

**SITE ASSESSMENT FOR PROPOSED COKE
POINT DREDGED MATERIAL CONTAINMENT
FACILITY AT SPARROWS POINT

BALTIMORE COUNTY, MARYLAND**

ATTACHMENT III

Analytical Results – Sediment

Prepared for:



Maryland Port Administration
2310 Broening Highway
Baltimore, Maryland 21224

Under Contract to:



Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

Prepared by:



EA Engineering, Science, and Technology, Inc.
15 Loveton Circle
Sparks, Maryland 21152

META RESULTS

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

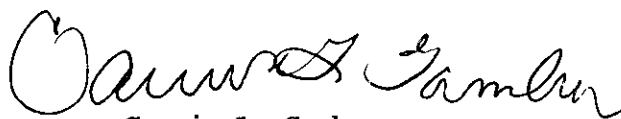
EA/MES Sparrows Point 18001868

Lot #: C9B120236

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.


Carrie L. Gamber
Project Manager

March 2, 2009

CASE NARRATIVE

**EA Engineering
Sparrows Point**

LOT # C9B120236

The samples were analyzed by Meta Environmental, Inc.



February 27, 2009

Carrie Gamber
Test America
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

RE: Sparrow's Point Interim Report; Sample Delivery Group: TA090209

Dear Ms. Gamber:

This package contains the summary results from two (2) sediment samples received on February 9th, 2009 by META Environmental, Inc. (META) from EA Engineering, Science, and Technology, Inc (EA).

Methods

The samples were prepared by solvent extraction (EPA 3570) using dichloromethane (DCM). The extracts were spiked with internal standard and analyzed by GC/FID (EPA 8100M) for fingerprinting and by GC/MS/SIM (EPA 8270M) for mono- and polycyclic aromatic hydrocarbons (MAHs and PAHs), alkyl PAH homologues and other selected compounds.

A portion of the extract was sent to Oklahoma University for compound-specific stable carbon isotope ratios (CSIR) of PAHs. Those results are not yet available.

QC Summary

8270M – Mono- and Polycyclic Aromatic Hydrocarbons

QC090212-SB – Compound is detected above reporting limit.

Benzene, 2-methylnaphthalene, 1-methylnaphthalene, C1-naphthalenes, C2-Naphthalenes, C3-naphthalenes, heptadecane, pristine, octadecane, phytane

QC090212-SBS - Percent recovery is outside laboratory criteria.

Benzene (63%)

No other observations noted.

Qualifications

The determination of sample identity was based on visual inspection of GC/FID chromatograms, GC/MS source and weathering ratios, and comparison to META's archive of reference samples. Statistical results, histograms, GC/MS extracted ion current profiles and other supporting data will be provided in the final project report.

Fingerprinting Results

BH-SED-03A-00

Sample *BH-SED-03A-00* contained primarily pyrogenic material. The pyrogenic material was indicated by a wide range distribution of relatively high concentration unsubstituted polycyclic aromatic hydrocarbons (PAHs) with the 2 ring PAHs dominant.

The ratio of fluoranthene to pyrene of about 1.3 in conjunction with a total priority pollutant PAH value of 243 ppm indicates that the pyrogenic component of this sample is very similar to tars in META's library that were formed from manufactured gas plants utilizing coal carbonization processes, byproduct coke ovens, as well as creosote and some other coal tar products.

The sample contained substantial concentrations of naphthalene relative to other PAHs. Most notably, there was nearly no 2-ring and 3-ring PAHs other than naphthalene. This is atypical for tar-like materials (TLM). The source of the atypical pattern could not be identified with the available data.

In addition to the pyrogenic PAHs, a low level of petrogenic material was also present. This material is indicated by the presence of alkane and isoprenoid hydrocarbons (heptadecane, octadecane, pristane, phytane) and the sesquiterpane and triterpane classes of petroleum biomarkers. This petrogenic material could not be specifically characterized, however, is typical of background in urban sediments.

Background

Sample *Background* contained a mixture of low level pyrogenic and petrogenic materials. The pyrogenic material was indicated by a low level distribution of unsubstituted and substituted polycyclic aromatic hydrocarbons (PAHs) with the 2-, 3-, 4-, and 5-ring ring PAHs at similar levels.

The ratio of fluoranthene to pyrene of about 1.0 in conjunction with a low total priority pollutant PAH value of about 6 ppm is consistent with PAH background in urban sediments, however, the presence of elevated naphthalene suggests that impacts from another pyrogenic source are likely.

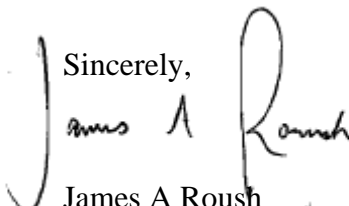
Sample *Background* also showed a very low level of petrogenic material consistent with background in urban sediments.

Definitions

Pyrogenic substances are complex mixtures of primarily hydrocarbons produced from organic matter subjected to high temperatures but with insufficient oxygen for complete combustion. Pyrogenic materials are produced by fires, internal combustion engines, and furnaces. They also are formed when coke or gas are produced from coal or oil. Coal-tar based products, such as roofing, pavement sealers, waterproofing, pesticides, and some shampoos contain pyrogenic materials.

Petrogenic substances include crude oil and crude oil derivatives such as gasoline, heating oil, and asphalt.

The data contained in this report will be used in conjunction with data collected at future sampling time points to provide a more comprehensive forensic characterization of the Sparrow's Point Site. Additionally, an in-depth description of the analytical methods used, and a general forensic chemistry overview will be provided. Please contact me if you have any questions about these results.

Sincerely,

James A Roush
Laboratory Manager

Attachments:

Chain of Custody

GC/FID Chromatograms

MAH & PAH Concentration Data

Turn Around Time	
Standard	<input checked="" type="checkbox"/>
If Authorized *	
1 Week	<input type="checkbox"/>
Other	<input type="checkbox"/>

META  **Environmental, Inc.**
49 Clarendon St. - Watertown, Massachusetts - 02472
Tel (617) 923-4662 - Fax (617) 923-4610 - www.metaenv.com

[illegible][illegible]

Relinquished by <i>Todd Wilson</i>	Date & Time 2/9/09 1820	Relinquished by	Date & Time	Relinquished by	Date & Time
Received by <i>Jim Goo</i>	Date & Time 2/11/09 10:50	Received by	Date & Time	Received by	Date & Time
Shipping Info. 9B120236		Remarks Temp °C 14.2 * Surcharges may apply 6 (1-2)			

META Environmental, Inc.

Sample Receipt Log

Lab ID	Field ID	Matrix	Prep Method	Cleanup Method	Analysis Method	Date Sampled	Date Received	Project #	Container	Comments	Client Name	Project Name
TA090211-01	BH-SED-03A-00	Sediment	2508		4007/4008	2/6/2009	2/11/2009	T06006-60	1 x 4oz jar	Sub CSIR PAHs	Test America	Sparrows Point
TA090211-02	Reference	Sediment	2508		4007/4008	2/9/2009	2/11/2009	T06006-60	1 x 4 oz jar	Sub CSIR PAHs	Test America	Sparrows Point

Logged By: PSDate: 2/12/09

C9B120236

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Reviewed By: JMDate: 2/12/09

(1-27)

META Environmental, Inc.
Sample Receipt Checklist

Receipt date: 2/11/09
 Login date: 2/11/09
 Login personnel: PS

Client Information:

Company Name: EA Engineering / KSA America
 Project Manager: Dr. Frank Baranco
 Project Name: spawning point

Shipping Information:

How were samples received? UPS FedEx DHL Other:
 Number of coolers: 1
 Internal temperature of coolers: 1.4°C
 Was ice present? Yes / No

Note: if cooler is outside the 2-6° range, META's project manager should be notified.

Documentation:

Was a Chain of Custody present? Yes / No
 Was it signed? Yes / No
 Was all project information present on the COC? Yes / No
 Was a bill of lading or shipping label retained? Yes / No

Sample Information:

Number of sample containers: 2
 Does this match the COC? Yes / No
 Were all sample containers intact? Yes / No
 If no, list samples and problems:

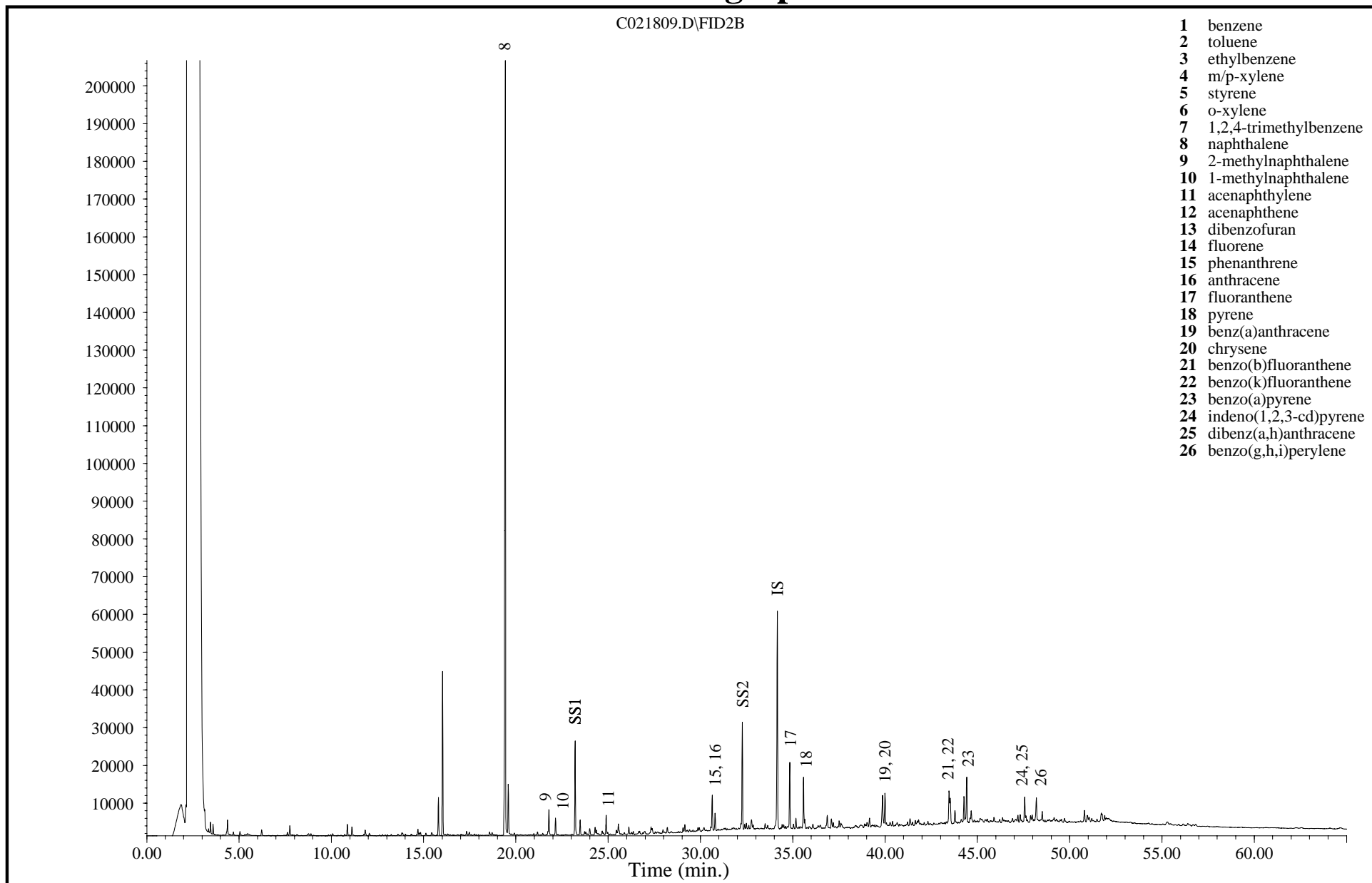
Note: if samples are damaged, META's project manager should be notified.

For aqueous 40ml Voas; was headspace present? Yes / No / NA

Comments:

Custodian: Robert Galt
 Project Manager: James R

GC/FID Fingerprint

**Extraction Date: 02/12/2009****Analysis Date: 02/19/2009**IS – 5 α -androstane

SS1 – 2-fluorobiphenyl

SS2 – o-terphenyl

Field ID: BH-SED-03A-00

Laboratory ID: TA090209-01

Method: EPA 8100M

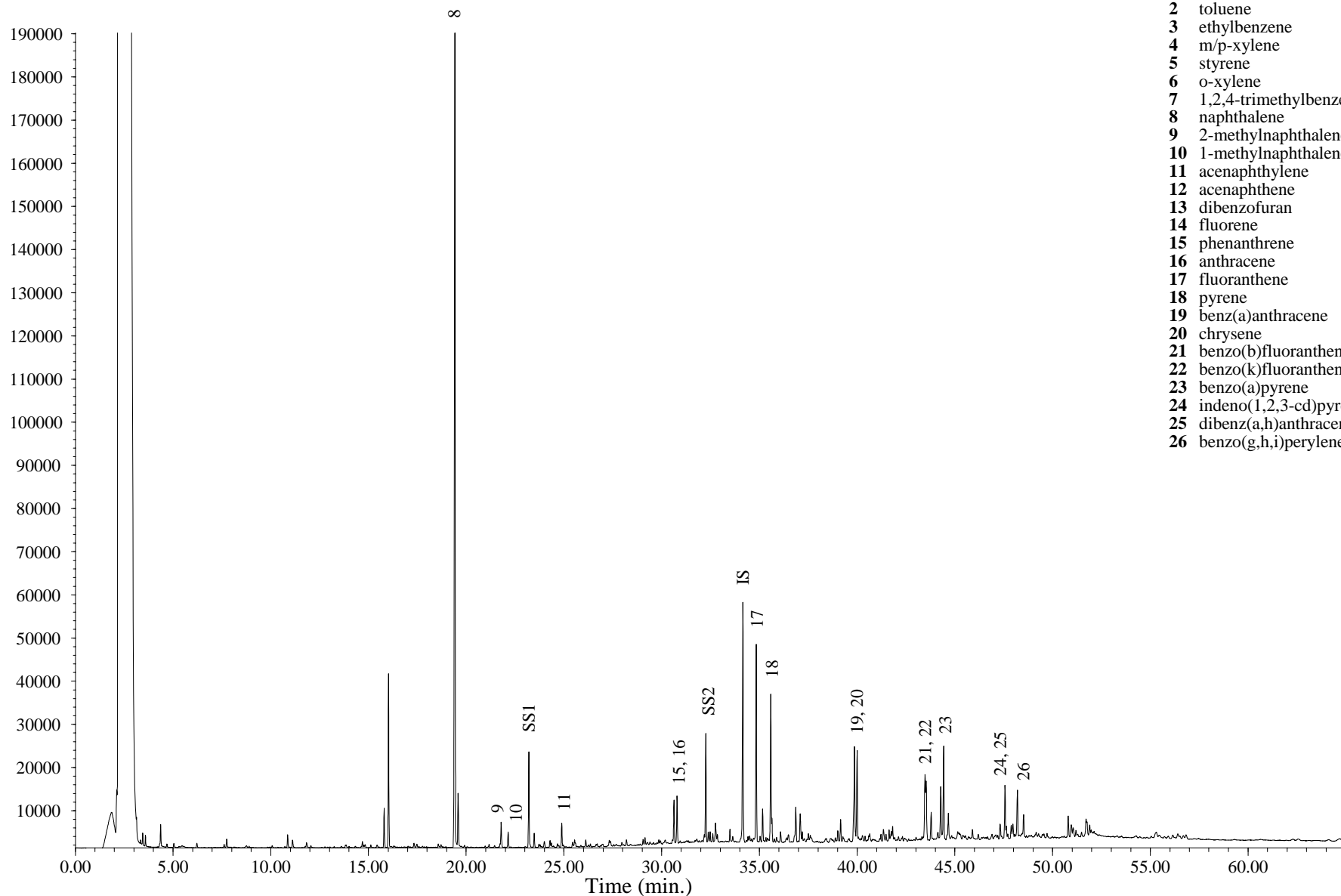
GC/FID Fingerprint

C9B120236

10

C021810.D\FID2B

- 1 benzene
- 2 toluene
- 3 ethylbenzene
- 4 m/p-xylene
- 5 styrene
- 6 o-xylene
- 7 1,2,4-trimethylbenzene
- 8 naphthalene
- 9 2-methylnaphthalene
- 10 1-methylnaphthalene
- 11 acenaphthylene
- 12 acenaphthene
- 13 dibenzofuran
- 14 fluorene
- 15 phenanthrene
- 16 anthracene
- 17 fluoranthene
- 18 pyrene
- 19 benz(a)anthracene
- 20 chrysene
- 21 benzo(b)fluoranthene
- 22 benzo(k)fluoranthene
- 23 benzo(a)pyrene
- 24 indeno(1,2,3-cd)pyrene
- 25 dibenz(a,h)anthracene
- 26 benzo(g,h,i)perylene



Extraction Date: 02/12/2009

Analysis Date: 02/19/2009

IS – 5 α -androstane
 SS1 – 2-fluorobiphenyl
 SS2 – o-terphenyl

Field ID: BH-SED-03A-00

Laboratory ID: TA090209-01DUP

Method: EPA 8100M

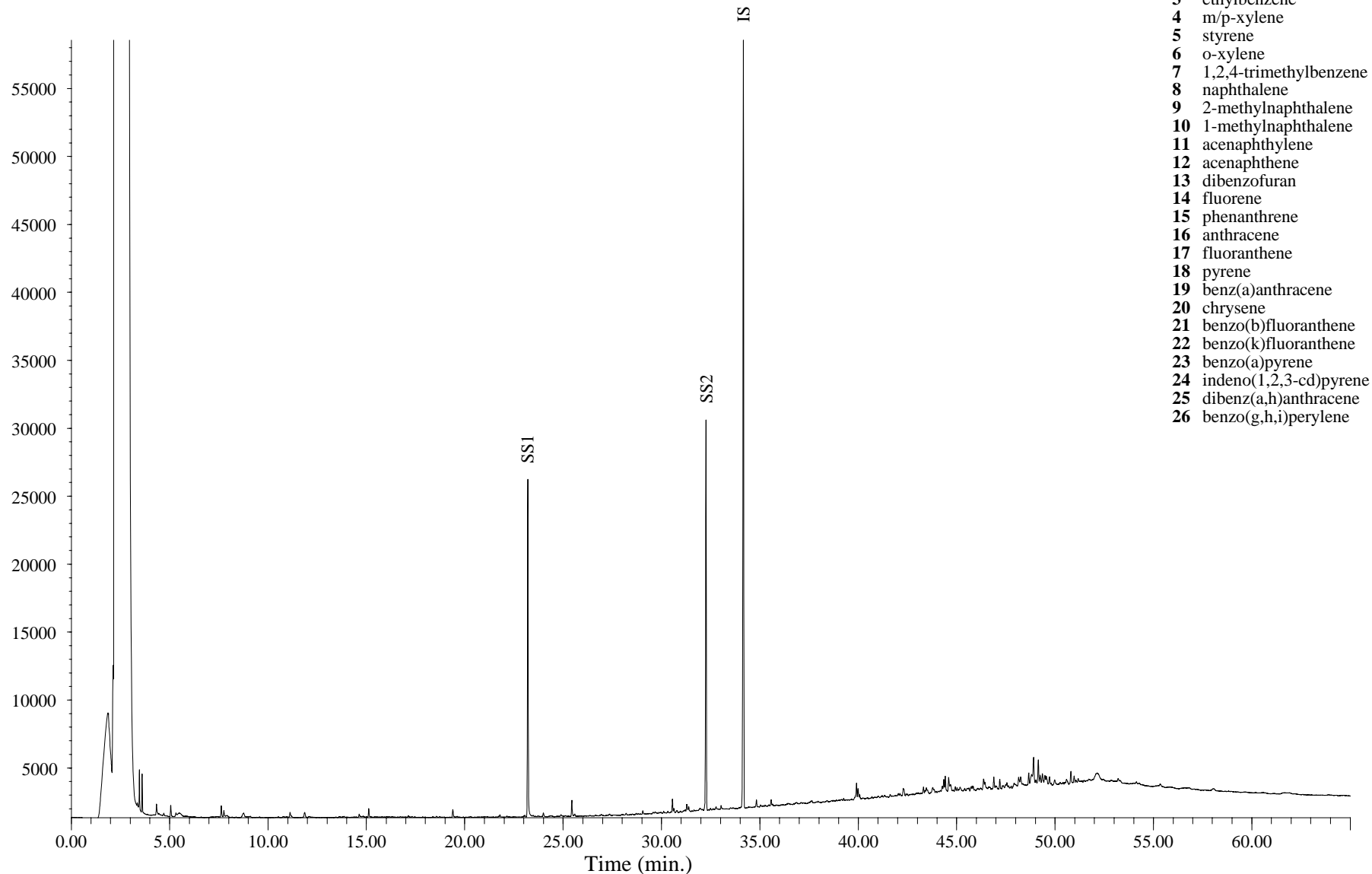
(1-27)

GC/FID Fingerprint

C9B120236

11

C021811.D\FID2B



Extraction Date: 02/12/2009

Analysis Date: 02/19/2009

IS – 5 α -androstane

SS1 – 2-fluorobiphenyl

SS2 – o-terphenyl

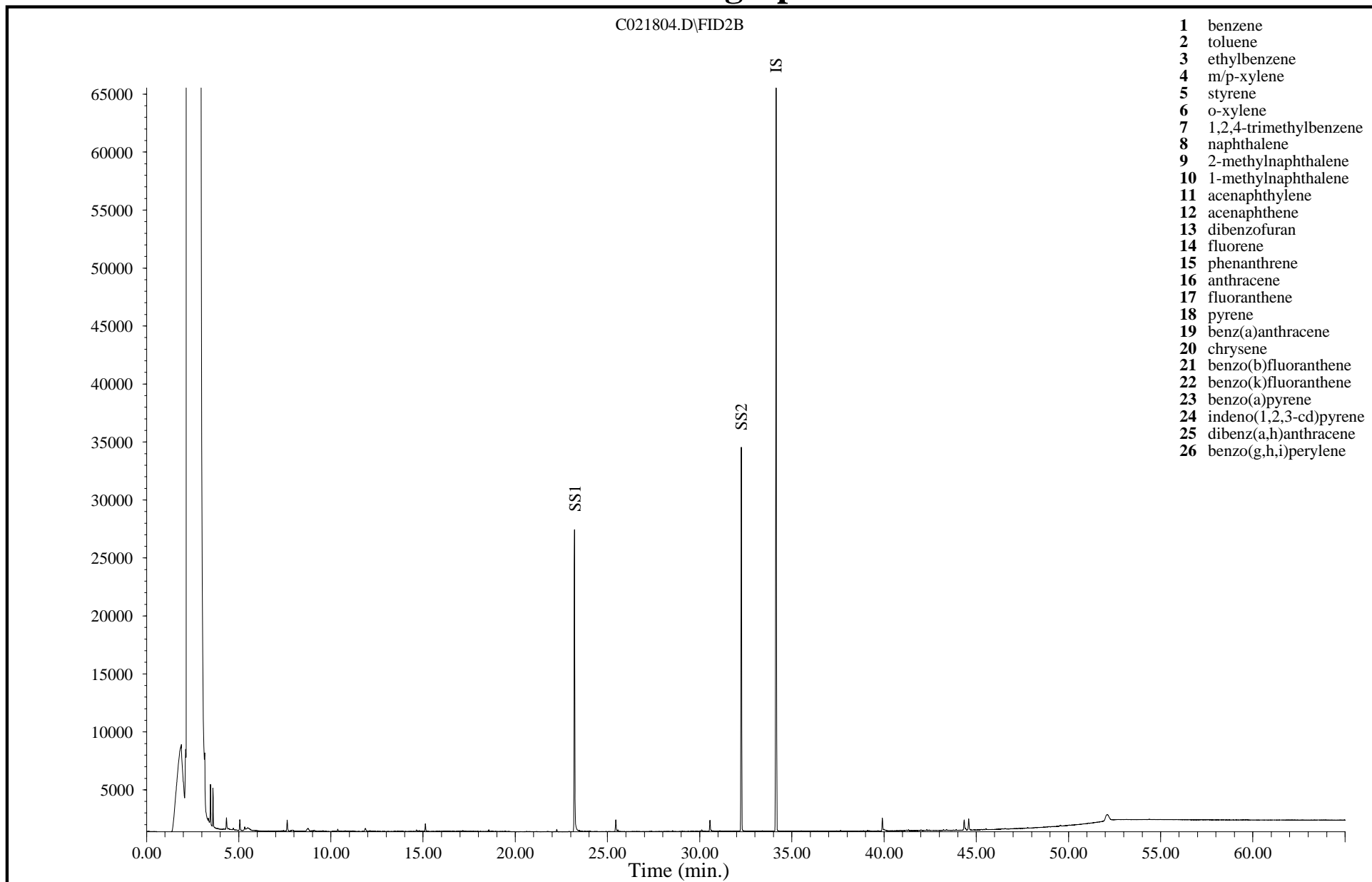
Field ID: **Reference**

Laboratory ID: TA090209-02

Method: EPA 8100M

(1-27)

