No.:

Client Information

Name: Accutest New England
Address: 50 D'Angelo Drive
City: Marlborough State: MA Zip: 01752
Send Report to:
Any questions contact: Jeremy Vinneau
Phone/Fax #: (508)481-6200 / (508)481-7753

Subcontract Laboratory Information

Name: Accutest - New Jersey
Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Contact: Sample Management
Phone: (732) 329-0200

Analytical Information

Field ID / Point of Collection	Collection Date			Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	SB7363PAH	LAB ID / Comments
MC4196 -8D				SED							X	A9111007-08 MS
MC4196 -8S				SED							X	MSD
MC4196 -9				SED							X	-09
MC4196 -10				SED							X	-10
MC4196 -11				SED							X	-11
MC4196 -12				SED							X	-12
MC4196 -13				SED							X	-13
MC4196 -14				SED							X	-14
MC4196 -15				SED							X	-15
MC4196 -16				SED							X	-16
				SED								

Turnaround Information

[x] DUE 10/17/11
[ ] Other _____ (Days)

10 Day Turnaround Hardcopy, RUSH is FAX Data unless previously approved.

[ ] Commercial "A"
[ ] Commercial "B"
[ ] Commercial "BN"
[ ] Reduced Tier 1
[ ] Full Tier 1
[ ] PDF
[ ] Compact Disk Deliverable
[ ] Electronic Delivery:
[ ] State Forms
[ ] Other (Specify)

Comments / Remarks
DUE 10/17/11

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: 1	Date & Time: 10/6/11	Received By: 1 Fed Ex	Date & Time: 1
Relinquished by: 2 FEDEX	Date & Time: 10-5-11	Received By: 2	Date & Time: 2 10-5-11 930
Relinquished by: 3	Date & Time: 10/6/11 1700	Received By: 3 Fed Ex	Date & Time: 3 10/6/11 1700

Seal #:
Headspace: Yes [ ] No [ ] NA [ ]
Preserved where applicable: [ ]
Temperature °C 2.8 On Ice [ ]

CHAIN OF CUSTODY

ACCUTEST®
4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #: p30654
Accutest Quote #: MC4196
AMS P.O. #:
Project No.:

Client Information	Subcontract Laboratory Information	Analytical Information
Name: Accutest New England	Name: Accutest - New Jersey	
Address: 50 D'Angelo Drive	Address: 2235 Route 130	
City: Marlborough State: MA Zip: 01752	City: Dayton State: NJ Zip: 08810	
Send Report to: Any questions contact: Jeremy Vinneau	Contact: Sample Management	
Phone/Fax #: (508)481-6200 / (508)481-7753	Phone: (732) 329-0200	

Field ID / Point of Collection	Collection Date			Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2So4	None	SB7363PAH					LAB ID: Comments
MC4196 -17				SED							X					A41110-17
MC4196 -18				SED							X					-18
MC4196 -19				SED							X					-19
MC4196 -20				SED							X					-20
MC4196 -21				SED							X					-21
MC4196 -22				SED							X					-22
MC4196 -23				SED							X					-23
MC4196 -24				SED							X					-24
MC4196 -25				SED							X					-25
MC4196 -26				SED							X					-26

Turnaround Information

[x] DUE 10/17/11
[ ] Other _____ (Days)

10 Day Turnaround Hardcopy, RUSH is FAX Data unless previously approved.

[ ] Commercial "A"
[ ] Commercial "B"
[ ] Commercial "BN"
[ ] Reduced Tier 1
[ ] Full Tier 1
[ ] PDF
[ ] Compact Disk Deliverable
[ ] Electronic Delivery:
[ ] State Forms
[ ] Other (Specify)

Comments / Remarks
DUE 10/17/11

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date & Time:	Received By:	Date & Time:
1	10/4/11	1 FedEx	1
2 FEDEX	10-5-11	2	2 10-5-11 930
3	Date & Time: 10/6/11 1700	3 FedEx	3 10/6/11 1700

Seal #:
Headspace: Yes [ ] No [ ] NA [ ]
Preserved where applicable: [ ]
Temperature °C 2.8 On Ice [ ]

CHAIN OF CUSTODY

ACCUTEST®
4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #:
Accutest Quote #: MC4196 P4066
AMS P.O. #:
Project No.:

Client Information			Subcontract Laboratory Information			Analytical Information
Name: Accutest New England			Name: Accutest - New Jersey			
Address: 50 D'Angelo Drive			Address: 2235 Route 130			
City: Marlborough	State: MA	Zip: 01752	City: Dayton	State: NJ	Zip: 08810	
Send Report to: Any questions contact: Jeremy Vinneau			Contact: Sample Management			
Phone/Fax #: (508)481-6200 / (508)481-7753			Phone: (732) 329-0200			

Field ID / Point of Collection	Collection Date			Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2So4	None	SB7363PAH	HOLD				LAB ID: Comments
MC4196 -27				SED								X				A41111007-27
MC4196 -28				SED							X					-28
MC4196 -29				SED							X					-29
MC4196 -30				SED							X					-30
MC4196 -31				SED							X					-31
MC4196 -32				SED							X					-32
MC4196 -33				SED							X					-33
MC4196 -34				SED							X					-34
MC4196 -34 35				SED							X					-35
MC4196 -36				SED							X					-34

Turnaround Information

- [x] DUE 10/17/11
- [ ] Other _____ (Days)

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- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Commercial "BN"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
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- [ ] Compact Disk Deliverable
- [ ] Electronic Delivery:
- [ ] State Forms
- [ ] Other (Specify)

Comments / Remarks: **DUE 10/17/11**

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: 1	10/4/11	Received By: 1 FedEx	Date & Time: 1	Seal #:	Headspace: Yes ☐ No ☐ NA ☐
Relinquished by: 2 FEDEX	10-5-11 930	Received By: 2	Date & Time: 2 10-5-11 930	Preserved where applicable: ☐	
Relinquished by: 3	Date & Time: 10/6/11 1700	Received By: 3	Date & Time: 3 10/6/11 1700	Temperature °C 2.8	On Ice ☐

CHAIN OF CUSTODY

ACCUTEST®

4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #:
Accutest Quote #: MC4196 p 5006
AMS P.O. #:
Project No.:

Client Information	Subcontract Laboratory Information
Name: Accutest New England	Name: Accutest - New Jersey
Address: 50 D'Angelo Drive	Address: 2235 Route 130
City: Marlborough State: MA Zip: 01752	City: Dayton State: NJ Zip: 08810
Send Report to: Any questions contact: Jeremy Vinneau	Contact: Sample Management
Phone/Fax #: (508)481-6200 / (508)481-7753	Phone: (732) 329-0200

Field ID / Point of Collection	Collection Date			Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	Analytical Information SB7363PAH					LAB ID Comments
MC4196 -37				SED							X					A41100T-37
MC4196 -38				SED							X					-38
MC4196 -39				SED							X					-39
MC4196 -40				SED							X					-40
MC4196 -41				SED							X					-41
MC4196 -42				SED							X					-42
MC4196 -43				SED							X					-43
MC4196 -44				SED							X					-44
MC4196 -45				SED							X					-45
MC4196 -46				SED							X					-46
Turnaround Information				SED												Comments / Remarks

[x] DUE 10/17/11
[ ] Other _____ (Days)

10 Day Turnaround Hardcopy, RUSH is FAX Data unless previously approved.

[ ] Commercial "A"
[ ] Commercial "B"
[ ] Commercial "BN"
[ ] Reduced Tier 1
[ ] Full Tier 1
[ ] PDF
[ ] Compact Disk Deliverable
[ ] Electronic Delivery:
[ ] State Forms
[ ] Other (Specify)

DUE 10/17/11

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date & Time:	Received By:	Date & Time:
1	10/4/11	1 FedEx	1
2 FedEx		2	2 10-5-11 930
3	Date & Time: 10/6/11 1700	3 FedEx	3 10/6/11 1700

Seal #:
Headspace: Yes [ ] No [ ] NA [ ]
Preserved where applicable: [ ]
Temperature °C 2.8
On Ice [ ]

CHAIN OF CUSTODY

ACCUTEST®
4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #:	
Accutest Quote #:	MC4196 p.6866
AMS P.O. #:	
Project No.:	

Client Information	Subcontract Laboratory Information	Analytical Information
Name: Accutest New England	Name: Accutest - New Jersey	
Address: 50 D'Angelo Drive	Address: 2235 Route 130	
City: Marlborough State: MA Zip: 01752	City: Dayton State: NJ Zip: 08810	
Send Report to: Any questions contact: Jeremy Vinneau	Contact: Sample Management	
Phone/Fax #: (508)481-6200 / (508)481-7753	Phone: (732) 329-0200	

Field ID / Point of Collection	Collection Date			Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2So4	None	SB7363PAH					LAB ID Comments
MC4196 -47				SED							X					M111087-47

Turnaround Information

- [x] DUE 10/17/11
- [ ] Other _____ (Days)

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- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Commercial "BN"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
- [ ] PDF
- [ ] Compact Disk Deliverable
- [ ] Electronic Delivery: _____
- [ ] State Forms
- [ ] Other (Specify) _____

Comments / Remarks

DUE 10/17/11

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: 1	10/14/11	Received By: 1 FedEx	Date & Time: 1
Relinquished by: 2		Received By: 2	Date & Time: 2 10-5-11 930
Relinquished by: 3	Date & Time: 10/6/11 1700	Received By: 3 FedEx	Date & Time: 3 10/6/11 1700