GC/FID Fingerprint



Extraction Date: 02/12/2009

Analysis Date: 02/18/2009

IS – 5 α -androstane

SS1 – 2-fluorobiphenyl

SS2 – o-terphenyl

Field ID: Soil Blank

Laboratory ID: QC090212-SB

Method: EPA 8100M

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Reference

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-02		
File ID:	E021814.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	1/0/1900	Decanted:	None
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.73
Date Cleanup:	NA	Percent Solid:	30.6%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.333 B	0.009	0.004
Toluene	0.841	0.018	0.009
Ethylbenzene	0.043	0.009	0.004
m/p-Xylenes	0.611	0.009	0.004
Styrene	0.026	0.018	0.009
o-Xylene	0.051	0.009	0.004
Isopropylbenzene	0.006 J	0.009	0.004
n-Propylbenzene	0.022	0.009	0.004
1,3,5-Trimethylbenzene	0.018	0.009	0.004
1,2,4-Trimethylbenzene	0.048	0.009	0.004
t-Butylbenzene	U	0.009	0.004
sec-Butylbenzene	U	0.009	0.004
p-Isopropyltoluene	0.016	0.009	0.004
n-Butylbenzene	0.023	0.009	0.004
C1 - Benzene	0.511	0.018	0.009
C2 - Benzene	0.349	0.009	0.004
C3 - Benzene	0.070	0.009	0.004
C4 - Benzene	0.051	0.009	0.004
C5 - Benzene	0.040	0.009	0.004
trans-Decalin	0.009 J	0.009	0.004
cis-Decalin	U	0.009	0.004
Naphthalene	0.873 B	0.009	0.004
2-Methylnaphthalene	0.270 B	0.009	0.004
1-Methylnaphthalene	0.123 B	0.009	0.004
C1 - Naphthalene	0.247 B	0.009	0.004
C2 - Naphthalene	0.390 B	0.009	0.004
C3- Naphthalene	0.140 B	0.009	0.004
C4- Naphthalene	0.094	0.009	0.004
Acenaphthylene	0.110	0.009	0.004
Acenaphthene	0.055	0.009	0.004
Dibenzofuran	0.075	0.009	0.004
Fluorene	0.092	0.009	0.004
C1 - Fluorene	0.066	0.009	0.004
C2 - Fluorene	0.217	0.009	0.004
C3 - Fluorene	0.157	0.009	0.004
Phenanthrene	0.370 B	0.009	0.004
Anthracene	0.196	0.009	0.004

2/26/2009
TA090209.xls



Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Reference

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-02		
File ID:	E021814.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	1/0/1900	Decanted:	None
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.73
Date Cleanup:	NA	Percent Solid:	30.6%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.662	0.009	0.004	
C2 - Phenanthrene/Anthracene	0.276	0.009	0.004	
C3 - Phenanthrene/Anthracene	0.155	0.009	0.004	
C4 - Phenanthrene/Anthracene	0.081	0.009	0.004	
Dibenzothiophene	0.055	0.009	0.004	
C1 - Dibenzothiophene	0.074	0.009	0.004	
C2 - Dibenzothiophene	0.112	0.009	0.004	
C3 - Dibenzothiophene	0.096	0.009	0.004	
C4 - Dibenzothiophene	0.070	0.009	0.004	
Benzo(b)naphtho(2,1-d)thiophene	0.065	0.009	0.004	
Fluoranthene	0.693 B	0.009	0.004	
Pyrene	0.669 B	0.009	0.004	
C1 - Fluoranthene/Pyrene	0.450	0.009	0.004	
C2 - Fluoranthene/Pyrene	0.281	0.009	0.004	
C3 - Fluoranthene/Pyrene	0.145	0.009	0.004	
Benz[a]anthracene	0.337 B	0.009	0.004	
Chrysene*	0.370 B	0.009	0.004	
C1 - Benz(a)anthracene/Chrysene	0.245	0.009	0.004	
C2 - Benz(a)anthracene/Chrysene	0.170	0.009	0.004	
C3 - Benz(a)anthracene/Chrysene	0.093	0.009	0.004	
C4 - Benz(a)anthracene/Chrysene	0.096	0.009	0.004	
Benzo[b]fluoranthene	0.516 B	0.009	0.004	
Benzo[j/k]fluoranthene	0.442 B	0.009	0.004	
Benzo(e)pyrene	0.368 B	0.009	0.004	
Benzo[a]pyrene	0.468 B	0.009	0.004	
Perylene	0.271 B	0.009	0.004	
Indeno[1,2,3-cd]pyrene	0.344 B	0.009	0.004	
Dibenz[a,h]anthracene	0.082 B	0.009	0.004	
Benzo[g,h,i]perylene	0.360 B	0.009	0.004	
Coronene	0.096	0.009	0.004	
Retene	0.040	0.009	0.004	
Benzo(b/c)fluorenes	0.087	0.009	0.004	
2-Methylpyrene	0.058	0.009	0.004	
4-Methylpyrene	0.050	0.009	0.004	
1-Methylpyrene	0.043	0.009	0.004	
Heptadecane	0.362 B	0.018	0.009	
Pristane	0.053 B	0.009	0.004	
Octadecane	0.097 B	0.018	0.009	
Phytane	0.064 B	0.009	0.004	

2/26/2009
TA090209.xls



Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Reference

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-02		
File ID:	E021814.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	1/0/1900	Decanted:	None
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.73
Date Cleanup:	NA	Percent Solid:	30.6%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.025	0.009	0.004	
2,6,10-trimethyltridecane	0.040	0.009	0.004	
Norpristane	0.020	0.009	0.004	
Tetraethyl lead	U	0.018	0.009	
Total PAH (16)	5.98	0.009	0.004	
Total PAH (42)	11.1	0.009	0.004	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	67	50 - 120
Phenanthrene-d10	85	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 DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-01-D		
File ID:	E021812.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	1/0/1900	Decanted:	None
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.48
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	3.0 B	0.050	0.025
Toluene	2.18	0.099	0.050
Ethylbenzene	2.13	0.050	0.025
m/p-Xylenes	1.88	0.050	0.025
Styrene	0.404	0.099	0.050
o-Xylene	0.931	0.050	0.025
Isopropylbenzene	0.210	0.050	0.025
n-Propylbenzene	0.196	0.050	0.025
1,3,5-Trimethylbenzene	0.326	0.050	0.025
1,2,4-Trimethylbenzene	1.11	0.050	0.025
t-Butylbenzene	U	0.050	0.025
sec-Butylbenzene	0.033 J	0.050	0.025
p-Isopropyltoluene	0.121	0.050	0.025
n-Butylbenzene	0.151	0.050	0.025
C1 - Benzene	1.34	0.099	0.050
C2 - Benzene	2.26	0.050	0.025
C3 - Benzene	1.39	0.050	0.025
C4 - Benzene	0.835	0.050	0.025
C5 - Benzene	0.375	0.050	0.025
trans-Decalin	0.100	0.050	0.025
cis-Decalin	U	0.050	0.025
Naphthalene	151 B	0.050	0.025
2-Methylnaphthalene	5.38 B	0.050	0.025
1-Methylnaphthalene	3.5 B	0.050	0.025
C1 - Naphthalene	5.48 B	0.050	0.025
C2 - Naphthalene	3.25 B	0.050	0.025
C3- Naphthalene	2.32 B	0.050	0.025
C4- Naphthalene	1.5	0.050	0.025
Acenaphthylene	3.86	0.050	0.025
Acenaphthene	1.92	0.050	0.025
Dibenzofuran	1.85	0.050	0.025
Fluorene	1.46	0.050	0.025
C1 - Fluorene	0.814	0.050	0.025
C2 - Fluorene	1.3	0.050	0.025
C3 - Fluorene	1.13	0.050	0.025
Phenanthrene	7.01 B	0.050	0.025
Anthracene	3.72	0.050	0.025

2/26/2009
TA090209.xls



Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-01-D		
File ID:	E021812.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.48
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	3.51	0.050	0.025	
C2 - Phenanthrene/Anthracene	2.77	0.050	0.025	
C3 - Phenanthrene/Anthracene	1.66	0.050	0.025	
C4 - Phenanthrene/Anthracene	1.01	0.050	0.025	
Dibenzothiophene	0.698	0.050	0.025	
C1 - Dibenzothiophene	0.712	0.050	0.025	
C2 - Dibenzothiophene	0.845	0.050	0.025	
C3 - Dibenzothiophene	0.750	0.050	0.025	
C4 - Dibenzothiophene	0.470	0.050	0.025	
Benzo(b)naphtho(2,1-d)thiophene	1.01	0.050	0.025	
Fluoranthene	14.8 B	0.050	0.025	
Pyrene	11.4 B	0.050	0.025	
C1 - Fluoranthene/Pyrene	7.44	0.050	0.025	
C2 - Fluoranthene/Pyrene	4.52	0.050	0.025	
C3 - Fluoranthene/Pyrene	2.76	0.050	0.025	
Benz[a]anthracene	6.93 B	0.050	0.025	
Chrysene*	7.04 B	0.050	0.025	
C1 - Benz(a)anthracene/Chrysene	3.01	0.050	0.025	
C2 - Benz(a)anthracene/Chrysene	2.2	0.050	0.025	
C3 - Benz(a)anthracene/Chrysene	1.82	0.050	0.025	
C4 - Benz(a)anthracene/Chrysene	1.45	0.050	0.025	
Benzo[b]fluoranthene	6.65 B	0.050	0.025	
Benzo[j/k]fluoranthene	6.82 B	0.050	0.025	
Benzo(e)pyrene	5.5 B	0.050	0.025	
Benzo[a]pyrene	8.72 B	0.050	0.025	
Perylene	2.3 B	0.050	0.025	
Indeno[1,2,3-cd]pyrene	5.16 B	0.050	0.025	
Dibenz[a,h]anthracene	1.21 B	0.050	0.025	
Benzo[g,h,i]perylene	5.05 B	0.050	0.025	
Coronene	1.19	0.050	0.025	
Retene	0.353	0.050	0.025	
Benzo(b/c)fluorenes	1.68	0.050	0.025	
2-Methylpyrene	0.837	0.050	0.025	
4-Methylpyrene	0.954	0.050	0.025	
1-Methylpyrene	0.731	0.050	0.025	
Heptadecane	0.758 B	0.099	0.050	
Pristane	1.58 B	0.050	0.025	
Octadecane	0.697 B	0.099	0.050	
Phytane	0.383 B	0.050	0.025	

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Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-01-D		
File ID:	E021812.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.48
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.268	0.050	0.025	
2,6,10-trimethyltridecane	0.516	0.050	0.025	
Norpristane	0.265	0.050	0.025	
Tetraethyl lead	U	0.099	0.050	
Total PAH (16)	243	0.050	0.025	
Total PAH (42)	304	0.050	0.025	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	70	50 - 120
Phenanthrene-d10	82	50 - 120
Benzo[a]pyrene-d12	66	50 - 120
Perylene-d12	79	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090212-SB		
File ID:	E021804.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	2/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	2/18/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.003	0.003	0.001	
Toluene	U	0.005	0.003	
Ethylbenzene	U	0.003	0.001	
m/p-Xylenes	U	0.003	0.001	
Styrene	U	0.005	0.003	
o-Xylene	U	0.003	0.001	
Isopropylbenzene	U	0.003	0.001	
n-Propylbenzene	U	0.003	0.001	
1,3,5-Trimethylbenzene	U	0.003	0.001	
1,2,4-Trimethylbenzene	U	0.003	0.001	
t-Butylbenzene	U	0.003	0.001	
sec-Butylbenzene	U	0.003	0.001	
p-Isopropyltoluene	U	0.003	0.001	
n-Butylbenzene	U	0.003	0.001	
C1 - Benzene	U	0.005	0.003	
C2 - Benzene	U	0.003	0.001	
C3 - Benzene	U	0.003	0.001	
C4 - Benzene	U	0.003	0.001	
C5 - Benzene	U	0.003	0.001	
trans-Decalin	U	0.003	0.001	
cis-Decalin	U	0.003	0.001	
Naphthalene	0.003 J	0.003	0.001	
2-Methylnaphthalene	0.007	0.003	0.001	
1-Methylnaphthalene	0.004	0.003	0.001	
C1 - Naphthalene	0.006	0.003	0.001	
C2 - Naphthalene	0.009	0.003	0.001	
C3- Naphthalene	0.006	0.003	0.001	
C4- Naphthalene	U	0.003	0.001	
Acenaphthylene	U	0.003	0.001	
Acenaphthene	U	0.003	0.001	
Dibenzofuran	U	0.003	0.001	
Fluorene	U	0.003	0.001	
C1 - Fluorene	U	0.003	0.001	
C2 - Fluorene	U	0.003	0.001	
C3 - Fluorene	U	0.003	0.001	
Phenanthrene	0.003 J	0.003	0.001	
Anthracene	U	0.003	0.001	

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090212-SB		
File ID:	E021804.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	2/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	2/18/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	U	0.003	0.001	
C2 - Phenanthrene/Anthracene	U	0.003	0.001	
C3 - Phenanthrene/Anthracene	U	0.003	0.001	
C4 - Phenanthrene/Anthracene	U	0.003	0.001	
Dibenzothiophene	U	0.003	0.001	
C1 - Dibenzothiophene	U	0.003	0.001	
C2 - Dibenzothiophene	U	0.003	0.001	
C3 - Dibenzothiophene	U	0.003	0.001	
C4 - Dibenzothiophene	U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene	U	0.003	0.001	
Fluoranthene	0.002 J	0.003	0.001	
Pyrene	0.002 J	0.003	0.001	
C1 - Fluoranthene/Pyrene	U	0.003	0.001	
C2 - Fluoranthene/Pyrene	U	0.003	0.001	
C3 - Fluoranthene/Pyrene	U	0.003	0.001	
Benz[a]anthracene	0.002 J	0.003	0.001	
Chrysene*	0.002 J	0.003	0.001	
C1 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
Benzo[b]fluoranthene	0.002 J	0.003	0.001	
Benzo[j/k]fluoranthene	0.002 J	0.003	0.001	
Benzo(e)pyrene	0.002 J	0.003	0.001	
Benzo[a]pyrene	0.002 J	0.003	0.001	
Perylene	0.002 J	0.003	0.001	
Indeno[1,2,3-cd]pyrene	0.002 J	0.003	0.001	
Dibenz[a,h]anthracene	0.001 J	0.003	0.001	
Benzo[g,h,i]perylene	0.002 J	0.003	0.001	
Coronene	U	0.003	0.001	
Retene	U	0.003	0.001	
Benzo(b/c)fluorenes	U	0.003	0.001	
2-Methylpyrene	U	0.003	0.001	
4-Methylpyrene	U	0.003	0.001	
1-Methylpyrene	U	0.003	0.001	
Heptadecane	0.007	0.005	0.003	
Pristane	0.004	0.003	0.001	
Octadecane	0.006	0.005	0.003	
Phytane	0.003	0.003	0.001	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090212-SB		
File ID:	E021804.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	2/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	2/18/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.003	0.001	
2,6,10-trimethyltridecane	U	0.003	0.001	
Norpristane	U	0.003	0.001	
Tetraethyl lead	U	0.005	0.003	
Total PAH (16)	0.025	0.003	0.001	
Total PAH (42)	0.050	0.003	0.001	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	79	50 - 120
Phenanthrene-d10	87	50 - 120
Benzo[a]pyrene-d12	74	50 - 120
Perylene-d12	86	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090212-SBS		
File ID:	E021805.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	2/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	2/18/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:	Spike Amount				% Recovery
Benzene	2.50	1.57 B	0.003	0.001	63
Toluene	2.50	1.99	0.005	0.003	80
Ethylbenzene	2.50	1.87	0.003	0.001	75
m/p-Xylenes	2.50	1.88	0.003	0.001	75
Styrene	2.50	2.07	0.005	0.003	83
o-Xylene	2.50	1.93	0.003	0.001	77
Isopropylbenzene	2.50	1.98	0.003	0.001	79
n-Propylbenzene	2.50	1.97	0.003	0.001	79
1,3,5-Trimethylbenzene	2.50	2.0	0.003	0.001	80
1,2,4-Trimethylbenzene	2.50	1.98	0.003	0.001	79
t-Butylbenzene		U	0.003	0.001	
sec-Butylbenzene	2.50	1.97	0.003	0.001	79
p-Isopropyltoluene	2.50	2.06	0.003	0.001	82
n-Butylbenzene	2.50	2.01	0.003	0.001	80
C1 - Benzene		U	0.005	0.003	
C2 - Benzene		U	0.003	0.001	
C3 - Benzene		U	0.003	0.001	
C4 - Benzene		U	0.003	0.001	
C5 - Benzene		U	0.003	0.001	
trans-Decalin		U	0.003	0.001	
cis-Decalin		U	0.003	0.001	
Naphthalene	2.50	2.05 B	0.003	0.001	82
2-Methylnaphthalene	2.50	2.13 B	0.003	0.001	85
1-Methylnaphthalene	2.50	2.12 B	0.003	0.001	85
C1 - Naphthalene		BU	0.003	0.001	
C2 - Naphthalene		BU	0.003	0.001	
C3- Naphthalene		BU	0.003	0.001	
C4- Naphthalene		U	0.003	0.001	
Acenaphthylene	2.50	2.5	0.003	0.001	100
Acenaphthene	2.50	2.15	0.003	0.001	86
Dibenzofuran	2.50	2.1	0.003	0.001	84
Fluorene	2.50	2.24	0.003	0.001	90
C1 - Fluorene		U	0.003	0.001	
C2 - Fluorene		U	0.003	0.001	
C3 - Fluorene		U	0.003	0.001	
Phenanthrene	2.50	2.05 B	0.003	0.001	82
Anthracene	2.50	2.16	0.003	0.001	86

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090212-SBS		
File ID:	E021805.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	2/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	2/18/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene		U	0.003	0.001	
C2 - Phenanthrene/Anthracene		U	0.003	0.001	
C3 - Phenanthrene/Anthracene		U	0.003	0.001	
C4 - Phenanthrene/Anthracene		U	0.003	0.001	
Dibenzothiophene	2.50	2.04	0.003	0.001	82
C1 - Dibenzothiophene		U	0.003	0.001	
C2 - Dibenzothiophene		U	0.003	0.001	
C3 - Dibenzothiophene		U	0.003	0.001	
C4 - Dibenzothiophene		U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene		U	0.003	0.001	
Fluoranthene	2.50	2.22 B	0.003	0.001	89
Pyrene	2.50	2.23 B	0.003	0.001	89
C1 - Fluoranthene/Pyrene		U	0.003	0.001	
C2 - Fluoranthene/Pyrene		U	0.003	0.001	
C3 - Fluoranthene/Pyrene		U	0.003	0.001	
Benz[a]anthracene	2.50	2.16 B	0.003	0.001	86
Chrysene*	2.50	2.1 B	0.003	0.001	84
C1 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
Benzo[b]fluoranthene	2.50	2.12 B	0.003	0.001	85
Benzo[j/k]fluoranthene	2.50	2.2 B	0.003	0.001	88
Benzo(e)pyrene	2.50	2.04 B	0.003	0.001	82
Benzo[a]pyrene	2.50	2.15 B	0.003	0.001	86
Perylene		BU	0.003	0.001	
Indeno[1,2,3-cd]pyrene	2.50	1.98 B	0.003	0.001	79
Dibenz[a,h]anthracene	2.50	2.16 B	0.003	0.001	86
Benzo[g,h,i]perylene	2.50	2.05 B	0.003	0.001	82
Coronene		U	0.003	0.001	
Retene		U	0.003	0.001	
Benzo(b/c)fluorenes		U	0.003	0.001	
2-Methylpyrene		U	0.003	0.001	
4-Methylpyrene		U	0.003	0.001	
1-Methylpyrene		U	0.003	0.001	
Heptadecane		BU	0.005	0.003	
Pristane		BU	0.003	0.001	
Octadecane		BU	0.005	0.003	
Phytane		BU	0.003	0.001	

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090212-SBS		
File ID:	E021805.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	2/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	2/18/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.003	0.001	
2,6,10-trimethyltridecane	U	0.003	0.001	
Norpristane	U	0.003	0.001	
Tetraethyl lead	U	0.005	0.003	
<i>Extraction Surrogate Recoveries (%)</i>		<i>Limits</i>		
Toluene-d8	72	50 - 120		
Phenanthrene-d10	85	50 - 120		
Benzo[a]pyrene-d12	71	50 - 120		
Perylene-d12	80	50 - 120		

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-03A-00 - 10X

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
Lab ID	TA090209-01DUP-D	Analysis Method:	EPA 8270M
File ID:	E021813.D	Matrix:	Sediment
Date Sampled:	1/0/1900	Preservation:	None
Date Received:	2/9/2009	Decanted:	None
Date Prepared:	2/12/2009	Sample Size (g):	3.66
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
Batch QC:	QC090212-SB	Injection Volume (µl):	1.00

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	3.96 B	0.047	0.024	27.6
Toluene	1.66	0.094	0.047	27.1
Ethylbenzene	2.11	0.047	0.024	0.9
m/p-Xylenes	1.47	0.047	0.024	24.5
Styrene	0.320	0.094	0.047	23.2
o-Xylene	0.679	0.047	0.024	31.3
Isopropylbenzene	0.165	0.047	0.024	24
n-Propylbenzene	0.159	0.047	0.024	20.8
1,3,5-Trimethylbenzene	0.251	0.047	0.024	26
1,2,4-Trimethylbenzene	0.863	0.047	0.024	25
t-Butylbenzene	U	0.047	0.024	NA
sec-Butylbenzene	U	0.047	0.024	NA
p-Isopropyltoluene	0.091	0.047	0.024	28.3
n-Butylbenzene	0.120	0.047	0.024	22.9
C1 - Benzene	1.01	0.094	0.047	28.1
C2 - Benzene	1.9	0.047	0.024	17.3
C3 - Benzene	1.15	0.047	0.024	18.9
C4 - Benzene	0.665	0.047	0.024	22.7
C5 - Benzene	0.301	0.047	0.024	21.9
trans-Decalin	0.087	0.047	0.024	13.9
cis-Decalin	U	0.047	0.024	NA
Naphthalene	133 B	0.047	0.024	12.7
2-Methylnaphthalene	4.38 B	0.047	0.024	20.5
1-Methylnaphthalene	2.59 B	0.047	0.024	29.9
C1 - Naphthalene	4.51 B	0.047	0.024	19.4
C2 - Naphthalene	2.48 B	0.047	0.024	26.9
C3- Naphthalene	1.8 B	0.047	0.024	25.2
C4- Naphthalene	1.14	0.047	0.024	27.3
Acenaphthylene	4.36	0.047	0.024	12.2
Acenaphthene	1.06	0.047	0.024	57.7
Dibenzofuran	1.47	0.047	0.024	22.9
Fluorene	0.990	0.047	0.024	38.4
C1 - Fluorene	0.808	0.047	0.024	0.7
C2 - Fluorene	1.33	0.047	0.024	2.3
C3 - Fluorene	0.968	0.047	0.024	15.4
Phenanthrene	6.62 B	0.047	0.024	5.7
Anthracene	9.14	0.047	0.024	84.3

Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Duplicate of BH-SED-03A-00 - 10X

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-01DUP-D		
File ID:	E021813.D	Matrix:	Sediment
		Preservation:	None
Date Sampled:	1/0/1900	Decanted:	None
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.66
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	5.58	0.047	0.024	45.5
C2 - Phenanthrene/Anthracene	3.51	0.047	0.024	23.6
C3 - Phenanthrene/Anthracene	1.51	0.047	0.024	9.5
C4 - Phenanthrene/Anthracene	0.560	0.047	0.024	57.3
Dibenzothiophene	0.619	0.047	0.024	12
C1 - Dibenzothiophene	0.837	0.047	0.024	16.1
C2 - Dibenzothiophene	0.897	0.047	0.024	6
C3 - Dibenzothiophene	0.628	0.047	0.024	17.7
C4 - Dibenzothiophene	0.311	0.047	0.024	40.7
Benzo(b)naphtho(2,1-d)thiophene	2.2	0.047	0.024	74.1
Fluoranthene	35.6 B	0.047	0.024	82.5
Pyrene	28.2 B	0.047	0.024	84.8
C1 - Fluoranthene/Pyrene	14.7	0.047	0.024	65.6
C2 - Fluoranthene/Pyrene	3.35	0.047	0.024	29.7
C3 - Fluoranthene/Pyrene	1.33	0.047	0.024	69.9
Benz[a]anthracene	17.0 B	0.047	0.024	84.2
Chrysene*	16.3 B	0.047	0.024	79.3
C1 - Benz(a)anthracene/Chrysene	4.18	0.047	0.024	32.5
C2 - Benz(a)anthracene/Chrysene	1.46	0.047	0.024	40.4
C3 - Benz(a)anthracene/Chrysene	0.633	0.047	0.024	96.8
C4 - Benz(a)anthracene/Chrysene	0.534	0.047	0.024	92.3
Benzo[b]fluoranthene	12.8 B	0.047	0.024	63.2
Benzo[j/k]fluoranthene	13.1 B	0.047	0.024	63.1
Benzo(e)pyrene	9.62 B	0.047	0.024	54.5
Benzo[a]pyrene	16.4 B	0.047	0.024	61.1
Perylene	4.43 B	0.047	0.024	63.3
Indeno[1,2,3-cd]pyrene	9.08 B	0.047	0.024	55.1
Dibenz[a,h]anthracene	2.06 B	0.047	0.024	52
Benzo[g,h,i]perylene	8.84 B	0.047	0.024	54.6
Coronene	2.13	0.047	0.024	56.6
Retene	0.275	0.047	0.024	24.8
Benzo(b/c)fluorenes	4.3	0.047	0.024	87.6
2-Methylpyrene	1.3	0.047	0.024	43.3
4-Methylpyrene	0.992	0.047	0.024	3.9
1-Methylpyrene	1.1	0.047	0.024	40.3
Heptadecane	0.865 B	0.094	0.047	13.2
Pristane	1.41 B	0.047	0.024	11.4
Octadecane	0.798 B	0.094	0.047	13.5
Phytane	0.589 B	0.047	0.024	42.4

2/26/2009
TA090209.xls

META 

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-03A-00 - 10X

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090209-01DUP-D		
File ID:	E021813.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.66
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.195	0.047	0.024	31.5
2,6,10-trimethyltridecane	0.356	0.047	0.024	36.7
Norpristane	0.232	0.047	0.024	13.3
Tetraethyl lead	U	0.094	0.047	NA
Total PAH (16)	314	0.047	0.024	25.5
Total PAH (42)	384	0.047	0.024	23.3

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	63	50 - 120
Phenanthrene-d10	74	50 - 120
Benzo[a]pyrene-d12	61	50 - 120
Perylene-d12	72	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 REPORT

PROJECT NO. MES SPARROWS

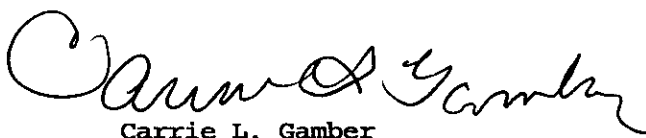
MES Sparrows Point 18001868

Lot #: C9C020106

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.


Carrie L. Gamber
Project Manager

March 30, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C020106

Meta Environmental, Inc, Watertown, MA analyzed the samples.



March 18, 2009

Carrie Gamber
Test America
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

RE: Sparrow's Point Interim Report; Sample Delivery Group: TA090226

Dear Ms. Gamber:

This package contains the summary results from two (2) sediment samples received on February 26th, 2009 by META Environmental, Inc. (META) from EA Engineering, Science, and Technology, Inc (EA).

Methods

The samples were prepared by solvent extraction (EPA 3570) using dichloromethane (DCM). The extracts were spiked with internal standard and analyzed by GC/FID (EPA 8100M) for fingerprinting and by GC/MS/SIM (EPA 8270M) for mono- and polycyclic aromatic hydrocarbons (MAHs and PAHs), alkyl PAH homologues and other selected compounds.

A portion of the extract was sent to Oklahoma University for compound-specific stable carbon isotope ratios (CSIR) of PAHs. Those results are not yet available.

QC Summary

8270M – Mono- and Polycyclic Aromatic Hydrocarbons

QC090303-SB – Compound is detected above reporting limit.

Benzene, toluene, styrene, C1-Benzene, C1-naphthalenes, phenanthrene, C1-phenanthrenes, fluoranthene, pyrene, benz(a)anthracene, chrysene, heptadecane, octadecane.

QC090303-SBS - Percent recovery is outside laboratory criteria (70-120%)

Benzene (59%)

No other observations noted.

Qualifications

The determination of sample identity was based on visual inspection of GC/FID chromatograms, GC/MS source and weathering ratios, and comparison to META's archive of reference samples.

Statistical results, histograms, GC/MS extracted ion current profiles and other supporting data will be provided in the final project report.

Fingerprinting Results

BH-SED-10-2

Sample *BH-SED-10-2* contained both petrogenic and pyrogenic materials. The pyrogenic material was indicated by a wide range distribution of unsubstituted polycyclic aromatic hydrocarbons (PAHs) with 2-, & 3-ring and 4, 5, & 6-ring PAHs present. The ratio of fluoranthene to pyrene of about 1.48 is in the range consistent with tars in META's library that were formed from manufactured gas plants utilizing coal carbonization processes, byproduct coke ovens, as well as some coal tar products, such as creosote, road tar, roofing, and waterproofing materials.

The sample contained much higher concentrations of naphthalene relative to other low molecular weight 2-, and 3-ring PAHs. This is atypical for tar-like materials (TLM), and weathered TLM, and suggests a source of naphthalene separate or in addition to the other pyrogenic PAHs. For example, naphthalene oil or "front end" oil is a product of the distillation of coal tar, and consists principally of naphthalene. Similarly, naphthalene scrubbers frequently were components of coal gas plants and light oil recovery plants. The naphthalene scrubbers removed much of the naphthalene from the gas stream prior to recovery of light oil chemicals¹. The waste naphthalene was either recycled to the bulk tar or disposed of. Finally, naphthalene was reported to precipitate out of coal gas as it cooled in tanks and piping and had to be removed by scrapping or collection as drips. The specific source of the elevated naphthalene in the Sparrows Point samples could not be identified with the available data.

The petrogenic material was indicated by a late eluting bimodal UCM beginning at about 21 minutes, peaking once at about 32 minutes, again at about 44 minutes, and ending at about 60 minutes. The high molecular weight petrogenic material also contained alkane and alkyl-cyclohexane compounds, in addition to the sesquiterpane, triterpane and sterane classes of petroleum biomarkers. This pattern is consistent with some severely weathered crude oils, No. 6 or bunker C oils and petroleum background in urban sediments.

BH-SED-03A-12

Sample *BH-SED-03A-12* contained pyrogenic material. . The pyrogenic material consisted of low relative concentrations of 3, 4, and 5-ring PAHs with a much higher relative concentration of naphthalene. The fluoranthene to pyrene ratio (0.92) was substantially lower than in sample BH-SED-10-2, and was similar to those found in urban background and some coal tars. The amount of naphthalene relative to the other PAHs was similar to sample BH-SED-10-2.

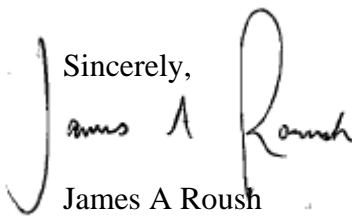
Definitions

Pyrogenic substances are complex mixtures of primarily hydrocarbons produced from organic matter subjected to high temperatures but with insufficient oxygen for complete combustion. Pyrogenic materials are produced by fires, internal combustion engines, and furnaces. They also are formed when coke or gas are produced from coal or oil. Coal-tar based products, such as

roofing, pavement sealers, waterproofing, pesticides, and some shampoos contain pyrogenic materials.

Petrogenic substances include crude oil and crude oil derivatives such as gasoline, heating oil, and asphalt.

The data contained in this report will be used in conjunction with data collected at future sampling time points to provide a more comprehensive forensic characterization of the Sparrow's Point Site. Additionally, an in-depth description of the analytical methods used, and a general forensic chemistry overview will be provided. Please contact me if you have any questions about these results.

Sincerely,

James A Roush
Laboratory Manager

1, Chemistry of Coal Utilization Second Supplementary Volume. John Wiley & Sons, New York, NY 1981.

Attachments:

Chain of Custody

GC/FID Chromatograms

MAH & PAH Concentration Data

Turn Around Time	
Standard	<input checked="" type="checkbox"/>
If Authorized *	
1 Week	<input type="checkbox"/>
Other	<input type="checkbox"/>

META



Tel (617) 923-4662 - Fax (617) 923-4610 - www.metaenv.com

Sign

[illegible]

META Environmental, Inc.

Sample Receipt Log

Lab ID	Field ID	Matrix	Prep Method	Cleanup Method	Analysis Method	Date Sampled	Date Received	Project #	Container	Comments	Client Name	Project Name
TA090226-01	BH-SED-10-2	Sediment	2508		4007/4008	2/24/2009	2/26/2009	T06006-60	2 x 4oz jar		Test America	Sparrows Point
TA090226-02	BH-SED-03A-12	Sediment	2508		4007/4008	2/25/2009	2/26/2009	T06006-60	2 x 4oz jar		Test America	Sparrows Point

Logged By: PSDate: 3/2/09

Page 1 of 1

Reviewed By: JKDate: 3/3/09

C9C020106

7

(1 - 27)

META Environmental, Inc.
Sample Receipt Checklist

Receipt date: 2/26/09
Login date: 2/26/09
Login personnel: PS

Client Information:

Company Name: EA Engineering / Test America
Project Manager: Frank Baranico
Project Name: SPAWN Spit Point Test America

Shipping Information:

How were samples received? UPS FedEx DHL Other:
Number of coolers: 1
Internal temperature of coolers: 6.5°C
Was ice present? Yes No

Note: if cooler is outside the 2-6° range, META's project manager should be notified.

Documentation:

Was a Chain of Custody present? Yes / No
Was it signed? Yes / No
Was all project information present on the COC? Yes / No
Was a bill of lading or shipping label retained? Yes / No

Sample Information:

Number of sample containers: 4
Does this match the COC? Yes / No
Were all sample containers Intact? Yes / No

If no, list samples and problems:

Note: if samples are damaged, META's project manager should be notified.

For aqueous 40ml Voas; was headspace present? Yes / No / NA

Comments:

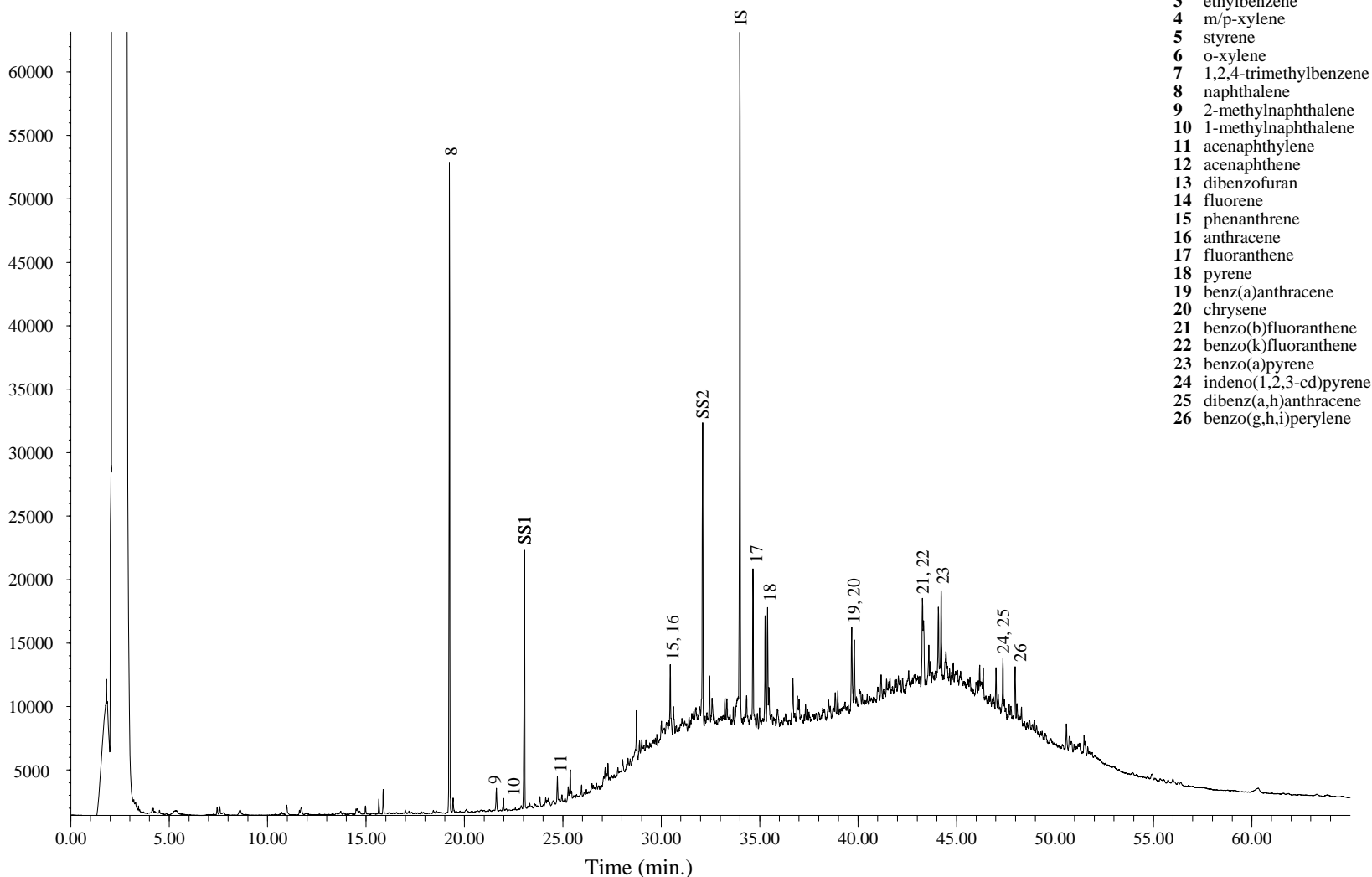
Custodian: Robert Galt

Project Manager: Jan A. R.

GC/FID Fingerprint

7 of 25

C030523.D\FID2B



Extraction Date: 03/03/2009
Analysis Date: 03/06/2009

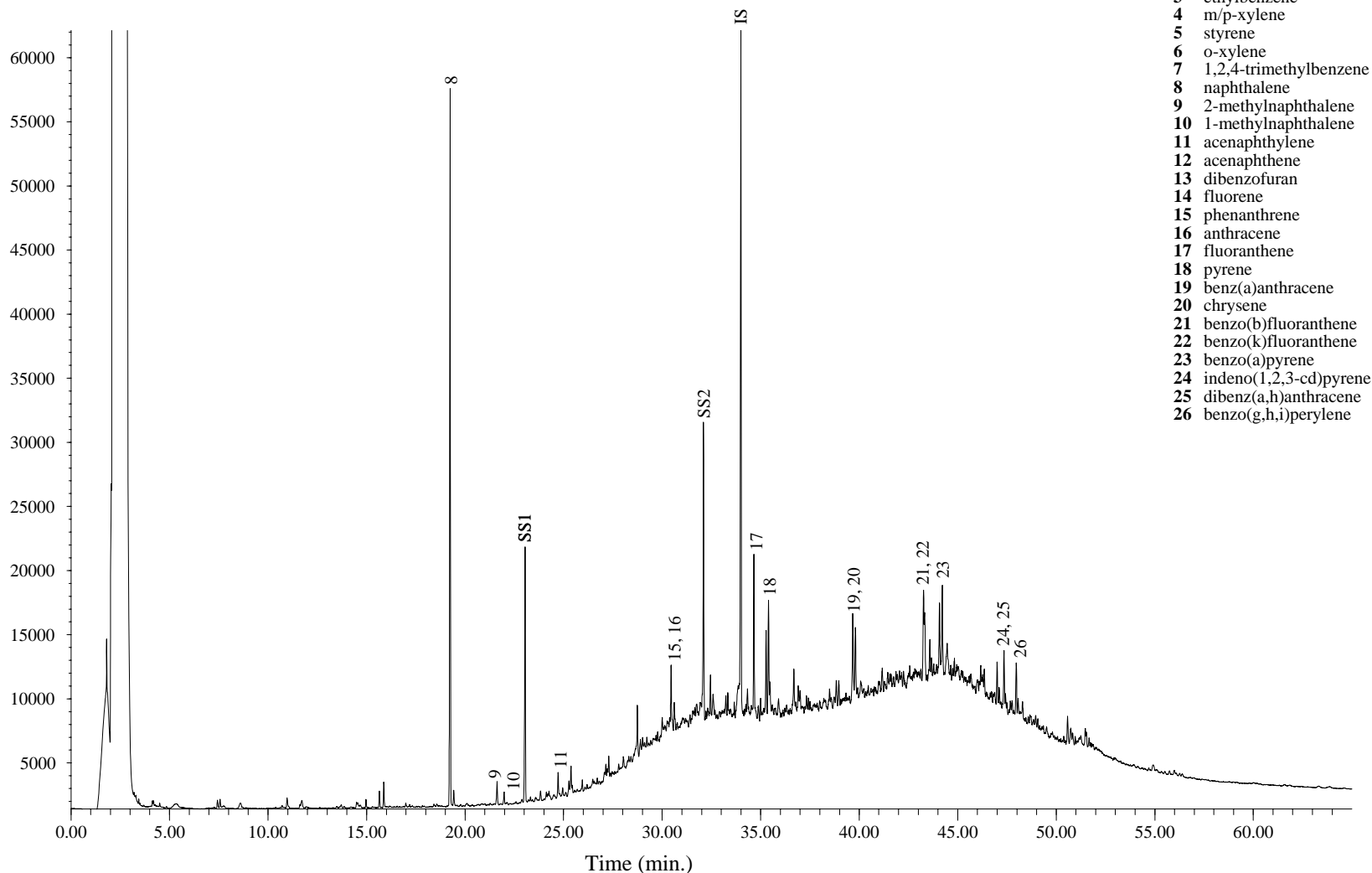
IS – 5 α -androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: BH-SED-10-2
Laboratory ID: TA090226-01
Method: EPA 8100M

GC/FID Fingerprint

8 of 25

C030524.D\FID2B



Extraction Date: 03/03/2009
Analysis Date: 03/06/2009

IS - 5 α -androstane
SS1 - 2-fluorobiphenyl
SS2 - o-terphenyl

Field ID: BH-SED-10-2

Laboratory ID: TA090226-01DUP

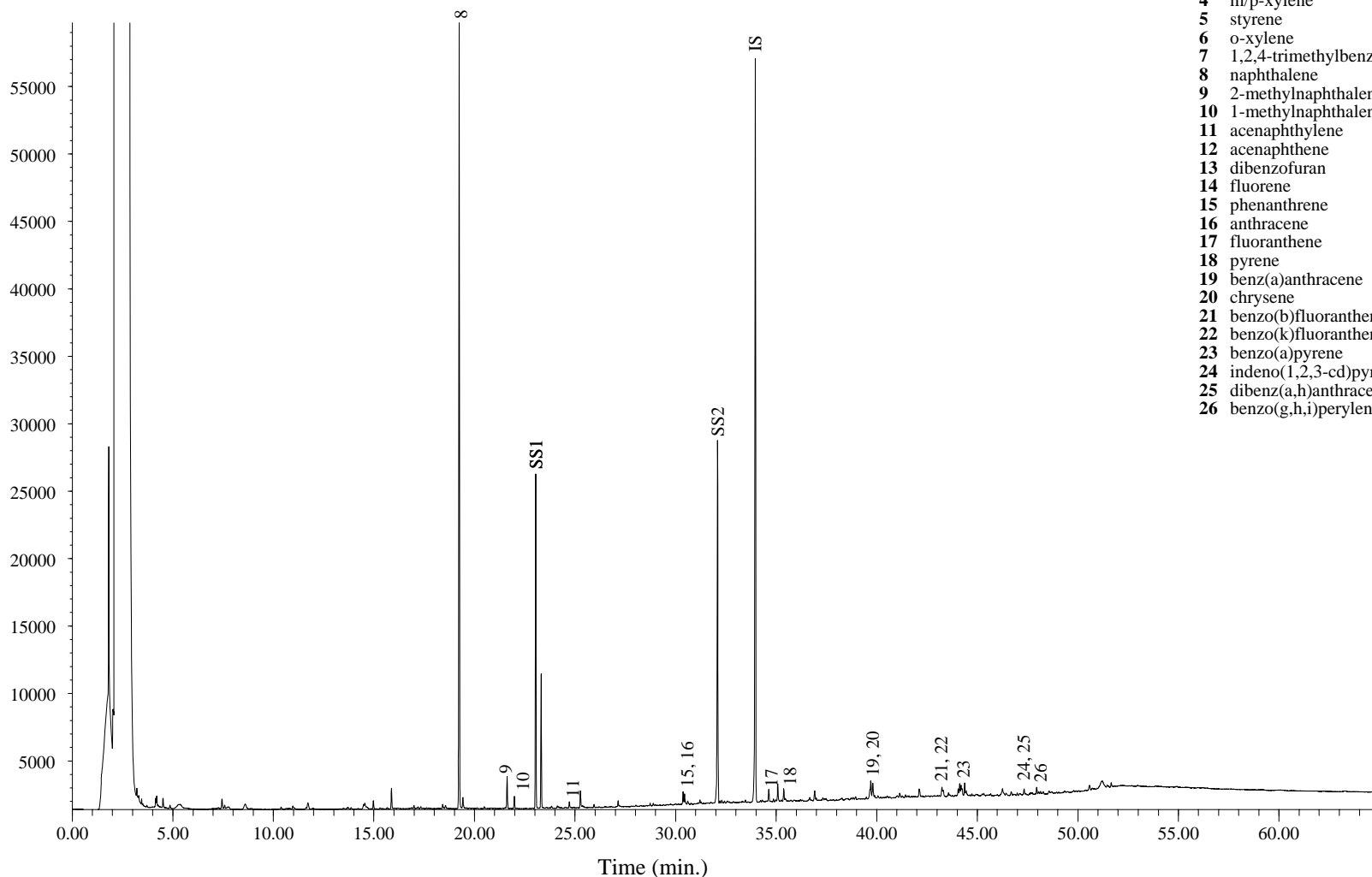
Method: EPA 8100M

GC/FID Fingerprint

9 of 25

C030525.D\FID2B

- 1 benzene
- 2 toluene
- 3 ethylbenzene
- 4 m/p-xylene
- 5 styrene
- 6 o-xylene
- 7 1,2,4-trimethylbenzene
- 8 naphthalene
- 9 2-methylnaphthalene
- 10 1-methylnaphthalene
- 11 acenaphthylene
- 12 acenaphthene
- 13 dibenzofuran
- 14 fluorene
- 15 phenanthrene
- 16 anthracene
- 17 fluoranthene
- 18 pyrene
- 19 benz(a)anthracene
- 20 chrysene
- 21 benzo(b)fluoranthene
- 22 benzo(k)fluoranthene
- 23 benzo(a)pyrene
- 24 indeno(1,2,3-cd)pyrene
- 25 dibenz(a,h)anthracene
- 26 benzo(g,h,i)perylene