Seal #: Headspace: Yes ☐ No ☐ NA ☐

Preserved where applicable: ☐

Temperature °C 2.8 On Ice ☐

ARCADIS

Appendix B

Statistical Background
Calculation Sheet

Appendix B
Statistical Background Calculation Sheet

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

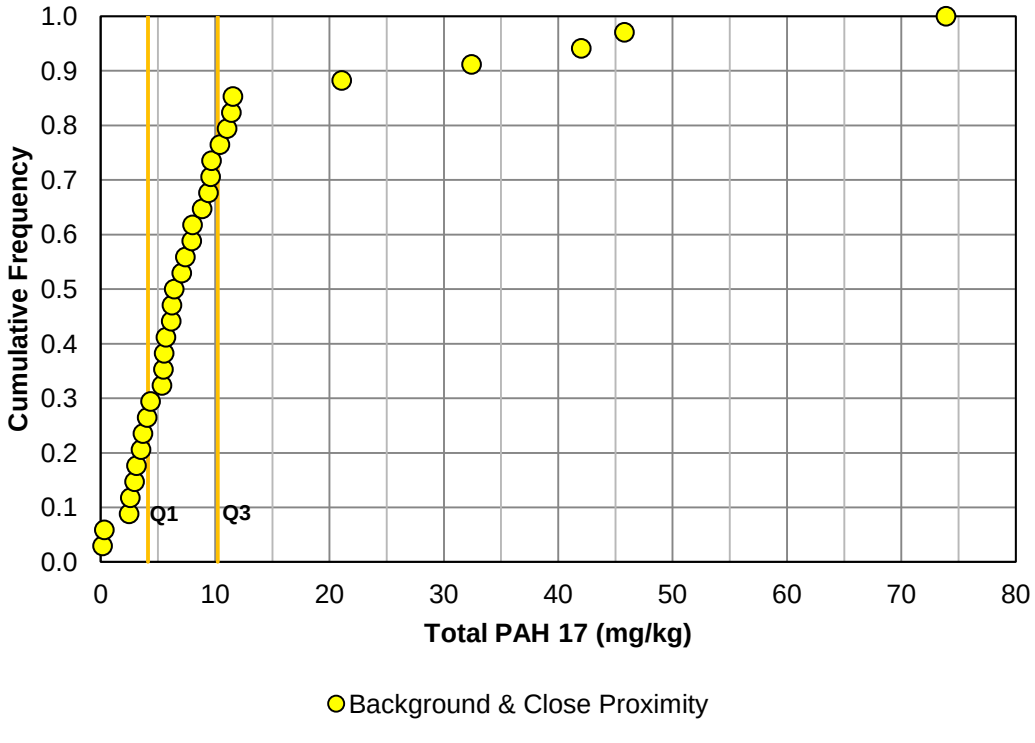
Location ID	Duplicate ID	Total PAH 17 (mg/kg)		
		Result	Qual	Text Result
SD-35		11	J	11 J
SD-36		10		10
SD-37		12		12
SD-38		5.7		5.7
SD-39		0.16	J	0.16 J
SD-40	SD-40-DUP	3.1		2.7 [3.5]
SD-41		3.0		3.0
SD-42		3.5		3.5
SD-43		2.6		2.6
SD-44		5.5		5.5
SD-45		6.2		6.2
SD-46		2.5		2.5
SD-47	SD-47-DUP	3.7		3.6 [3.8]
SD-48		6.4		6.4
SD-49		4.4		4.4
SD-50		7.4		7.4
SD-51		5.3		5.3
SD-52		5.5		5.5
SD-53		8.0		8.0
SD-54		11		11
SD-55		21		21
SD-56		74		74
SD-57		42		42
SD-58		6.2		6.2
SD-59		9.6		9.6
SD-60		4.1		4.1
SD-61		0.31	J	0.31 J
SD-62		8.0		8.0
SD-63		8.9		8.9
SD-64		9.7		9.7
SD-65		9.4		9.4
SD-66		7.1		7.1
SD-67		46		46
SD-68		32	J	32 J

Appendix B
Statistical Background Calculation Sheet

Supplemental Sediment Investigation
Con Edison - Former Pemart Avenue Works MGP Site - Peekskill, New York

Summary Statistics (mg/kg):

Mean	12	1st Quartile (Q1)	4.1
Standard Deviation	15	3rd Quartile (Q3)	10.2
Median (Q2)	6.8	Interquartile Range (IQR)	6.1



Note: Potential outliers identified as results greater than 1.5 times the IQR (1) over the Q3 or (2) under Q1.

Suspected Statistical Outliers (mg/kg):

SD-55	21
SD-56	74
SD-57	42
SD-67	46
SD-68	32 J

75th percentile (all data) = 10.2 mg/kg

90th percentile (suspected outliers removed) = 10.5 mg/kg

Note: Summary Statistics generated using USEPA ProUCL (v. 4.1.01) software (USEPA, 2010).
ProUCL output file provided on "ProUCL Sum Stats Output" tab.