Extraction Date: 03/03/2009
Analysis Date: 03/06/2009

IS – 5α-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

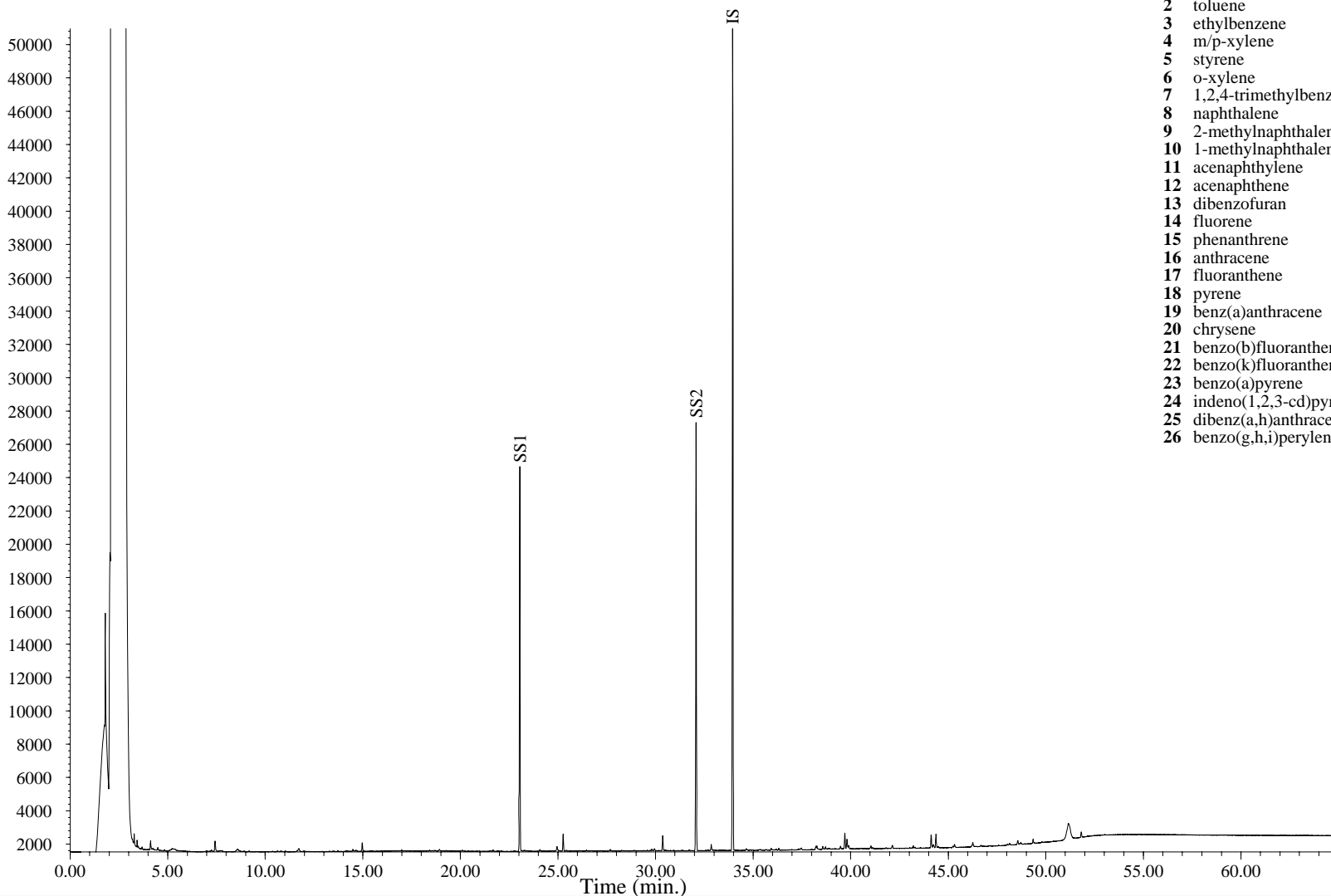
Field ID: BH-SED-03A-12
Laboratory ID: TA090226-02
Method: EPA 8100M

GC/FID Fingerprint

10 of 25

C030505.D\FID2B

- 1 benzene
- 2 toluene
- 3 ethylbenzene
- 4 m/p-xylene
- 5 styrene
- 6 o-xylene
- 7 1,2,4-trimethylbenzene
- 8 naphthalene
- 9 2-methylnaphthalene
- 10 1-methylnaphthalene
- 11 acenaphthylene
- 12 acenaphthene
- 13 dibenzofuran
- 14 fluorene
- 15 phenanthrene
- 16 anthracene
- 17 fluoranthene
- 18 pyrene
- 19 benz(a)anthracene
- 20 chrysene
- 21 benzo(b)fluoranthene
- 22 benzo(k)fluoranthene
- 23 benzo(a)pyrene
- 24 indeno(1,2,3-cd)pyrene
- 25 dibenz(a,h)anthracene
- 26 benzo(g,h,i)perylene



Extraction Date: 03/03/2009
Analysis Date: 03/05/2009

IS – 5α-androstane
 SS1 – 2-fluorobiphenyl
 SS2 – o-terphenyl

Field ID: Soil Blank
Laboratory ID: QC090303-SB
Method: EPA 8100M

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01-D		
File ID:	E030516.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	2/24/2009	Decanted:	None
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.62
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.933 B	0.092	0.046
Toluene	1.69 B	0.092	0.046
Ethylbenzene	0.394	0.092	0.046
m/p-Xylenes	1.72 B	0.092	0.046
Styrene	1.36 B	0.092	0.046
o-Xylene	0.323	0.092	0.046
Isopropylbenzene	0.135	0.092	0.046
n-Propylbenzene	0.067 J	0.092	0.046
1,3,5-Trimethylbenzene	0.234 B	0.092	0.046
1,2,4-Trimethylbenzene	0.445	0.092	0.046
t-Butylbenzene	0.072 J	0.092	0.046
sec-Butylbenzene	0.065 J	0.092	0.046
p-Isopropyltoluene	0.055 J	0.092	0.046
n-Butylbenzene	0.088 J	0.092	0.046
C1 - Benzene	1.01 B	0.092	0.046
C2 - Benzene	1.24	0.092	0.046
C3 - Benzene	0.690	0.092	0.046
C4 - Benzene	0.390	0.092	0.046
C5 - Benzene	0.353	0.092	0.046
trans-Decalin	U	0.092	0.046
cis-Decalin	U	0.092	0.046
Naphthalene	78.6 B	0.092	0.046
2-Methylnaphthalene	2.84 B	0.092	0.046
1-Methylnaphthalene	1.61 B	0.092	0.046
C1 - Naphthalene	2.78 B	0.092	0.046
C2 - Naphthalene	2.28	0.092	0.046
C3- Naphthalene	1.73	0.092	0.046
C4- Naphthalene	2.61	0.092	0.046
Acenaphthylene	4.39 B	0.092	0.046
Acenaphthene	3.28	0.092	0.046
Dibenzofuran	1.99	0.092	0.046
Fluorene	2.06 B	0.092	0.046
C1 - Fluorene	1.48	0.092	0.046
C2 - Fluorene	3.19	0.092	0.046
C3 - Fluorene	3.93	0.092	0.046
Phenanthrene	8.2 B	0.092	0.046
Anthracene	4.53 B	0.092	0.046

3/13/2009
TA090226



Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01-D		
File ID:	E030516.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	2/24/2009	Decanted:	None
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.62
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	4.81 B	0.092	0.046	
C2 - Phenanthrene/Anthracene	5.84	0.092	0.046	
C3 - Phenanthrene/Anthracene	7.16	0.092	0.046	
C4 - Phenanthrene/Anthracene	3.75	0.092	0.046	
Dibenzothiophene	0.962 B	0.092	0.046	
C1 - Dibenzothiophene	1.36	0.092	0.046	
C2 - Dibenzothiophene	2.59	0.092	0.046	
C3 - Dibenzothiophene	3.45	0.092	0.046	
C4 - Dibenzothiophene	2.17	0.092	0.046	
Benzo(b)naphtho(2,1-d)thiophene	1.94	0.092	0.046	
Fluoranthene	22.0 B	0.092	0.046	
Pyrene	14.9 B	0.092	0.046	
C1 - Fluoranthene/Pyrene	13.1	0.092	0.046	
C2 - Fluoranthene/Pyrene	7.24	0.092	0.046	
C3 - Fluoranthene/Pyrene	5.2	0.092	0.046	
Benz[a]anthracene	10.3 B	0.092	0.046	
Chrysene*	7.92 B	0.092	0.046	
C1 - Benz(a)anthracene/Chrysene	6.58	0.092	0.046	
C2 - Benz(a)anthracene/Chrysene	5.21	0.092	0.046	
C3 - Benz(a)anthracene/Chrysene	3.5	0.092	0.046	
C4 - Benz(a)anthracene/Chrysene	3.12	0.092	0.046	
Benzo[b]fluoranthene	9.45 B	0.092	0.046	
Benzo[j/k]fluoranthene	9.09 B	0.092	0.046	
Benzo(e)pyrene	6.79 B	0.092	0.046	
Benzo[a]pyrene	10.3 B	0.092	0.046	
Perylene	2.82	0.092	0.046	
Indeno[1,2,3-cd]pyrene	6.17 B	0.092	0.046	
Dibenz[a,h]anthracene	1.8 B	0.092	0.046	
Benzo[g,h,i]perylene	5.58 B	0.092	0.046	
Coronene	1.19	0.092	0.046	
Retene	1.79	0.092	0.046	
Benzo(b/c)fluorenes	2.96	0.092	0.046	
2-Methylpyrene	1.38	0.092	0.046	
4-Methylpyrene	1.35	0.092	0.046	
1-Methylpyrene	1.12	0.092	0.046	
Heptadecane	2.25 B	0.092	0.046	
Pristane	2.73	0.092	0.046	
Octadecane	1.81 B	0.092	0.046	
Phytane	3.28	0.092	0.046	

3/13/2009
TA090226



Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01-D		
File ID:	E030516.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	2/24/2009	Decanted:	None
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.62
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.090 J	0.092	0.046	
2,6,10-trimethyltridecane	0.511	0.092	0.046	
Norpristane	1.45	0.092	0.046	
Tetraethyl lead	U	0.092	0.046	
Total PAH (16)	198	0.092	0.046	
Total PAH (42)	304	0.092	0.046	

Extraction Surrogate Recoveries (%)	Limits
Toluene-d8	60 50 - 120
Phenanthrene-d10	89 50 - 120
Benzo[a]pyrene-d12	65 50 - 120
Perylene-d12	77 50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03A-12

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-02		
File ID:	E030518.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	2/25/2009	Decanted:	None
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.88
Date Cleanup:	NA	Percent Solid:	76.6%
Date Analyzed:	3/7/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.534 B	0.005	0.002	
Toluene	0.247 B	0.005	0.002	
Ethylbenzene	0.037	0.005	0.002	
m/p-Xylenes	0.235 B	0.005	0.002	
Styrene	0.139 B	0.005	0.002	
o-Xylene	0.047	0.005	0.002	
Isopropylbenzene	0.003 J	0.005	0.002	
n-Propylbenzene	0.008	0.005	0.002	
1,3,5-Trimethylbenzene	0.094 B	0.005	0.002	
1,2,4-Trimethylbenzene	0.239	0.005	0.002	
t-Butylbenzene	U	0.005	0.002	
sec-Butylbenzene	U	0.005	0.002	
p-Isopropyltoluene	0.012	0.005	0.002	
n-Butylbenzene	0.017	0.005	0.002	
C1 - Benzene	0.150 B	0.005	0.002	
C2 - Benzene	0.155	0.005	0.002	
C3 - Benzene	0.219	0.005	0.002	
C4 - Benzene	0.130	0.005	0.002	
C5 - Benzene	0.039	0.005	0.002	
trans-Decalin	0.005 J	0.005	0.002	
cis-Decalin	U	0.005	0.002	
Naphthalene	46.0 DB	0.005	0.002	
2-Methylnaphthalene	1.66 B	0.005	0.002	
1-Methylnaphthalene	0.616 B	0.005	0.002	
C1 - Naphthalene	1.4 B	0.005	0.002	
C2 - Naphthalene	0.238	0.005	0.002	
C3- Naphthalene	0.093	0.005	0.002	
C4- Naphthalene	0.067	0.005	0.002	
Acenaphthylene	0.342 B	0.005	0.002	
Acenaphthene	0.075	0.005	0.002	
Dibenzofuran	0.207	0.005	0.002	
Fluorene	0.340 B	0.005	0.002	
C1 - Fluorene	0.052	0.005	0.002	
C2 - Fluorene	0.088	0.005	0.002	
C3 - Fluorene	0.106	0.005	0.002	
Phenanthrene	0.529 B	0.005	0.002	
Anthracene	0.199 B	0.005	0.002	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03A-12

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-02		
File ID:	E030518.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/25/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.88
Date Cleanup:	NA	Percent Solid:	76.6%
Date Analyzed:	3/7/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.345 B	0.005	0.002	
C2 - Phenanthrene/Anthracene	0.364	0.005	0.002	
C3 - Phenanthrene/Anthracene	0.254	0.005	0.002	
C4 - Phenanthrene/Anthracene	0.136	0.005	0.002	
Dibenzothiophene	0.049 B	0.005	0.002	
C1 - Dibenzothiophene	0.100	0.005	0.002	
C2 - Dibenzothiophene	0.089	0.005	0.002	
C3 - Dibenzothiophene	0.114	0.005	0.002	
C4 - Dibenzothiophene	0.077	0.005	0.002	
Benzo(b)naphtho(2,1-d)thiophene	0.084	0.005	0.002	
Fluoranthene	0.681 B	0.005	0.002	
Pyrene	0.741 B	0.005	0.002	
C1 - Fluoranthene/Pyrene	0.601	0.005	0.002	
C2 - Fluoranthene/Pyrene	0.380	0.005	0.002	
C3 - Fluoranthene/Pyrene	0.258	0.005	0.002	
Benz[a]anthracene	0.464 B	0.005	0.002	
Chrysene*	0.376 B	0.005	0.002	
C1 - Benz(a)anthracene/Chrysene	0.429	0.005	0.002	
C2 - Benz(a)anthracene/Chrysene	0.378	0.005	0.002	
C3 - Benz(a)anthracene/Chrysene	0.224	0.005	0.002	
C4 - Benz(a)anthracene/Chrysene	0.150	0.005	0.002	
Benzo[b]fluoranthene	0.415 B	0.005	0.002	
Benzo[j/k]fluoranthene	0.409 B	0.005	0.002	
Benzo(e)pyrene	0.321 B	0.005	0.002	
Benzo[a]pyrene	0.469 B	0.005	0.002	
Perylene	0.142	0.005	0.002	
Indeno[1,2,3-cd]pyrene	0.290 B	0.005	0.002	
Dibenz[a,h]anthracene	0.085 B	0.005	0.002	
Benzo[g,h,i]perylene	0.273 B	0.005	0.002	
Coronene	0.066	0.005	0.002	
Retene	0.042	0.005	0.002	
Benzo(b/c)fluorenes	0.127	0.005	0.002	
2-Methylpyrene	0.107	0.005	0.002	
4-Methylpyrene	0.073	0.005	0.002	
1-Methylpyrene	0.055	0.005	0.002	
Heptadecane	0.127 B	0.005	0.002	
Pristane	0.059	0.005	0.002	
Octadecane	0.114 B	0.005	0.002	
Phytane	0.072	0.005	0.002	

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Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-03A-12

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-02		
File ID:	E030518.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	2/25/2009	Decanted:	None
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.88
Date Cleanup:	NA	Percent Solid:	76.6%
Date Analyzed:	3/7/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.010	0.005	0.002	
2,6,10-trimethyltridecane	0.015	0.005	0.002	
Norpristane	0.020	0.005	0.002	
Tetraethyl lead	U	0.005	0.002	
Total PAH (16)	51.7	0.005	0.002	
Total PAH (42)	58.4	0.005	0.002	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	65	50 - 120
Phenanthrene-d10	80	50 - 120
Benzo[a]pyrene-d12	63	50 - 120
Perylene-d12	71	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090303-SB		
File ID:	E030504.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	3/3/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/5/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.006	0.003	0.001	
Toluene	0.007	0.003	0.001	
Ethylbenzene	U	0.003	0.001	
m/p-Xylenes	0.002 J	0.003	0.001	
Styrene	0.035	0.003	0.001	
o-Xylene	U	0.003	0.001	
Isopropylbenzene	U	0.003	0.001	
n-Propylbenzene	U	0.003	0.001	
1,3,5-Trimethylbenzene	0.002 J	0.003	0.001	
1,2,4-Trimethylbenzene	U	0.003	0.001	
t-Butylbenzene	U	0.003	0.001	
sec-Butylbenzene	U	0.003	0.001	
p-Isopropyltoluene	U	0.003	0.001	
n-Butylbenzene	U	0.003	0.001	
C1 - Benzene	0.004	0.003	0.001	
C2 - Benzene	U	0.003	0.001	
C3 - Benzene	U	0.003	0.001	
C4 - Benzene	U	0.003	0.001	
C5 - Benzene	U	0.003	0.001	
trans-Decalin	U	0.003	0.001	
cis-Decalin	U	0.003	0.001	
Naphthalene	0.001 J	0.003	0.001	
2-Methylnaphthalene	0.002 J	0.003	0.001	
1-Methylnaphthalene	0.002 J	0.003	0.001	
C1 - Naphthalene	0.003	0.003	0.001	
C2 - Naphthalene	U	0.003	0.001	
C3- Naphthalene	U	0.003	0.001	
C4- Naphthalene	U	0.003	0.001	
Acenaphthylene	0.002 J	0.003	0.001	
Acenaphthene	U	0.003	0.001	
Dibenzofuran	U	0.003	0.001	
Fluorene	0.003 J	0.003	0.001	
C1 - Fluorene	U	0.003	0.001	
C2 - Fluorene	U	0.003	0.001	
C3 - Fluorene	U	0.003	0.001	
Phenanthrene	0.007	0.003	0.001	
Anthracene	0.002 J	0.003	0.001	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090303-SB		
File ID:	E030504.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/3/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/5/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.004	0.003	0.001	
C2 - Phenanthrene/Anthracene	U	0.003	0.001	
C3 - Phenanthrene/Anthracene	U	0.003	0.001	
C4 - Phenanthrene/Anthracene	U	0.003	0.001	
Dibenzothiophene	0.001 J	0.003	0.001	
C1 - Dibenzothiophene	U	0.003	0.001	
C2 - Dibenzothiophene	U	0.003	0.001	
C3 - Dibenzothiophene	U	0.003	0.001	
C4 - Dibenzothiophene	U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene	U	0.003	0.001	
Fluoranthene	0.004	0.003	0.001	
Pyrene	0.005	0.003	0.001	
C1 - Fluoranthene/Pyrene	U	0.003	0.001	
C2 - Fluoranthene/Pyrene	U	0.003	0.001	
C3 - Fluoranthene/Pyrene	U	0.003	0.001	
Benz[a]anthracene	0.003	0.003	0.001	
Chrysene*	0.003	0.003	0.001	
C1 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
Benzo[b]fluoranthene	0.002 J	0.003	0.001	
Benzo[j/k]fluoranthene	0.003 J	0.003	0.001	
Benzo(e)pyrene	0.002 J	0.003	0.001	
Benzo[a]pyrene	0.003 J	0.003	0.001	
Perylene	U	0.003	0.001	
Indeno[1,2,3-cd]pyrene	0.002 J	0.003	0.001	
Dibenz[a,h]anthracene	0.002 J	0.003	0.001	
Benzo[g,h,i]perylene	0.003 J	0.003	0.001	
Coronene	U	0.003	0.001	
Retene	U	0.003	0.001	
Benzo(b/c)fluorenes	U	0.003	0.001	
2-Methylpyrene	U	0.003	0.001	
4-Methylpyrene	U	0.003	0.001	
1-Methylpyrene	U	0.003	0.001	
Heptadecane	0.015	0.003	0.001	
Pristane	U	0.003	0.001	
Octadecane	0.012	0.003	0.001	
Phytane	U	0.003	0.001	

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Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090303-SB		
File ID:	E030504.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	3/3/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/5/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.003	0.001	
2,6,10-trimethyltridecane	U	0.003	0.001	
Norpristane	U	0.003	0.001	
Tetraethyl lead	U	0.003	0.001	
Total PAH (16)	0.045	0.003	0.001	
Total PAH (42)	0.055	0.003	0.001	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	76	50 - 120
Phenanthrene-d10	88	50 - 120
Benzo[a]pyrene-d12	76	50 - 120
Perylene-d12	87	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090303-SBS		
File ID:	E030505.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	3/3/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/5/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:	Spike Amount				% Recovery
Benzene	2.50	1.47 B	0.003	0.001	59
Toluene	2.50	1.93 B	0.003	0.001	77
Ethylbenzene	2.50	1.84	0.003	0.001	74
m/p-Xylenes	2.50	1.95 B	0.003	0.001	78
Styrene	2.50	2.17 B	0.003	0.001	87
o-Xylene	2.50	1.91	0.003	0.001	76
Isopropylbenzene	2.50	1.97	0.003	0.001	79
n-Propylbenzene	2.50	1.96	0.003	0.001	78
1,3,5-Trimethylbenzene	2.50	2.0 B	0.003	0.001	80
1,2,4-Trimethylbenzene	2.50	2.0	0.003	0.001	80
t-Butylbenzene		U	0.003	0.001	
sec-Butylbenzene	2.50	2.0	0.003	0.001	80
p-Isopropyltoluene	2.50	2.08	0.003	0.001	83
n-Butylbenzene	2.50	2.04	0.003	0.001	82
C1 - Benzene		BU	0.003	0.001	
C2 - Benzene		U	0.003	0.001	
C3 - Benzene		U	0.003	0.001	
C4 - Benzene		U	0.003	0.001	
C5 - Benzene		U	0.003	0.001	
trans-Decalin		U	0.003	0.001	
cis-Decalin		U	0.003	0.001	
Naphthalene	2.50	2.12 B	0.003	0.001	85
2-Methylnaphthalene	2.50	2.22 B	0.003	0.001	89
1-Methylnaphthalene	2.50	2.21 B	0.003	0.001	88
C1 - Naphthalene		BU	0.003	0.001	
C2 - Naphthalene		U	0.003	0.001	
C3- Naphthalene		U	0.003	0.001	
C4- Naphthalene		U	0.003	0.001	
Acenaphthylene	2.50	2.6 B	0.003	0.001	104
Acenaphthene	2.50	2.25	0.003	0.001	90
Dibenzofuran	2.50	2.19	0.003	0.001	88
Fluorene	2.50	2.35 B	0.003	0.001	94
C1 - Fluorene		U	0.003	0.001	
C2 - Fluorene		U	0.003	0.001	
C3 - Fluorene		U	0.003	0.001	
Phenanthrene	2.50	2.12 B	0.003	0.001	85
Anthracene	2.50	2.19 B	0.003	0.001	88

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Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090303-SBS		
File ID:	E030505.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/3/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/5/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene		BU	0.003	0.001	
C2 - Phenanthrene/Anthracene		U	0.003	0.001	
C3 - Phenanthrene/Anthracene		U	0.003	0.001	
C4 - Phenanthrene/Anthracene		U	0.003	0.001	
Dibenzothiophene	2.50	2.12 B	0.003	0.001	85
C1 - Dibenzothiophene		U	0.003	0.001	
C2 - Dibenzothiophene		U	0.003	0.001	
C3 - Dibenzothiophene		U	0.003	0.001	
C4 - Dibenzothiophene		U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene		U	0.003	0.001	
Fluoranthene	2.50	2.33 B	0.003	0.001	93
Pyrene	2.50	2.33 B	0.003	0.001	93
C1 - Fluoranthene/Pyrene		U	0.003	0.001	
C2 - Fluoranthene/Pyrene		U	0.003	0.001	
C3 - Fluoranthene/Pyrene		U	0.003	0.001	
Benz[a]anthracene	2.50	2.31 B	0.003	0.001	92
Chrysene*	2.50	2.18 B	0.003	0.001	87
C1 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
Benzo[b]fluoranthene	2.50	2.22 B	0.003	0.001	89
Benzo[j/k]fluoranthene	2.50	2.31 B	0.003	0.001	92
Benzo(e)pyrene	2.50	2.14 B	0.003	0.001	86
Benzo[a]pyrene	2.50	2.25 B	0.003	0.001	90
Perylene		U	0.003	0.001	
Indeno[1,2,3-cd]pyrene	2.50	2.11 B	0.003	0.001	84
Dibenz[a,h]anthracene	2.50	2.31 B	0.003	0.001	92
Benzo[g,h,i]perylene	2.50	2.17 B	0.003	0.001	87
Coronene		U	0.003	0.001	
Retene		U	0.003	0.001	
Benzo(b/c)fluorenes		U	0.003	0.001	
2-Methylpyrene		U	0.003	0.001	
4-Methylpyrene		U	0.003	0.001	
1-Methylpyrene		U	0.003	0.001	
Heptadecane		BU	0.003	0.001	
Pristane		U	0.003	0.001	
Octadecane		BU	0.003	0.001	
Phytane		U	0.003	0.001	

3/13/2009
TA090226



Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090303-SBS		
File ID:	E030505.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	3/3/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/5/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.003	0.001	
2,6,10-trimethyltridecane	U	0.003	0.001	
Norpristane	U	0.003	0.001	
Tetraethyl lead	U	0.003	0.001	
<i>Extraction Surrogate Recoveries (%)</i>		<i>Limits</i>		
Toluene-d8	69	50 - 120		
Phenanthrene-d10	85	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 DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Duplicate of BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
Lab ID	TA090226-01DUP-D	Analysis Method:	EPA 8270M
File ID:	E030517.D	Matrix:	Soil
Date Sampled:	2/24/2009	Preservation:	None
Date Received:	2/26/2009	Decanted:	None
Date Prepared:	3/3/2009	Sample Size (g):	2.98
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
Batch QC:	QC090303-SB	Injection Volume (µl):	1.00

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	1.01 B	0.081	0.041	7.9
Toluene	1.58 B	0.081	0.041	6.7
Ethylbenzene	0.378	0.081	0.041	4.1
m/p-Xylenes	1.61 B	0.081	0.041	6.6
Styrene	1.36 B	0.081	0.041	0
o-Xylene	0.305	0.081	0.041	5.7
Isopropylbenzene	0.130	0.081	0.041	3.8
n-Propylbenzene	0.057 J	0.081	0.041	16.1
1,3,5-Trimethylbenzene	0.207 B	0.081	0.041	12.2
1,2,4-Trimethylbenzene	0.396	0.081	0.041	11.7
t-Butylbenzene	0.061 J	0.081	0.041	16.5
sec-Butylbenzene	0.044 J	0.081	0.041	38.5
p-Isopropyltoluene	0.050 J	0.081	0.041	9.5
n-Butylbenzene	0.085	0.081	0.041	3.5
C1 - Benzene	0.961 B	0.081	0.041	5
C2 - Benzene	1.19	0.081	0.041	4.1
C3 - Benzene	0.640	0.081	0.041	7.5
C4 - Benzene	0.382	0.081	0.041	2.1
C5 - Benzene	0.337	0.081	0.041	4.6
trans-Decalin	0.067 J	0.081	0.041	NA
cis-Decalin	U	0.081	0.041	NA
Naphthalene	74.5 B	0.081	0.041	5.4
2-Methylnaphthalene	2.64 B	0.081	0.041	7.3
1-Methylnaphthalene	1.42 B	0.081	0.041	12.5
C1 - Naphthalene	2.46 B	0.081	0.041	12.2
C2 - Naphthalene	2.1	0.081	0.041	8.2
C3- Naphthalene	1.48	0.081	0.041	15.6
C4- Naphthalene	2.33	0.081	0.041	11.3
Acenaphthylene	3.76 B	0.081	0.041	15.5
Acenaphthene	2.56	0.081	0.041	24.7
Dibenzofuran	1.7	0.081	0.041	15.7
Fluorene	1.77 B	0.081	0.041	15.1
C1 - Fluorene	1.21	0.081	0.041	20.1
C2 - Fluorene	3.0	0.081	0.041	6.1
C3 - Fluorene	3.34	0.081	0.041	16.2
Phenanthrene	6.9 B	0.081	0.041	17.2
Anthracene	4.03 B	0.081	0.041	11.7

3/13/2009
TA090226



Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01DUP-D		
File ID:	E030517.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.98
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	4.15 B	0.081	0.041	14.7
C2 - Phenanthrene/Anthracene	5.06	0.081	0.041	14.3
C3 - Phenanthrene/Anthracene	5.73	0.081	0.041	22.2
C4 - Phenanthrene/Anthracene	3.29	0.081	0.041	13.1
Dibenzothiophene	0.838 B	0.081	0.041	13.8
C1 - Dibenzothiophene	1.23	0.081	0.041	10
C2 - Dibenzothiophene	2.34	0.081	0.041	10.1
C3 - Dibenzothiophene	3.06	0.081	0.041	12
C4 - Dibenzothiophene	1.92	0.081	0.041	12.2
Benzo(b)naphtho(2,1-d)thiophene	1.83	0.081	0.041	5.8
Fluoranthene	19.8 B	0.081	0.041	10.5
Pyrene	13.4 B	0.081	0.041	10.6
C1 - Fluoranthene/Pyrene	11.6	0.081	0.041	12.1
C2 - Fluoranthene/Pyrene	6.29	0.081	0.041	14
C3 - Fluoranthene/Pyrene	4.34	0.081	0.041	18
Benz[a]anthracene	9.88 B	0.081	0.041	4.2
Chrysene*	7.62 B	0.081	0.041	3.9
C1 - Benz(a)anthracene/Chrysene	5.67	0.081	0.041	14.9
C2 - Benz(a)anthracene/Chrysene	3.99	0.081	0.041	26.5
C3 - Benz(a)anthracene/Chrysene	2.73	0.081	0.041	24.7
C4 - Benz(a)anthracene/Chrysene	2.38	0.081	0.041	26.9
Benzo[b]fluoranthene	8.42 B	0.081	0.041	11.5
Benzo[j/k]fluoranthene	8.68 B	0.081	0.041	4.6
Benzo(e)pyrene	6.06 B	0.081	0.041	11.4
Benzo[a]pyrene	9.28 B	0.081	0.041	10.4
Perylene	2.71	0.081	0.041	4
Indeno[1,2,3-cd]pyrene	5.61 B	0.081	0.041	9.5
Dibenz[a,h]anthracene	1.51 B	0.081	0.041	17.5
Benzo[g,h,i]perylene	5.0 B	0.081	0.041	11
Coronene	1.17	0.081	0.041	1.7
Retene	1.53	0.081	0.041	15.7
Benzo(b/c)fluorenes	2.7	0.081	0.041	9.2
2-Methylpyrene	1.18	0.081	0.041	15.6
4-Methylpyrene	1.14	0.081	0.041	16.9
1-Methylpyrene	0.949	0.081	0.041	16.5
Heptadecane	1.75 B	0.081	0.041	25
Pristane	1.93	0.081	0.041	34.3
Octadecane	1.59 B	0.081	0.041	12.9
Phytane	2.48	0.081	0.041	27.8

3/13/2009
TA090226



Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Duplicate of BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01DUP-D		
File ID:	E030517.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.98
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.131	0.081	0.041	37.1
2,6,10-trimethyltridecane	0.373	0.081	0.041	31.2
Norpristane	0.884	0.081	0.041	48.5
Tetraethyl lead	U	0.081	0.041	NA
Total PAH (16)	183	0.081	0.041	7.9
Total PAH (42)	274	0.081	0.041	10.4

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	68	50 - 120
Phenanthrene-d10	86	50 - 120
Benzo[a]pyrene-d12	65	50 - 120
Perylene-d12	75	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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.

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9D080110

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

April 9, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9D080110

Meta Environmental, Inc, Watertown, MA analyzed the samples.



April 7, 2009

Carrie Gamber
Test America
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

RE: Sparrow's Point Interim Report; Sample Delivery Groups: TA090305 & TA090311

Dear Ms. Gamber:

This package contains the summary results from four (4) sediment samples received on March 5th and March 11th of 2009 by META Environmental, Inc. (META) from EA Engineering, Science, and Technology, Inc (EA).

Methods

The samples were prepared by solvent extraction (EPA 3570) using dichloromethane (DCM). The extracts were spiked with internal standard and analyzed by GC/FID (EPA 8100M) for fingerprinting and by GC/MS/SIM (EPA 8270M) for mono- and polycyclic aromatic hydrocarbons (MAHs and PAHs), alkyl PAH homologues and other selected compounds.

A portion of the extracts were sent to Oklahoma University for compound-specific stable carbon isotope ratios (CSIR) of PAHs. Those results are not yet available.

QC Summary

8270M – Mono- and Polycyclic Aromatic Hydrocarbons

QC090312-SB – Compound is detected above reporting limit.

C2-naphthalenes, C3-naphthalenes, C1-phenanthrenes/anthracenes, heptadecane, pristine, octadecane, phytane.

QC090324-SB – Compound is detected above reporting limit.

Benzene, heptadecane, octadecane.

TA090305-01, TA090305-02 – Extraction holding time exceeded.

Samples TA090305-01 and TA090305-02 were extracted within holding time, however, a QC failure (blank contamination) required re-extraction. The re-extraction occurred outside the recommended holding time. Concentration results between the two extractions were consistent suggesting minimal bias.

Qualifications

The determination of sample identity was based on visual inspection of GC/FID chromatograms, GC/MS source and weathering ratios, and comparison to META's archive of reference samples. Statistical results, histograms, GC/MS extracted ion current profiles and other supporting data will be provided in the final project report.

Fingerprinting Results

BH-SED-13C-6

Sample *BH-SED-13C-6* contained both petrogenic and pyrogenic materials (see definitions). The pyrogenic material was indicated by a wide range distribution of unsubstituted polycyclic aromatic hydrocarbons (PAHs) with the 3- and 4-ring PAHs dominant. The ratio of fluoranthene to pyrene of about 1.5 is in the range consistent with tars in META's library that were formed from manufactured gas plants utilizing coal carbonization processes, byproduct coke ovens, as well as some other coal tar products.

The petrogenic material was indicated by a late eluting wide range unresolved complex mixture (UCM) beginning at about 21 minutes, peaking at about 32 minutes, again at about 44 minutes, and ending at about 50 minutes. The high molecular weight petrogenic material also contained alkane and alkyl-cyclohexane hydrocarbons, in addition to the sesquiterpane, triterpane and sterane classes of petroleum biomarkers. This pattern is consistent with some severely weathered crude oils, No. 6 or bunker C oils and petroleum background in urban sediments.

The laboratory duplicate of this sample showed a similar pattern, however, the relative concentration was much higher suggesting heterogeneity within the sample container.

BH-SED-05-4

Sample *BH-SED-05-4* contained a pyrogenic material. The pyrogenic material was indicated by a wide range distribution of unsubstituted polycyclic aromatic hydrocarbons (PAHs) with the 2-ring PAH, naphthalene, dominant. Again, the ratio of fluoranthene to pyrene of about 1.5 is in the range consistent with tars in META's library that were formed from manufactured gas plants utilizing coal carbonization processes, byproduct coke ovens, as well as some other coal tar products.

The sample contained much higher concentrations of naphthalene relative to other low molecular weight 2-, and 3-ring PAHs. This is atypical for tar-like materials (TLM), and weathered TLM, and suggests a source of naphthalene separate or in addition to the other pyrogenic PAHs. For example, naphthalene oil or "front end" oil is a product of the distillation of coal tar, and consists principally of naphthalene. Similarly, naphthalene scrubbers frequently were components of coal gas plants and light oil recovery plants. The naphthalene scrubbers removed much of the naphthalene from the gas stream prior to recovery of light oil chemicals¹. The waste naphthalene was either recycled to the bulk tar or disposed of. Finally, naphthalene was reported to precipitate out of coal gas as it cooled in tanks and piping and had to be removed by scrapping or collection as drips. The specific source of the elevated naphthalene in the Sparrows Point samples could not be identified with the available data.

BH-SED-03E-2

Sample *BH-SED-03E-2* contained both petrogenic and pyrogenic materials. The pyrogenic material was indicated by a wide range distribution of unsubstituted polycyclic aromatic hydrocarbons (PAHs) with the 4-ring PAHs dominant. The ratio of fluoranthene to pyrene of about 1.0 is in the range consistent with some tars in META's library that were formed from manufactured gas plants utilizing coal carbonization processes, some coal tar products, and urban background from combustion sources.

The petrogenic material was indicated by a late eluting wide range unresolved complex mixture (UCM) beginning at about 20 minutes, peaking at about 44 minutes, and ending at about 60 minutes. The presence of alkane and alkyl-cyclohexane hydrocarbons in addition to the sesquiterpane, triterpane and sterane classes of petroleum biomarkers confirms the presence of petroleum. This pattern is consistent with some severely weathered crude oils, No. 6 or bunker C oils and petroleum background in urban sediments.

The laboratory duplicate of this sample showed similar results.

BH-SED-17-0

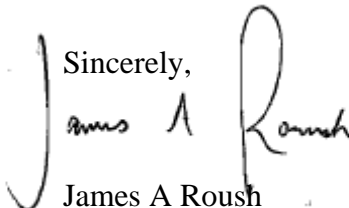
Sample *BH-SED-17-0* contained petrogenic and pyrogenic materials similar to those seen in sample *BH-SED-03E-2*, however, the petrogenic component was more abundant relative to the pyrogenic component.

Definitions

Pyrogenic substances are complex mixtures of primarily hydrocarbons produced from organic matter subjected to high temperatures but with insufficient oxygen for complete combustion. Pyrogenic materials are produced by fires, internal combustion engines, and furnaces. They also are formed when coke or gas are produced from coal or oil. Coal-tar based products, such as roofing, pavement sealers, waterproofing, pesticides, and some shampoos contain pyrogenic materials.

Petrogenic substances include crude oil and crude oil derivatives such as gasoline, heating oil, and asphalt.

The data contained in this report will be used in conjunction with data collected at previous sampling time points to provide a more comprehensive forensic characterization of the Sparrow's Point Site. Additionally, an in-depth description of the analytical methods used, and a general forensic chemistry overview will be provided. Please contact me if you have any questions about these results.

Sincerely,

 James A Roush
 Laboratory Manager

1, Chemistry of Coal Utilization Second Supplementary Volume. John Wiley & Sons, New York, NY 1981.

Attachments:

Chain of Custody

GC/FID Chromatograms

MAH & PAH Concentration Data

Turn Around Time	
Standard	<input checked="" type="checkbox"/>
If Authorized *	
1 Week	<input type="checkbox"/>
Other	<input type="checkbox"/>

META  **Environmental, Inc.**
Clarendon St. - Watertown, Massachusetts - 02472
(719) 923-4662 - Fax (617) 923-4610 - www.metaenv.com

[illegible]

Relinquished by <i>Todd Ward</i>	Date & Time <i>3/4/09 1815</i>	Relinquished by	Date & Time	Relinquished by	Date & Time
Received by <i>Julie Proby</i>	Date & Time <i>3/5/09 10:45</i>	Received by	Date & Time	Received by	Date & Time
Shipping Info. <i>9D080110</i>		Remarks Temp °C <i>33</i> * Surcharges may apply <i>7</i> (1-5)			

META Environmental, Inc.

Sample Receipt Log

Lab ID	Field ID	Matrix	Prep Method	Cleanup Method	Analysis Method	Date Sampled	Date Received	Project #	Container	Comments	Client Name	Project Name
TA090305-01	BH-SED-13C-6	Soil	2508		4007/4008	3/4/2009	3/5/2009	T06006-60	1 x 4 oz jar		Test America	Sparrows Point
TA090305-02a.b	BH-SED-05-4	Soil	2508		4007/4008	3/4/2009	3/5/2009	T06006-60	2 x 4 oz jar		Test America	Sparrows Point

Logged By: joDate: 3/5/09

C9D080110

Page 1 of 1

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Reviewed By: juDate: 3/6/09

(1-51)

META Environmental, Inc.
Sample Receipt Checklist

Receipt date: 3-5-09
 Login date: 3-5-09
 Login personnel: JO

Client Information:

Company Name: Test America
 Project Manager: Frank Barranco
 Project Name: Spanous Point

Shipping Information:

How were samples received? UPS FedEx DHL Other:
 Number of coolers: 1
 Internal temperature of coolers: 3.3°C
 Was ice present? Yes No

Note: if cooler is outside the 2-6° range, META's project manager should be notified.

Documentation:

Was a Chain of Custody present? Yes / No
 Was it signed? Yes / No
 Was all project information present on the COC? Yes / No
 Was a bill of lading or shipping label retained? Yes / No

Sample Information:

Number of sample containers: 3
 Does this match the COC? Yes / No
 Were all sample containers Intact? Yes / No
 If no, list samples and problems:

Note: if samples are damaged, META's project manager should be notified.

For aqueous 40ml Voas; was headspace present? Yes / No / NA

Comments:

Custodian: Joelyn D. Riley

Project Manager: Joan A. Barranco

James Roush

From: Olsen, Karin [kolsen@eaest.com]
Sent: Thursday, March 05, 2009 9:36 AM
To: James Roush
Subject: Sparrows Point sample ID



James -

Todd submitted a sample yesterday that he labeled BH-SED-05-6. However, the correct ID should be BH-SED-05-4. Can you guys log the sample in correctly?

Let me know if I need to submit a revised COC to document the sample ID change.

Thanks!

Karin

Karin Olsen, Senior Env Scientist
EA Engineering, Science, and Technology
15 Loveton Circle.....Sparks, MD 21152
office: 410.329.5112.....cell: 443.465.9783

Turn Around Time	
Standard	<input checked="" type="checkbox"/>
If Authorized *	
1 Week	<input type="checkbox"/>
Other	<input type="checkbox"/> _____

META

**Environmental, Inc.**

49 Clarendon St. - Watertown, Massachusetts - 02472

Tel (617) 923-4662 - Fax (617) 923-4610 - www.metaenv.com

Print Name

TODD WARD

Sign

Todd Liburd

Print Name

Sign

[illegible]

Shipping Info.	Remarks
C9D080110	<div>Temp °C <u>0</u></div> <div>* Surcharges may apply 11 (1-5)</div>

Temp °C 0

(1-51)

META Environmental, Inc.
Sample Receipt Log

Lab ID	Field ID	Matrix	Prep Method	Cleanup Method	Analysis Method	Date Sampled	Date Received	Project #	Container	Comments	Client Name	Project Name
TA090311-01a.b	BH-SED-03E-2	Soil	2508		4007/4008	3/9/2009	3/11/2009	T06006-60	2 x 4 oz jar	Sub for CSIR PAHs by GC/IRMs	Test America	Sparrows Point
TA090311-02a.b	BH-SED-17-0	Soil	2508		4007/4008	3/10/2009	3/11/2009	T06006-60	2 x 4 oz jar	Sub for CSIR PAHs by GC/IRMs	Test America	Sparrows Point

Logged By: *W* Date: 3/11/09

C9D080110

Page 1 of 1

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Reviewed By: *W* Date: 3/13/09

(1-51)

META Environmental, Inc.
Sample Receipt Checklist

Receipt date: 3-11-09
 Login date: 3-11-09
 Login personnel: SO

Client Information:

Company Name: Test America
 Project Manager: Frank Baranco
 Project Name: Sparrow's point

Shipping Information:

How were samples received? UPS FedEx DHL Other:
 Number of coolers: 1
 Internal temperature of coolers: 0°C
 Was ice present? Yes / No

Note: if cooler is outside the 2-6° range, META's project manager should be notified.

Documentation:

Was a Chain of Custody present? Yes / No
 Was it signed? Yes / No
 Was all project information present on the COC? Yes / No
 Was a bill of lading or shipping label retained? Yes / No

Sample Information:

Number of sample containers: 4
 Does this match the COC? Yes / No
 Were all sample containers Intact? Yes / No

If no, list samples and problems:

Note: if samples are damaged, META's project manager should be notified.

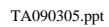
For aqueous 40ml Voas; was headspace present? Yes / No / NA

Comments:

Custodian: Juliana Riley

Project Manager: Frank Baranco (1-51)

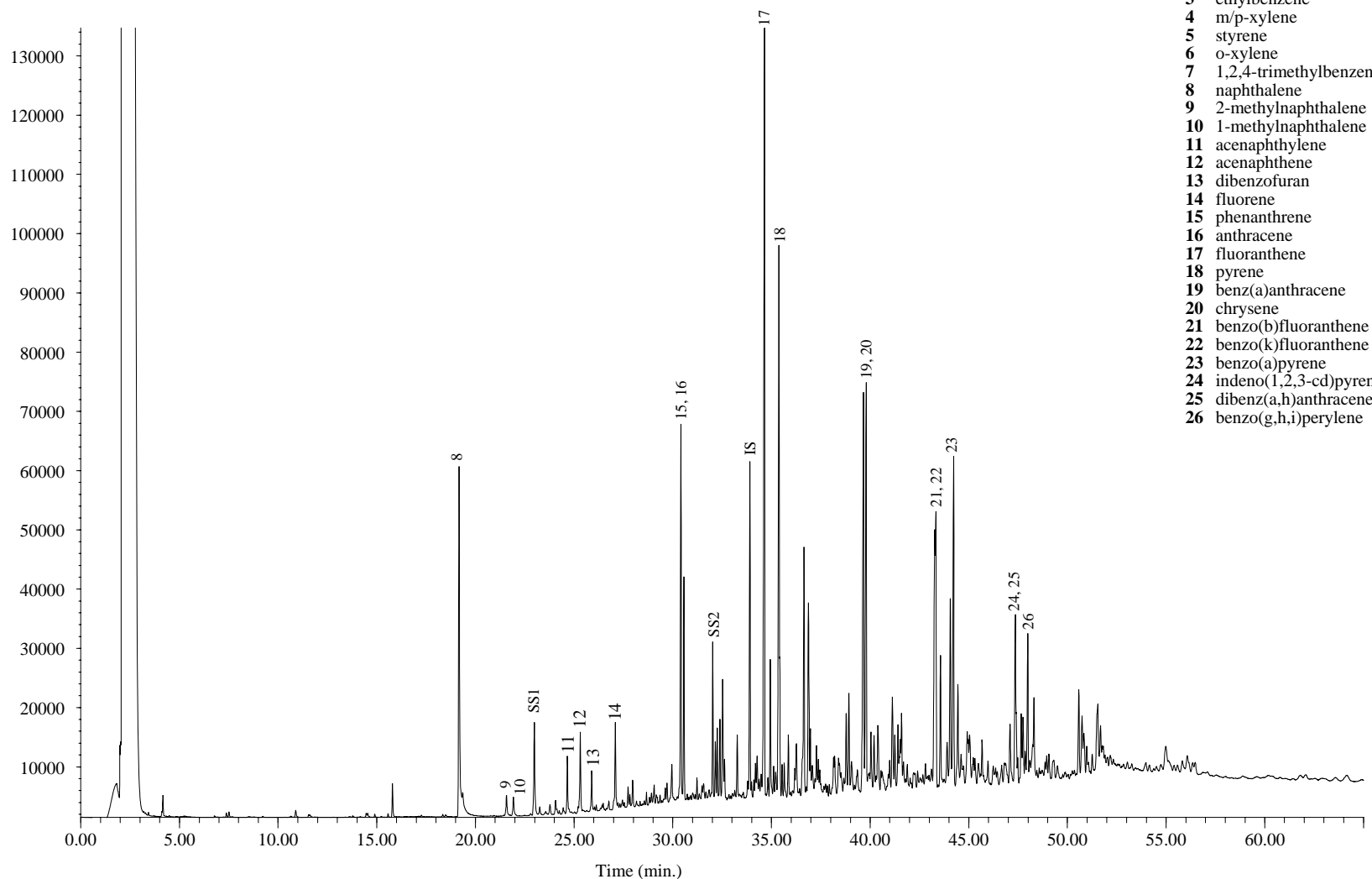
(1-51)



META

GC/FID Fingerprint

C032410.D\FID2B



Extraction Date: 03/24/2009

Analysis Date: 03/24/2009

IS - 5 α -androstane

SS1 - 2-fluorobiphenyl

SS2 - o-terphenyl

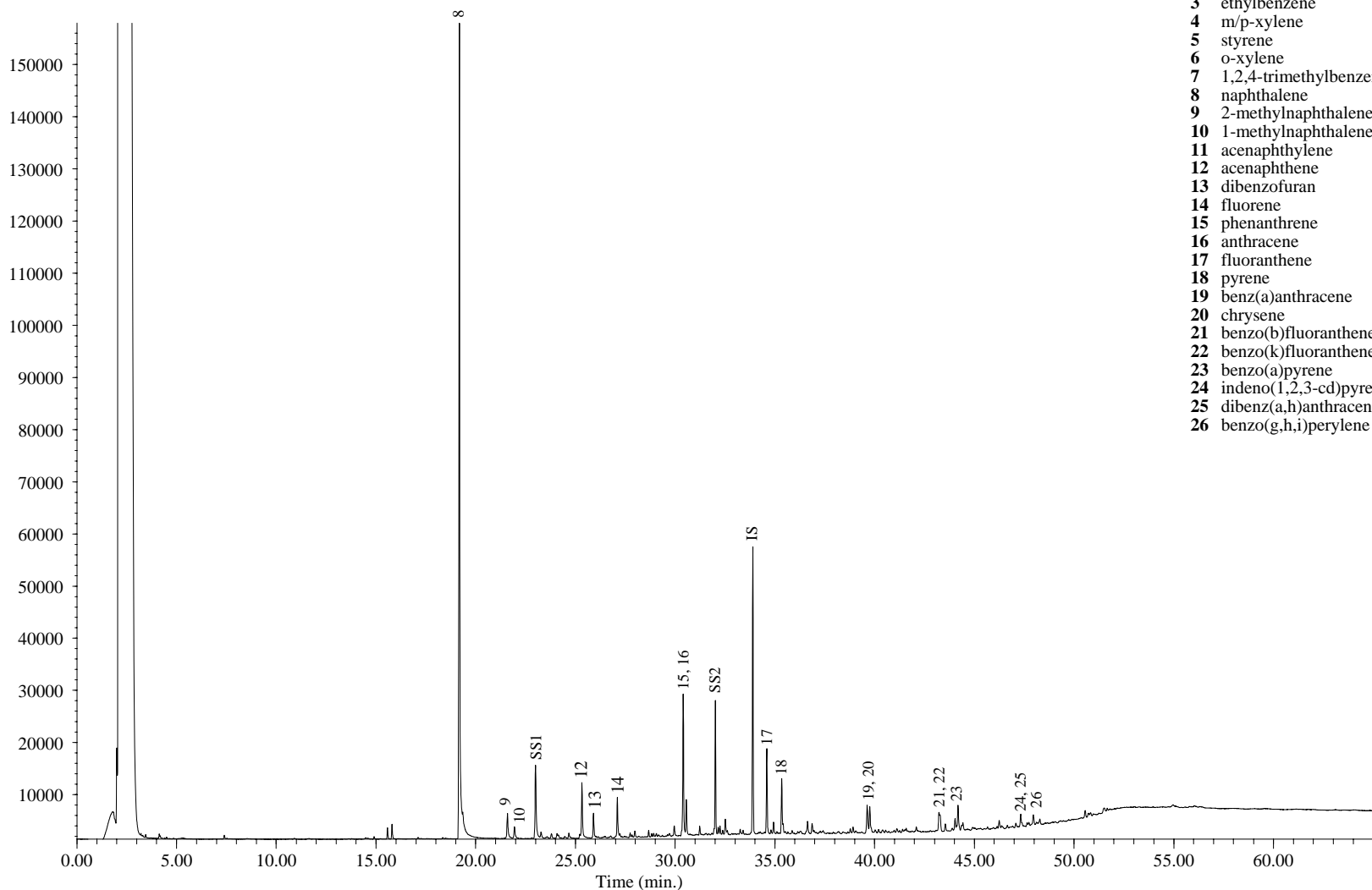
Field ID: BH-SED-13C-6

Laboratory ID: TA090305-01DUP-R

Method: EPA 8100M

GC/FID Fingerprint

C032411.D\FID2B

**Extraction Date: 03/24/2009****Analysis Date: 03/24/2009**IS – 5 α -androstane

SS1 – 2-fluorobiphenyl

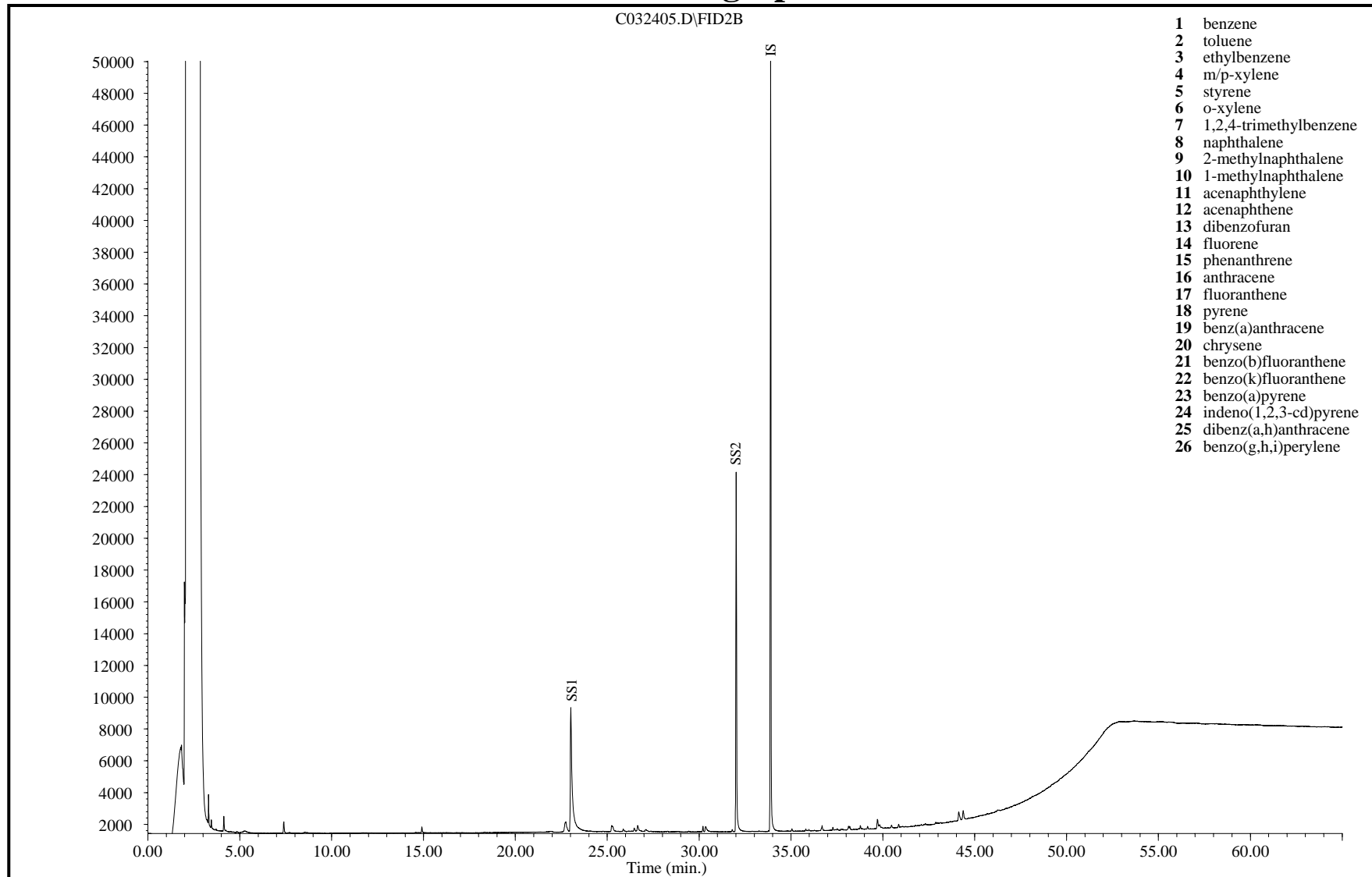
SS2 – o-terphenyl

Field ID: BH-SED-05-4

Laboratory ID: TA090305-02-R

Method: EPA 8100M

GC/FID Fingerprint



Extraction Date: 03/24/2009
Analysis Date: 03/24/2009

IS – 5 α -androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

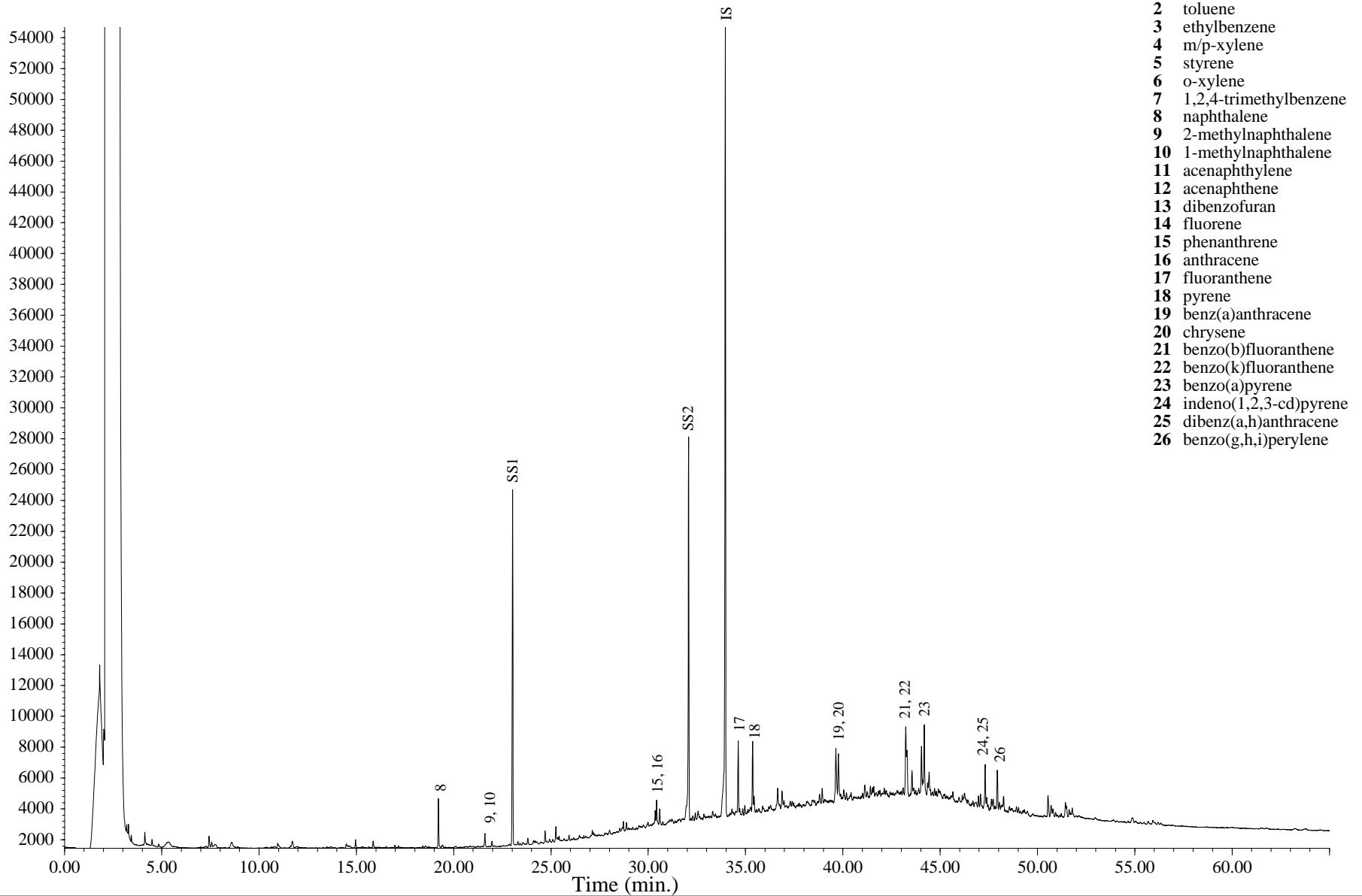
Field ID: Soil Blank
Laboratory ID: QC090324-SB
Method: EPA 8100M

GC/FID Fingerprint

C9D080110

18

C031313.D\FID2B



Extraction Date: 03/12/2009

Analysis Date: 03/14/2009

IS – 5 α -androstane
 SS1 – 2-fluorobiphenyl
 SS2 – o-terphenyl

Field ID: BH-SED-03E-2

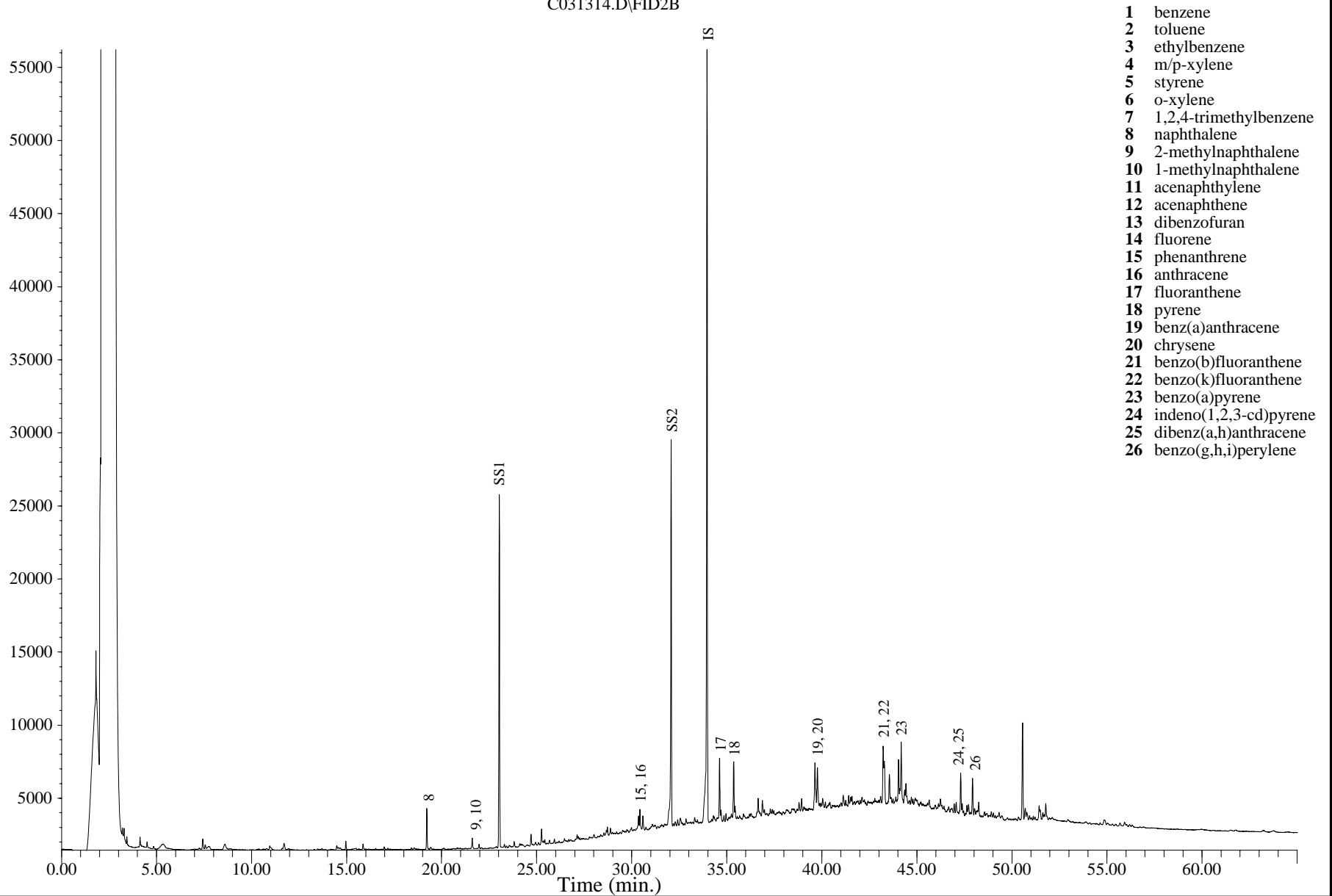
Laboratory ID: TA090311-01

Method: EPA 8100M

(1-51)

GC/FID Fingerprint

C031314.D\FID2B



Extraction Date: 03/12/2009

Analysis Date: 03/14/2009

IS – 5 α -androstane
 SS1 – 2-fluorobiphenyl
 SS2 – o-terphenyl

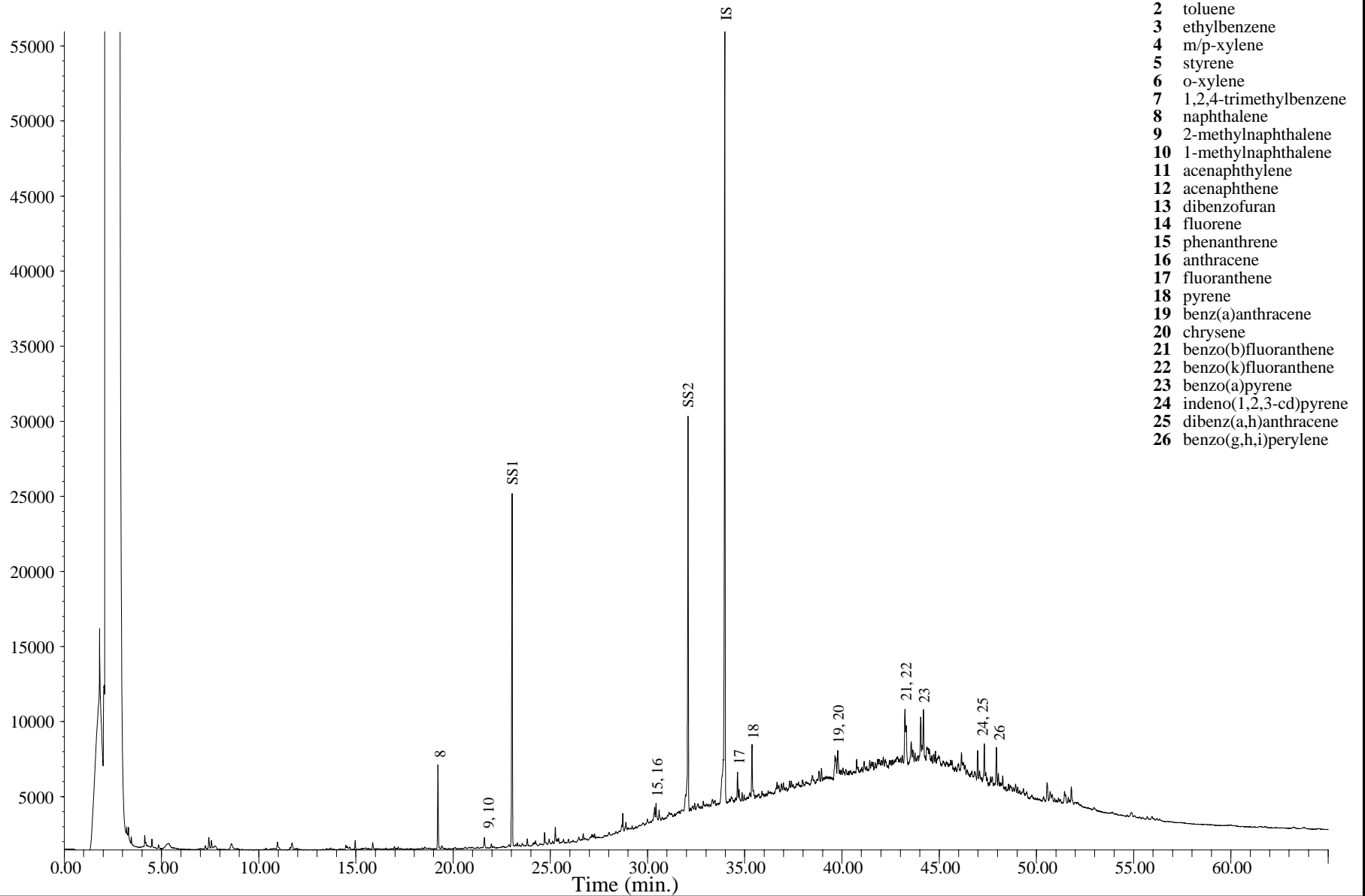
Field ID: BH-SED-03E-2

Laboratory ID: TA090311-01DUP

Method: EPA 8100M

GC/FID Fingerprint

C031315.D\FID2B



Extraction Date: 03/12/2009

Analysis Date: 03/14/2009

IS – 5 α -androstane
 SS1 – 2-fluorobiphenyl
 SS2 – o-terphenyl

Field ID: BH-SED-17-0

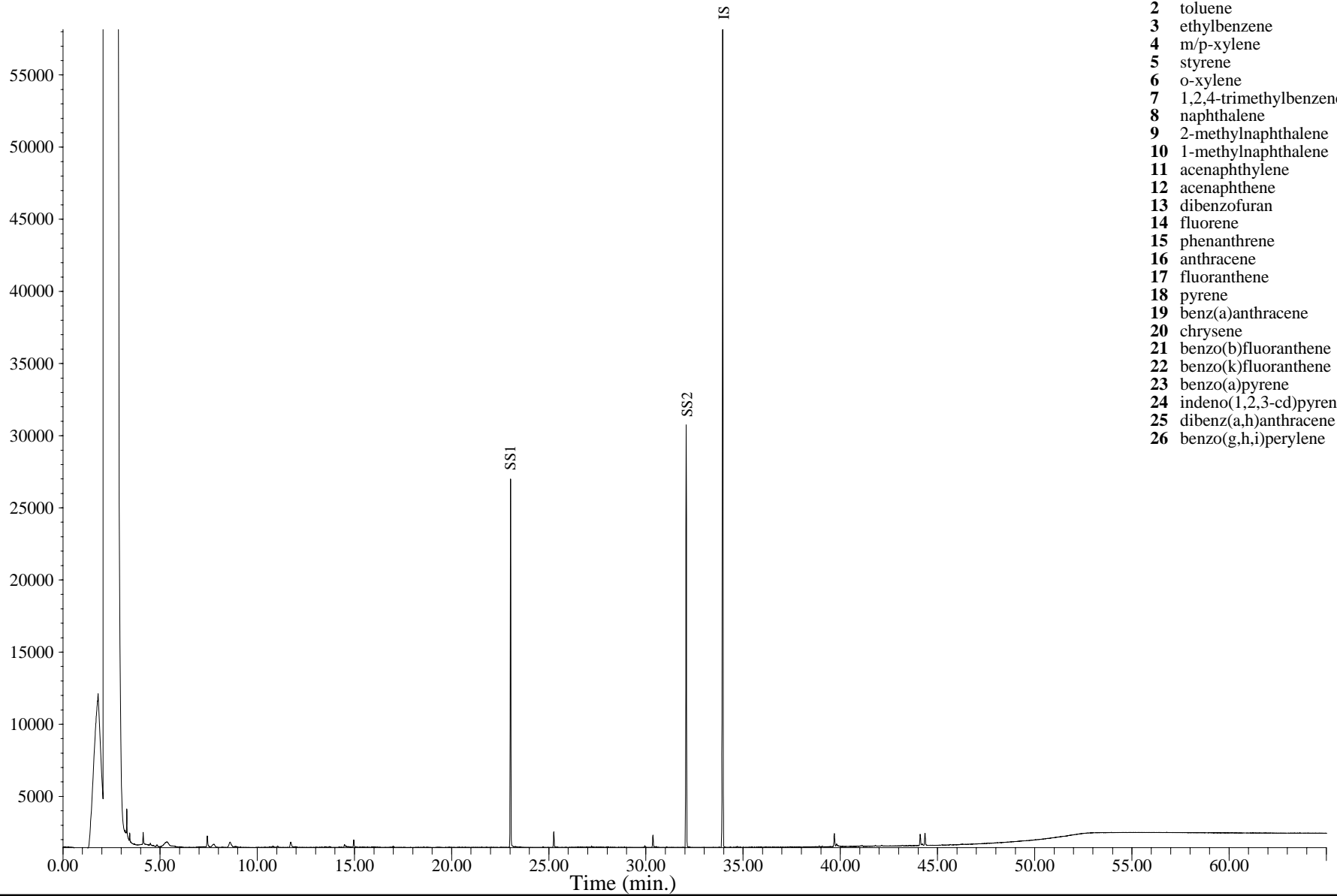
Laboratory ID: TA090311-02

Method: EPA 8100M

GC/FID Fingerprint

C031305.D\FID2B

- 1 benzene
- 2 toluene
- 3 ethylbenzene
- 4 m/p-xylene
- 5 styrene
- 6 o-xylene
- 7 1,2,4-trimethylbenzene
- 8 naphthalene
- 9 2-methylnaphthalene
- 10 1-methylnaphthalene
- 11 acenaphthylene
- 12 acenaphthene
- 13 dibenzofuran
- 14 fluorene
- 15 phenanthrene
- 16 anthracene
- 17 fluoranthene
- 18 pyrene
- 19 benz(a)anthracene
- 20 chrysene
- 21 benzo(b)fluoranthene
- 22 benzo(k)fluoranthene
- 23 benzo(a)pyrene
- 24 indeno(1,2,3-cd)pyrene
- 25 dibenz(a,h)anthracene
- 26 benzo(g,h,i)perylene



Extraction Date: 03/12/2009

Analysis Date: 03/13/2009

IS – 5 α -androstane

SS1 – 2-fluorobiphenyl

SS2 – o-terphenyl

Field ID: Soil Blank

Laboratory ID: QC090312-SB

Method: EPA 8100M

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01-R		
File ID:	E032408.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/4/2009	Decanted:	None
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.68
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	1.76 B	0.005	0.002	
Toluene	0.652	0.010	0.005	
Ethylbenzene	0.143	0.005	0.002	
m/p-Xylenes	0.728	0.005	0.002	
Styrene	0.316	0.010	0.005	
o-Xylene	0.156	0.005	0.002	
Isopropylbenzene	0.010	0.005	0.002	
n-Propylbenzene	0.009	0.005	0.002	
1,3,5-Trimethylbenzene	0.091	0.005	0.002	
1,2,4-Trimethylbenzene	0.206	0.005	0.002	
t-Butylbenzene	U	0.005	0.002	
sec-Butylbenzene	0.004 J	0.005	0.002	
p-Isopropyltoluene	0.015	0.005	0.002	
n-Butylbenzene	0.012	0.005	0.002	
C1 - Benzene	0.396	0.010	0.005	
C2 - Benzene	0.496	0.005	0.002	
C3 - Benzene	0.201	0.005	0.002	
C4 - Benzene	0.086	0.005	0.002	
C5 - Benzene	0.034	0.005	0.002	
trans-Decalin	0.008	0.005	0.002	
cis-Decalin	U	0.005	0.002	
Naphthalene	25.5 D	0.005	0.002	
2-Methylnaphthalene	1.63	0.005	0.002	
1-Methylnaphthalene	1.21	0.005	0.002	
C1 - Naphthalene	1.76	0.005	0.002	
C2 - Naphthalene	1.46	0.005	0.002	
C3- Naphthalene	0.849	0.005	0.002	
C4- Naphthalene	0.613	0.005	0.002	
Acenaphthylene	2.02	0.005	0.002	
Acenaphthene	3.86	0.005	0.002	
Dibenzofuran	2.88	0.005	0.002	
Fluorene	4.0	0.005	0.002	
C1 - Fluorene	0.958	0.005	0.002	
C2 - Fluorene	0.467	0.005	0.002	
C3 - Fluorene	0.523	0.005	0.002	
Phenanthrene	12.7	0.005	0.002	
Anthracene	6.59	0.005	0.002	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01-R		
File ID:	E032408.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/4/2009	Decanted:	None
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.68
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	4.22	0.005	0.002	
C2 - Phenanthrene/Anthracene	2.21	0.005	0.002	
C3 - Phenanthrene/Anthracene	1.05	0.005	0.002	
C4 - Phenanthrene/Anthracene	0.393	0.005	0.002	
Dibenzothiophene	1.58	0.005	0.002	
C1 - Dibenzothiophene	0.683	0.005	0.002	
C2 - Dibenzothiophene	0.576	0.005	0.002	
C3 - Dibenzothiophene	0.443	0.005	0.002	
C4 - Dibenzothiophene	0.266	0.005	0.002	
Benzo(b)naphtho(2,1-d)thiophene	2.09	0.005	0.002	
Fluoranthene	25.0 D	0.005	0.002	
Pyrene	16.2 D	0.005	0.002	
C1 - Fluoranthene/Pyrene	10.2	0.005	0.002	
C2 - Fluoranthene/Pyrene	2.46	0.005	0.002	
C3 - Fluoranthene/Pyrene	0.848	0.005	0.002	
Benz[a]anthracene	10.6	0.005	0.002	
Chrysene*	9.72	0.005	0.002	
C1 - Benz(a)anthracene/Chrysene	3.1	0.005	0.002	
C2 - Benz(a)anthracene/Chrysene	1.01	0.005	0.002	
C3 - Benz(a)anthracene/Chrysene	0.410	0.005	0.002	
C4 - Benz(a)anthracene/Chrysene	0.346	0.005	0.002	
Benzo[b]fluoranthene	8.33	0.005	0.002	
Benzo[j/k]fluoranthene	7.96	0.005	0.002	
Benzo(e)pyrene	5.58	0.005	0.002	
Benzo[a]pyrene	9.25	0.005	0.002	
Perylene	2.79	0.005	0.002	
Indeno[1,2,3-cd]pyrene	5.96	0.005	0.002	
Dibenz[a,h]anthracene	1.93	0.005	0.002	
Benzo[g,h,i]perylene	5.15	0.005	0.002	
Coronene	1.61	0.005	0.002	
Retene	0.258	0.005	0.002	
Benzo(b/c)fluorenes	3.27	0.005	0.002	
2-Methylpyrene	0.878	0.005	0.002	
4-Methylpyrene	0.566	0.005	0.002	
1-Methylpyrene	0.645	0.005	0.002	
Heptadecane	0.418 B	0.010	0.005	
Pristane	0.746 B	0.005	0.002	
Octadecane	0.380 B	0.010	0.005	
Phytane	0.792 B	0.005	0.002	

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Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01-R		
File ID:	E032408.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/4/2009	Decanted:	None
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.68
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.041	0.005	0.002	
2,6,10-trimethyltridecane	0.135	0.005	0.002	
Norpristane	0.272	0.005	0.002	
Tetraethyl lead	U	0.010	0.005	
Total PAH (16)	155	0.005	0.002	
Total PAH (42)	202	0.005	0.002	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	81	50 - 120
Phenanthrene-d10	92	50 - 120
Benzo[a]pyrene-d12	82	50 - 120
Perylene-d12	94	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-05-4

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-02-R		
File ID:	E032410.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/4/2009	Decanted:	None
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.67
Date Cleanup:	NA	Percent Solid:	50.7%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.478 B	0.007	0.004	
Toluene	0.291	0.015	0.007	
Ethylbenzene	0.120	0.007	0.004	
m/p-Xylenes	0.434	0.007	0.004	
Styrene	0.213	0.015	0.007	
o-Xylene	0.140	0.007	0.004	
Isopropylbenzene	0.013	0.007	0.004	
n-Propylbenzene	0.013	0.007	0.004	
1,3,5-Trimethylbenzene	0.227	0.007	0.004	
1,2,4-Trimethylbenzene	0.457	0.007	0.004	
t-Butylbenzene	U	0.007	0.004	
sec-Butylbenzene	U	0.007	0.004	
p-Isopropyltoluene	0.040	0.007	0.004	
n-Butylbenzene	0.037	0.007	0.004	
C1 - Benzene	0.179	0.015	0.007	
C2 - Benzene	0.331	0.007	0.004	
C3 - Benzene	0.455	0.007	0.004	
C4 - Benzene	0.327	0.007	0.004	
C5 - Benzene	0.122	0.007	0.004	
trans-Decalin	0.024	0.007	0.004	
cis-Decalin	U	0.007	0.004	
Naphthalene	226 D	0.007	0.004	
2-Methylnaphthalene	11.3	0.007	0.004	
1-Methylnaphthalene	5.04	0.007	0.004	
C1 - Naphthalene	10.1	0.007	0.004	
C2 - Naphthalene	3.64	0.007	0.004	
C3- Naphthalene	1.28	0.007	0.004	
C4- Naphthalene	0.626	0.007	0.004	
Acenaphthylene	2.02	0.007	0.004	
Acenaphthene	16.7	0.007	0.004	
Dibenzofuran	9.56	0.007	0.004	
Fluorene	12.8	0.007	0.004	
C1 - Fluorene	1.36	0.007	0.004	
C2 - Fluorene	0.773	0.007	0.004	
C3 - Fluorene	0.540	0.007	0.004	
Phenanthrene	35.4 D	0.007	0.004	
Anthracene	9.03 D	0.007	0.004	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-05-4

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-02-R		
File ID:	E032410.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/4/2009	Decanted:	None
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.67
Date Cleanup:	NA	Percent Solid:	50.7%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	5.86	0.007	0.004	
C2 - Phenanthrene/Anthracene	2.23	0.007	0.004	
C3 - Phenanthrene/Anthracene	0.924	0.007	0.004	
C4 - Phenanthrene/Anthracene	0.347	0.007	0.004	
Dibenzothiophene	3.0	0.007	0.004	
C1 - Dibenzothiophene	0.836	0.007	0.004	
C2 - Dibenzothiophene	0.504	0.007	0.004	
C3 - Dibenzothiophene	0.403	0.007	0.004	
C4 - Dibenzothiophene	0.219	0.007	0.004	
Benzo(b)naphtho(2,1-d)thiophene	1.36	0.007	0.004	
Fluoranthene	23.9	0.007	0.004	
Pyrene	16.1	0.007	0.004	
C1 - Fluoranthene/Pyrene	8.7	0.007	0.004	
C2 - Fluoranthene/Pyrene	1.97	0.007	0.004	
C3 - Fluoranthene/Pyrene	0.648	0.007	0.004	
Benz[a]anthracene	8.49	0.007	0.004	
Chrysene*	6.71	0.007	0.004	
C1 - Benz(a)anthracene/Chrysene	2.17	0.007	0.004	
C2 - Benz(a)anthracene/Chrysene	0.701	0.007	0.004	
C3 - Benz(a)anthracene/Chrysene	0.350	0.007	0.004	
C4 - Benz(a)anthracene/Chrysene	0.261	0.007	0.004	
Benzo[b]fluoranthene	5.55	0.007	0.004	
Benzo[j/k]fluoranthene	5.56	0.007	0.004	
Benzo(e)pyrene	3.64	0.007	0.004	
Benzo[a]pyrene	6.45	0.007	0.004	
Perylene	1.93	0.007	0.004	
Indeno[1,2,3-cd]pyrene	3.92	0.007	0.004	
Dibenz[a,h]anthracene	1.23	0.007	0.004	
Benzo[g,h,i]perylene	3.26	0.007	0.004	
Coronene	1.0	0.007	0.004	
Retene	0.204	0.007	0.004	
Benzo(b/c)fluorenes	2.7	0.007	0.004	
2-Methylpyrene	0.716	0.007	0.004	
4-Methylpyrene	0.518	0.007	0.004	
1-Methylpyrene	0.601	0.007	0.004	
Heptadecane	0.953 B	0.015	0.007	
Pristane	1.07 B	0.007	0.004	
Octadecane	1.18 B	0.015	0.007	
Phytane	1.06 B	0.007	0.004	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-05-4

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-02-R		
File ID:	E032410.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/4/2009	Decanted:	None
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.67
Date Cleanup:	NA	Percent Solid:	50.7%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.105	0.007	0.004	
2,6,10-trimethyltridecane	0.172	0.007	0.004	
Norpristane	0.260	0.007	0.004	
Tetraethyl lead	U	0.015	0.007	
Total PAH (16)	383	0.007	0.004	
Total PAH (42)	446	0.007	0.004	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	80	50 - 120
Phenanthrene-d10	93	50 - 120
Benzo[a]pyrene-d12	88	50 - 120
Perylene-d12	101	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090324-SB		
File ID:	E032404.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	3/24/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/24/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.005	0.003	0.001	
Toluene	U	0.005	0.003	
Ethylbenzene	U	0.003	0.001	
m/p-Xylenes	U	0.003	0.001	
Styrene	U	0.005	0.003	
o-Xylene	U	0.003	0.001	
Isopropylbenzene	U	0.003	0.001	
n-Propylbenzene	U	0.003	0.001	
1,3,5-Trimethylbenzene	U	0.003	0.001	
1,2,4-Trimethylbenzene	U	0.003	0.001	
t-Butylbenzene	U	0.003	0.001	
sec-Butylbenzene	U	0.003	0.001	
p-Isopropyltoluene	U	0.003	0.001	
n-Butylbenzene	U	0.003	0.001	
C1 - Benzene	U	0.005	0.003	
C2 - Benzene	U	0.003	0.001	
C3 - Benzene	U	0.003	0.001	
C4 - Benzene	U	0.003	0.001	
C5 - Benzene	U	0.003	0.001	
trans-Decalin	U	0.003	0.001	
cis-Decalin	U	0.003	0.001	
Naphthalene	U	0.003	0.001	
2-Methylnaphthalene	U	0.003	0.001	
1-Methylnaphthalene	U	0.003	0.001	
C1 - Naphthalene	U	0.003	0.001	
C2 - Naphthalene	U	0.003	0.001	
C3- Naphthalene	U	0.003	0.001	
C4- Naphthalene	U	0.003	0.001	
Acenaphthylene	U	0.003	0.001	
Acenaphthene	U	0.003	0.001	
Dibenzofuran	U	0.003	0.001	
Fluorene	U	0.003	0.001	
C1 - Fluorene	U	0.003	0.001	
C2 - Fluorene	U	0.003	0.001	
C3 - Fluorene	U	0.003	0.001	
Phenanthrene	U	0.003	0.001	
Anthracene	U	0.003	0.001	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090324-SB		
File ID:	E032404.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	3/24/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/24/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	U	0.003	0.001	
C2 - Phenanthrene/Anthracene	U	0.003	0.001	
C3 - Phenanthrene/Anthracene	U	0.003	0.001	
C4 - Phenanthrene/Anthracene	U	0.003	0.001	
Dibenzothiophene	U	0.003	0.001	
C1 - Dibenzothiophene	U	0.003	0.001	
C2 - Dibenzothiophene	U	0.003	0.001	
C3 - Dibenzothiophene	U	0.003	0.001	
C4 - Dibenzothiophene	U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene	U	0.003	0.001	
Fluoranthene	U	0.003	0.001	
Pyrene	U	0.003	0.001	
C1 - Fluoranthene/Pyrene	U	0.003	0.001	
C2 - Fluoranthene/Pyrene	U	0.003	0.001	
C3 - Fluoranthene/Pyrene	U	0.003	0.001	
Benz[a]anthracene	U	0.003	0.001	
Chrysene*	U	0.003	0.001	
C1 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
Benzo[b]fluoranthene	U	0.003	0.001	
Benzo[j/k]fluoranthene	U	0.003	0.001	
Benzo(e)pyrene	U	0.003	0.001	
Benzo[a]pyrene	U	0.003	0.001	
Perylene	U	0.003	0.001	
Indeno[1,2,3-cd]pyrene	U	0.003	0.001	
Dibenz[a,h]anthracene	U	0.003	0.001	
Benzo[g,h,i]perylene	U	0.003	0.001	
Coronene	U	0.003	0.001	
Retene	U	0.003	0.001	
Benzo(b/c)fluorenes	U	0.003	0.001	
2-Methylpyrene	U	0.003	0.001	
4-Methylpyrene	U	0.003	0.001	
1-Methylpyrene	U	0.003	0.001	
Heptadecane	0.005 J	0.005	0.003	
Pristane	0.001 J	0.003	0.001	
Octadecane	0.005 J	0.005	0.003	
Phytane	0.001 J	0.003	0.001	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090324-SB		
File ID:	E032404.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/24/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/24/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.003	0.001	
2,6,10-trimethyltridecane	U	0.003	0.001	
Norpristane	U	0.003	0.001	
Tetraethyl lead	U	0.005	0.003	
Total PAH (16)	U	0.003	0.001	
Total PAH (42)	U	0.003	0.001	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	83	50 - 120
Phenanthrene-d10	92	50 - 120
Benzo[a]pyrene-d12	90	50 - 120
Perylene-d12	103	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090324-SBS		
File ID:	E032405.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/24/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/24/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:	Spike Amount				% Recovery
Benzene	2.50	1.8 B	0.003	0.001	72
Toluene	2.50	2.08	0.005	0.003	83
Ethylbenzene	2.50	1.93	0.003	0.001	77
m/p-Xylenes	2.50	1.95	0.003	0.001	78
Styrene	2.50	2.13	0.005	0.003	85
o-Xylene	2.50	1.98	0.003	0.001	79
Isopropylbenzene	2.50	2.05	0.003	0.001	82
n-Propylbenzene	2.50	2.02	0.003	0.001	81
1,3,5-Trimethylbenzene	2.50	2.06	0.003	0.001	82
1,2,4-Trimethylbenzene	2.50	2.06	0.003	0.001	82
t-Butylbenzene		U	0.003	0.001	
sec-Butylbenzene	2.50	2.05	0.003	0.001	82
p-Isopropyltoluene	2.50	2.14	0.003	0.001	86
n-Butylbenzene	2.50	2.1	0.003	0.001	84
C1 - Benzene		U	0.005	0.003	
C2 - Benzene		U	0.003	0.001	
C3 - Benzene		U	0.003	0.001	
C4 - Benzene		U	0.003	0.001	
C5 - Benzene		U	0.003	0.001	
trans-Decalin		U	0.003	0.001	
cis-Decalin		U	0.003	0.001	
Naphthalene	2.50	2.22	0.003	0.001	89
2-Methylnaphthalene	2.50	2.37	0.003	0.001	95
1-Methylnaphthalene	2.50	2.35	0.003	0.001	94
C1 - Naphthalene		U	0.003	0.001	
C2 - Naphthalene		U	0.003	0.001	
C3- Naphthalene		U	0.003	0.001	
C4- Naphthalene		U	0.003	0.001	
Acenaphthylene	2.50	2.73	0.003	0.001	109
Acenaphthene	2.50	2.38	0.003	0.001	95
Dibenzofuran	2.50	2.35	0.003	0.001	94
Fluorene	2.50	2.54	0.003	0.001	102
C1 - Fluorene		U	0.003	0.001	
C2 - Fluorene		U	0.003	0.001	
C3 - Fluorene		U	0.003	0.001	
Phenanthrene	2.50	2.29	0.003	0.001	92
Anthracene	2.50	2.42	0.003	0.001	97

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090324-SBS		
File ID:	E032405.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/24/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/24/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene		U	0.003	0.001	
C2 - Phenanthrene/Anthracene		U	0.003	0.001	
C3 - Phenanthrene/Anthracene		U	0.003	0.001	
C4 - Phenanthrene/Anthracene		U	0.003	0.001	
Dibenzothiophene	2.50	2.3	0.003	0.001	92
C1 - Dibenzothiophene		U	0.003	0.001	
C2 - Dibenzothiophene		U	0.003	0.001	
C3 - Dibenzothiophene		U	0.003	0.001	
C4 - Dibenzothiophene		U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene		U	0.003	0.001	
Fluoranthene	2.50	2.46	0.003	0.001	98
Pyrene	2.50	2.45	0.003	0.001	98
C1 - Fluoranthene/Pyrene		U	0.003	0.001	
C2 - Fluoranthene/Pyrene		U	0.003	0.001	
C3 - Fluoranthene/Pyrene		U	0.003	0.001	
Benz[a]anthracene	2.50	2.46	0.003	0.001	98
Chrysene*	2.50	2.34	0.003	0.001	94
C1 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
Benzo[b]fluoranthene	2.50	2.4	0.003	0.001	96
Benzo[j/k]fluoranthene	2.50	2.48	0.003	0.001	99
Benzo(e)pyrene	2.50	2.28	0.003	0.001	91
Benzo[a]pyrene	2.50	2.37	0.003	0.001	95
Perylene		U	0.003	0.001	
Indeno[1,2,3-cd]pyrene	2.50	2.64	0.003	0.001	106
Dibenz[a,h]anthracene	2.50	2.41	0.003	0.001	96
Benzo[g,h,i]perylene	2.50	2.28	0.003	0.001	91
Coronene		U	0.003	0.001	
Retene		U	0.003	0.001	
Benzo(b/c)fluorenes		U	0.003	0.001	
2-Methylpyrene		U	0.003	0.001	
4-Methylpyrene		U	0.003	0.001	
1-Methylpyrene		U	0.003	0.001	
Heptadecane		BU	0.005	0.003	
Pristane		BU	0.003	0.001	
Octadecane		BU	0.005	0.003	
Phytane		BU	0.003	0.001	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090324-SBS		
File ID:	E032405.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/24/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/24/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.003	0.001	
2,6,10-trimethyltridecane	U	0.003	0.001	
Norpristane	U	0.003	0.001	
Tetraethyl lead	U	0.005	0.003	
<i>Extraction Surrogate Recoveries (%)</i>		<i>Limits</i>		
Toluene-d8	88	50 - 120		
Phenanthrene-d10	99	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 DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Duplicate of BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
Lab ID	TA090305-01DUP-R	Analysis Method:	EPA 8270M
File ID:	E032409.D	Matrix:	Soil
Date Sampled:	3/4/2009	Preservation:	None
Date Received:	3/5/2009	Decanted:	None
Date Prepared:	3/24/2009	Sample Size (g):	2.85
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
Batch QC:	QC090324-SB	Injection Volume (µl):	1.00

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	2.18 B	0.005	0.002	21.3
Toluene	0.870	0.009	0.005	28.6
Ethylbenzene	0.222	0.005	0.002	43.3
m/p-Xylenes	1.25	0.005	0.002	52.8
Styrene	0.697	0.009	0.005	75.2
o-Xylene	0.382	0.005	0.002	84
Isopropylbenzene	0.018	0.005	0.002	57.1
n-Propylbenzene	0.014	0.005	0.002	43.5
1,3,5-Trimethylbenzene	0.276	0.005	0.002	100.8
1,2,4-Trimethylbenzene	0.597	0.005	0.002	97.4
t-Butylbenzene	U	0.005	0.002	NA
sec-Butylbenzene	0.008	0.005	0.002	66.7
p-Isopropyltoluene	0.038	0.005	0.002	86.8
n-Butylbenzene	0.020	0.005	0.002	50
C1 - Benzene	0.536	0.009	0.005	30
C2 - Benzene	0.895	0.005	0.002	57.4
C3 - Benzene	0.552	0.005	0.002	93.2
C4 - Benzene	0.204	0.005	0.002	81.4
C5 - Benzene	0.056	0.005	0.002	48.9
trans-Decalin	0.013	0.005	0.002	47.6
cis-Decalin	U	0.005	0.002	NA
Naphthalene	64.2 D	0.005	0.002	86.3
2-Methylnaphthalene	4.66	0.005	0.002	96.3
1-Methylnaphthalene	3.71	0.005	0.002	101.6
C1 - Naphthalene	5.15	0.005	0.002	98.1
C2 - Naphthalene	3.9	0.005	0.002	91
C3- Naphthalene	2.48	0.005	0.002	98
C4- Naphthalene	1.95	0.005	0.002	104.3
Acenaphthylene	10.7	0.005	0.002	136.5
Acenaphthene	10.7	0.005	0.002	94
Dibenzofuran	7.11	0.005	0.002	84.7
Fluorene	11.9	0.005	0.002	99.4
C1 - Fluorene	3.61	0.005	0.002	116.1
C2 - Fluorene	2.43	0.005	0.002	135.5
C3 - Fluorene	1.6	0.005	0.002	101.5
Phenanthrene	47.4 D	0.005	0.002	115.5
Anthracene	31.0 D	0.005	0.002	129.9

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01DUP-R		
File ID:	E032409.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.85
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	26.0	0.005	0.002	144.1
C2 - Phenanthrene/Anthracene	16.8	0.005	0.002	153.5
C3 - Phenanthrene/Anthracene	5.99	0.005	0.002	140.3
C4 - Phenanthrene/Anthracene	1.23	0.005	0.002	103.1
Dibenzothiophene	4.95	0.005	0.002	103.2
C1 - Dibenzothiophene	2.85	0.005	0.002	122.7
C2 - Dibenzothiophene	2.55	0.005	0.002	126.3
C3 - Dibenzothiophene	1.38	0.005	0.002	102.8
C4 - Dibenzothiophene	0.606	0.005	0.002	78
Benzo(b)naphtho(2,1-d)thiophene	10.2	0.005	0.002	132
Fluoranthene	119 D	0.005	0.002	130.6
Pyrene	77.7 D	0.005	0.002	131
C1 - Fluoranthene/Pyrene	66.2	0.005	0.002	146.6
C2 - Fluoranthene/Pyrene	19.4	0.005	0.002	155
C3 - Fluoranthene/Pyrene	5.83	0.005	0.002	149.2
Benz[a]anthracene	60.7 D	0.005	0.002	140.5
Chrysene*	54.2 D	0.005	0.002	139.2
C1 - Benz(a)anthracene/Chrysene	22.0	0.005	0.002	150.6
C2 - Benz(a)anthracene/Chrysene	8.06	0.005	0.002	155.5
C3 - Benz(a)anthracene/Chrysene	2.28	0.005	0.002	139
C4 - Benz(a)anthracene/Chrysene	2.11	0.005	0.002	143.6
Benzo[b]fluoranthene	38.1 D	0.005	0.002	128.2
Benzo[j/k]fluoranthene	40.8 D	0.005	0.002	134.7
Benzo(e)pyrene	25.4 D	0.005	0.002	128
Benzo[a]pyrene	44.2 D	0.005	0.002	130.8
Perylene	10.3	0.005	0.002	114.7
Indeno[1,2,3-cd]pyrene	24.0 D	0.005	0.002	120.4
Dibenz[a,h]anthracene	8.26	0.005	0.002	124.2
Benzo[g,h,i]perylene	17.5	0.005	0.002	109.1
Coronene	5.68	0.005	0.002	111.7
Retene	U	0.005	0.002	NA
Benzo(b/c)fluorenes	21.1 D	0.005	0.002	146.3
2-Methylpyrene	5.66	0.005	0.002	146.3
4-Methylpyrene	3.43	0.005	0.002	143.3
1-Methylpyrene	4.41	0.005	0.002	149
Heptadecane	0.512 B	0.009	0.005	20.2
Pristane	1.55 B	0.005	0.002	70
Octadecane	0.566 B	0.009	0.005	39.3
Phytane	1.53 B	0.005	0.002	63.6

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01DUP-R		
File ID:	E032409.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.85
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.116	0.005	0.002	95.5
2,6,10-trimethyltridecane	0.293	0.005	0.002	73.8
Norpristane	0.570	0.005	0.002	70.8
Tetraethyl lead	U	0.009	0.005	NA
Total PAH (16)	660	0.005	0.002	123.9
Total PAH (42)	912	0.005	0.002	127.5

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	76	50 - 120
Phenanthrene-d10	86	50 - 120
Benzo[a]pyrene-d12	81	50 - 120
Perylene-d12	108	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01		
File ID:	E031812.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/9/2009	Decanted:	None
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.97
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.190 B	0.006	0.003	
Toluene	0.569 B	0.012	0.006	
Ethylbenzene	0.064	0.006	0.003	
m/p-Xylenes	0.457	0.006	0.003	
Styrene	0.385	0.012	0.006	
o-Xylene	0.057	0.006	0.003	
Isopropylbenzene	0.008	0.006	0.003	
n-Propylbenzene	0.018	0.006	0.003	
1,3,5-Trimethylbenzene	0.030	0.006	0.003	
1,2,4-Trimethylbenzene	0.082	0.006	0.003	
t-Butylbenzene	U	0.006	0.003	
sec-Butylbenzene	0.007	0.006	0.003	
p-Isopropyltoluene	0.027	0.006	0.003	
n-Butylbenzene	0.022	0.006	0.003	
C1 - Benzene	0.346	0.012	0.006	
C2 - Benzene	0.283	0.006	0.003	
C3 - Benzene	0.114	0.006	0.003	
C4 - Benzene	0.075	0.006	0.003	
C5 - Benzene	0.057	0.006	0.003	
trans-Decalin	0.009	0.006	0.003	
cis-Decalin	U	0.006	0.003	
Naphthalene	3.4 B	0.006	0.003	
2-Methylnaphthalene	0.994 B	0.006	0.003	
1-Methylnaphthalene	0.395	0.006	0.003	
C1 - Naphthalene	0.858 B	0.006	0.003	
C2 - Naphthalene	0.708 B	0.006	0.003	
C3- Naphthalene	0.360 B	0.006	0.003	
C4- Naphthalene	0.315	0.006	0.003	
Acenaphthylene	0.993	0.006	0.003	
Acenaphthene	0.151	0.006	0.003	
Dibenzofuran	0.539	0.006	0.003	
Fluorene	0.609	0.006	0.003	
C1 - Fluorene	0.321	0.006	0.003	
C2 - Fluorene	0.551	0.006	0.003	
C3 - Fluorene	0.593	0.006	0.003	
Phenanthrene	1.92 B	0.006	0.003	
Anthracene	1.65	0.006	0.003	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01		
File ID:	E031812.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/9/2009	Decanted:	None
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.97
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	1.53 B	0.006	0.003	
C2 - Phenanthrene/Anthracene	0.954	0.006	0.003	
C3 - Phenanthrene/Anthracene	0.678	0.006	0.003	
C4 - Phenanthrene/Anthracene	0.403	0.006	0.003	
Dibenzothiophene	0.304	0.006	0.003	
C1 - Dibenzothiophene	0.383	0.006	0.003	
C2 - Dibenzothiophene	0.436	0.006	0.003	
C3 - Dibenzothiophene	0.514	0.006	0.003	
C4 - Dibenzothiophene	0.394	0.006	0.003	
Benzo(b)naphtho(2,1-d)thiophene	0.730	0.006	0.003	
Fluoranthene	5.96 B	0.006	0.003	
Pyrene	5.62 B	0.006	0.003	
C1 - Fluoranthene/Pyrene	4.24	0.006	0.003	
C2 - Fluoranthene/Pyrene	1.65	0.006	0.003	
C3 - Fluoranthene/Pyrene	0.953	0.006	0.003	
Benz[a]anthracene	4.25	0.006	0.003	
Chrysene*	3.59	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	2.05	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	1.09	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	0.589	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	0.532	0.006	0.003	
Benzo[b]fluoranthene	4.8	0.006	0.003	
Benzo[j/k]fluoranthene	3.85	0.006	0.003	
Benzo(e)pyrene	3.18	0.006	0.003	
Benzo[a]pyrene	4.72	0.006	0.003	
Perylene	1.41	0.006	0.003	
Indeno[1,2,3-cd]pyrene	3.12	0.006	0.003	
Dibenz[a,h]anthracene	1.03 B	0.006	0.003	
Benzo[g,h,i]perylene	2.75	0.006	0.003	
Coronene	0.699	0.006	0.003	
Retene	0.168	0.006	0.003	
Benzo(b/c)fluorenes	1.21	0.006	0.003	
2-Methylpyrene	0.413	0.006	0.003	
4-Methylpyrene	0.339	0.006	0.003	
1-Methylpyrene	0.286	0.006	0.003	
Heptadecane	0.776 B	0.012	0.006	
Pristane	0.213 B	0.006	0.003	
Octadecane	0.399 B	0.012	0.006	
Phytane	0.341 B	0.006	0.003	

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Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01		
File ID:	E031812.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/9/2009	Decanted:	None
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.97
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.038 B	0.006	0.003	
2,6,10-trimethyltridecane	0.080 B	0.006	0.003	
Norpristane	0.154 B	0.006	0.003	
Tetraethyl lead	U	0.012	0.006	
Total PAH (16)	48.4	0.006	0.003	
Total PAH (42)	73.9	0.006	0.003	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	83	50 - 120
Phenanthrene-d10	103	50 - 120
Benzo[a]pyrene-d12	86	50 - 120
Perylene-d12	98	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-17-0

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-02		
File ID:	E031814.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/10/2009	Decanted:	None
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.87
Date Cleanup:	NA	Percent Solid:	42.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.289 B	0.006	0.003	
Toluene	0.761 B	0.012	0.006	
Ethylbenzene	0.075	0.006	0.003	
m/p-Xylenes	0.649	0.006	0.003	
Styrene	0.294	0.012	0.006	
o-Xylene	0.076	0.006	0.003	
Isopropylbenzene	0.008	0.006	0.003	
n-Propylbenzene	0.022	0.006	0.003	
1,3,5-Trimethylbenzene	0.036	0.006	0.003	
1,2,4-Trimethylbenzene	0.093	0.006	0.003	
t-Butylbenzene	U	0.006	0.003	
sec-Butylbenzene	0.004 J	0.006	0.003	
p-Isopropyltoluene	0.020	0.006	0.003	
n-Butylbenzene	0.028	0.006	0.003	
C1 - Benzene	0.464	0.012	0.006	
C2 - Benzene	0.391	0.006	0.003	
C3 - Benzene	0.122	0.006	0.003	
C4 - Benzene	0.076	0.006	0.003	
C5 - Benzene	0.057	0.006	0.003	
trans-Decalin	0.011	0.006	0.003	
cis-Decalin	U	0.006	0.003	
Naphthalene	4.9 B	0.006	0.003	
2-Methylnaphthalene	0.711 B	0.006	0.003	
1-Methylnaphthalene	0.278	0.006	0.003	
C1 - Naphthalene	0.611 B	0.006	0.003	
C2 - Naphthalene	0.559 B	0.006	0.003	
C3- Naphthalene	0.305 B	0.006	0.003	
C4- Naphthalene	0.277	0.006	0.003	
Acenaphthylene	0.888	0.006	0.003	
Acenaphthene	0.082	0.006	0.003	
Dibenzofuran	0.337	0.006	0.003	
Fluorene	0.302	0.006	0.003	
C1 - Fluorene	0.212	0.006	0.003	
C2 - Fluorene	0.618	0.006	0.003	
C3 - Fluorene	0.421	0.006	0.003	
Phenanthrene	1.1 B	0.006	0.003	
Anthracene	0.866	0.006	0.003	

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-17-0

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-02		
File ID:	E031814.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/10/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.87
Date Cleanup:	NA	Percent Solid:	42.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	1.27 B	0.006	0.003	
C2 - Phenanthrene/Anthracene	0.680	0.006	0.003	
C3 - Phenanthrene/Anthracene	0.583	0.006	0.003	
C4 - Phenanthrene/Anthracene	0.476	0.006	0.003	
Dibenzothiophene	0.166	0.006	0.003	
C1 - Dibenzothiophene	0.271	0.006	0.003	
C2 - Dibenzothiophene	0.312	0.006	0.003	
C3 - Dibenzothiophene	0.302	0.006	0.003	
C4 - Dibenzothiophene	0.278	0.006	0.003	
Benzo(b)naphtho(2,1-d)thiophene	0.274	0.006	0.003	
Fluoranthene	2.03 B	0.006	0.003	
Pyrene	3.5 B	0.006	0.003	
C1 - Fluoranthene/Pyrene	2.23	0.006	0.003	
C2 - Fluoranthene/Pyrene	1.42	0.006	0.003	
C3 - Fluoranthene/Pyrene	0.986	0.006	0.003	
Benz[a]anthracene	1.57	0.006	0.003	
Chrysene*	1.5	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	1.18	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	1.14	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	0.779	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	0.682	0.006	0.003	
Benzo[b]fluoranthene	3.22	0.006	0.003	
Benzo[j/k]fluoranthene	2.7	0.006	0.003	
Benzo(e)pyrene	2.21	0.006	0.003	
Benzo[a]pyrene	3.22	0.006	0.003	
Perylene	0.567	0.006	0.003	
Indeno[1,2,3-cd]pyrene	2.21	0.006	0.003	
Dibenz[a,h]anthracene	0.626 B	0.006	0.003	
Benzo[g,h,i]perylene	1.99	0.006	0.003	
Coronene	0.492	0.006	0.003	
Retene	0.115	0.006	0.003	
Benzo(b/c)fluorenes	0.437	0.006	0.003	
2-Methylpyrene	0.317	0.006	0.003	
4-Methylpyrene	0.336	0.006	0.003	
1-Methylpyrene	0.217	0.006	0.003	
Heptadecane	0.712 B	0.012	0.006	
Pristane	0.242 B	0.006	0.003	
Octadecane	0.411 B	0.012	0.006	
Phytane	0.278 B	0.006	0.003	

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Analytical Results for Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: BH-SED-17-0

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-02		
File ID:	E031814.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/10/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.87
Date Cleanup:	NA	Percent Solid:	42.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.024 B	0.006	0.003	
2,6,10-trimethyltridecane	0.051 B	0.006	0.003	
Norpristane	0.079 B	0.006	0.003	
Tetraethyl lead	U	0.012	0.006	
Total PAH (16)	30.7	0.006	0.003	
Total PAH (42)	49.6	0.006	0.003	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	79	50 - 120
Phenanthrene-d10	94	50 - 120
Benzo[a]pyrene-d12	80	50 - 120
Perylene-d12	91	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090312-SB		
File ID:	E031807.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.002 J	0.003	0.001
Toluene	0.003 J	0.005	0.003
Ethylbenzene	U	0.003	0.001
m/p-Xylenes	U	0.003	0.001
Styrene	U	0.005	0.003
o-Xylene	U	0.003	0.001
Isopropylbenzene	U	0.003	0.001
n-Propylbenzene	U	0.003	0.001
1,3,5-Trimethylbenzene	U	0.003	0.001
1,2,4-Trimethylbenzene	U	0.003	0.001
t-Butylbenzene	U	0.003	0.001
sec-Butylbenzene	U	0.003	0.001
p-Isopropyltoluene	U	0.003	0.001
n-Butylbenzene	U	0.003	0.001
C1 - Benzene	U	0.005	0.003
C2 - Benzene	U	0.003	0.001
C3 - Benzene	U	0.003	0.001
C4 - Benzene	U	0.003	0.001
C5 - Benzene	U	0.003	0.001
trans-Decalin	U	0.003	0.001
cis-Decalin	U	0.003	0.001
Naphthalene	0.001 J	0.003	0.001
2-Methylnaphthalene	0.001 J	0.003	0.001
1-Methylnaphthalene	U	0.003	0.001
C1 - Naphthalene	0.001 J	0.003	0.001
C2 - Naphthalene	0.006	0.003	0.001
C3- Naphthalene	0.007	0.003	0.001
C4- Naphthalene	U	0.003	0.001
Acenaphthylene	U	0.003	0.001
Acenaphthene	U	0.003	0.001
Dibenzofuran	U	0.003	0.001
Fluorene	U	0.003	0.001
C1 - Fluorene	U	0.003	0.001
C2 - Fluorene	U	0.003	0.001
C3 - Fluorene	U	0.003	0.001
Phenanthrene	0.003 J	0.003	0.001
Anthracene	U	0.003	0.001

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090312-SB		
File ID:	E031807.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.004	0.003	0.001	
C2 - Phenanthrene/Anthracene	U	0.003	0.001	
C3 - Phenanthrene/Anthracene	U	0.003	0.001	
C4 - Phenanthrene/Anthracene	U	0.003	0.001	
Dibenzothiophene	U	0.003	0.001	
C1 - Dibenzothiophene	U	0.003	0.001	
C2 - Dibenzothiophene	U	0.003	0.001	
C3 - Dibenzothiophene	U	0.003	0.001	
C4 - Dibenzothiophene	U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene	U	0.003	0.001	
Fluoranthene	0.001 J	0.003	0.001	
Pyrene	0.001 J	0.003	0.001	
C1 - Fluoranthene/Pyrene	U	0.003	0.001	
C2 - Fluoranthene/Pyrene	U	0.003	0.001	
C3 - Fluoranthene/Pyrene	U	0.003	0.001	
Benz[a]anthracene	U	0.003	0.001	
Chrysene*	U	0.003	0.001	
C1 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
Benzo[b]fluoranthene	U	0.003	0.001	
Benzo[j/k]fluoranthene	U	0.003	0.001	
Benzo(e)pyrene	U	0.003	0.001	
Benzo[a]pyrene	U	0.003	0.001	
Perylene	U	0.003	0.001	
Indeno[1,2,3-cd]pyrene	U	0.003	0.001	
Dibenz[a,h]anthracene	0.001 J	0.003	0.001	
Benzo[g,h,i]perylene	U	0.003	0.001	
Coronene	U	0.003	0.001	
Retene	U	0.003	0.001	
Benzo(b/c)fluorenes	U	0.003	0.001	
2-Methylpyrene	U	0.003	0.001	
4-Methylpyrene	U	0.003	0.001	
1-Methylpyrene	U	0.003	0.001	
Heptadecane	0.006	0.005	0.003	
Pristane	0.007	0.003	0.001	
Octadecane	0.005	0.005	0.003	
Phytane	0.004	0.003	0.001	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090312-SB		
File ID:	E031807.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.004	0.003	0.001	
2,6,10-trimethyltridecane	0.005	0.003	0.001	
Norpristane	0.005	0.003	0.001	
Tetraethyl lead	U	0.005	0.003	
Total PAH (16)	0.007	0.003	0.001	
Total PAH (42)	0.025	0.003	0.001	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	83	50 - 120
Phenanthrene-d10	95	50 - 120
Benzo[a]pyrene-d12	85	50 - 120
Perylene-d12	101	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090312-SBS		
File ID:	E031808.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	3/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:	Spike Amount				% Recovery
Benzene	2.50	1.75 B	0.003	0.001	70
Toluene	2.50	2.21 B	0.005	0.003	88
Ethylbenzene	2.50	2.07	0.003	0.001	83
m/p-Xylenes	2.50	2.09	0.003	0.001	84
Styrene	2.50	2.31	0.005	0.003	92
o-Xylene	2.50	2.14	0.003	0.001	86
Isopropylbenzene	2.50	2.2	0.003	0.001	88
n-Propylbenzene	2.50	2.19	0.003	0.001	88
1,3,5-Trimethylbenzene	2.50	2.24	0.003	0.001	90
1,2,4-Trimethylbenzene	2.50	2.25	0.003	0.001	90
t-Butylbenzene		U	0.003	0.001	
sec-Butylbenzene	2.50	2.23	0.003	0.001	89
p-Isopropyltoluene	2.50	2.32	0.003	0.001	93
n-Butylbenzene	2.50	2.27	0.003	0.001	91
C1 - Benzene		U	0.005	0.003	
C2 - Benzene		U	0.003	0.001	
C3 - Benzene		U	0.003	0.001	
C4 - Benzene		U	0.003	0.001	
C5 - Benzene		U	0.003	0.001	
trans-Decalin		U	0.003	0.001	
cis-Decalin		U	0.003	0.001	
Naphthalene	2.50	2.33 B	0.003	0.001	93
2-Methylnaphthalene	2.50	2.46 B	0.003	0.001	98
1-Methylnaphthalene	2.50	2.43	0.003	0.001	97
C1 - Naphthalene		BU	0.003	0.001	
C2 - Naphthalene		BU	0.003	0.001	
C3- Naphthalene		BU	0.003	0.001	
C4- Naphthalene		U	0.003	0.001	
Acenaphthylene	2.50	2.76	0.003	0.001	110
Acenaphthene	2.50	2.44	0.003	0.001	98
Dibenzofuran	2.50	2.4	0.003	0.001	96
Fluorene	2.50	2.58	0.003	0.001	103
C1 - Fluorene		U	0.003	0.001	
C2 - Fluorene		U	0.003	0.001	
C3 - Fluorene		U	0.003	0.001	
Phenanthrene	2.50	2.36 B	0.003	0.001	94
Anthracene	2.50	2.45	0.003	0.001	98

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090312-SBS		
File ID:	E031808.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene		BU	0.003	0.001	
C2 - Phenanthrene/Anthracene		U	0.003	0.001	
C3 - Phenanthrene/Anthracene		U	0.003	0.001	
C4 - Phenanthrene/Anthracene		U	0.003	0.001	
Dibenzothiophene	2.50	2.36	0.003	0.001	94
C1 - Dibenzothiophene		U	0.003	0.001	
C2 - Dibenzothiophene		U	0.003	0.001	
C3 - Dibenzothiophene		U	0.003	0.001	
C4 - Dibenzothiophene		U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene		U	0.003	0.001	
Fluoranthene	2.50	2.56 B	0.003	0.001	102
Pyrene	2.50	2.56 B	0.003	0.001	102
C1 - Fluoranthene/Pyrene		U	0.003	0.001	
C2 - Fluoranthene/Pyrene		U	0.003	0.001	
C3 - Fluoranthene/Pyrene		U	0.003	0.001	
Benz[a]anthracene	2.50	2.52	0.003	0.001	101
Chrysene*	2.50	2.42	0.003	0.001	97
C1 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene		U	0.003	0.001	
Benzo[b]fluoranthene	2.50	2.41	0.003	0.001	96
Benzo[j/k]fluoranthene	2.50	2.58	0.003	0.001	103
Benzo(e)pyrene	2.50	2.35	0.003	0.001	94
Benzo[a]pyrene	2.50	2.42	0.003	0.001	97
Perylene		U	0.003	0.001	
Indeno[1,2,3-cd]pyrene	2.50	2.34	0.003	0.001	94
Dibenz[a,h]anthracene	2.50	2.43 B	0.003	0.001	97
Benzo[g,h,i]perylene	2.50	2.33	0.003	0.001	93
Coronene		U	0.003	0.001	
Retene		U	0.003	0.001	
Benzo(b/c)fluorenes		U	0.003	0.001	
2-Methylpyrene		U	0.003	0.001	
4-Methylpyrene		U	0.003	0.001	
1-Methylpyrene		U	0.003	0.001	
Heptadecane		BU	0.005	0.003	
Pristane		BU	0.003	0.001	
Octadecane		BU	0.005	0.003	
Phytane		BU	0.003	0.001	

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC090312-SBS		
File ID:	E031808.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	NA		
Date Received:	NA		
Date Prepared:	3/12/2009	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	BU	0.003	0.001	
2,6,10-trimethyltridecane	BU	0.003	0.001	
Norpristane	BU	0.003	0.001	
Tetraethyl lead	U	0.005	0.003	
<i>Extraction Surrogate Recoveries (%)</i>		<i>Limits</i>		
Toluene-d8	88	50	120	
Phenanthrene-d10	102	50	120	
Benzo[a]pyrene-d12	95	50	120	
Perylene-d12	106	50	120	

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
Lab ID	TA090311-01DUP	Analysis Method:	EPA 8270M
File ID:	E031813.D	Matrix:	Soil
Date Sampled:	3/9/2009	Preservation:	None
Date Received:	3/11/2009	Decanted:	None
Date Prepared:	3/12/2009	Sample Size (g):	3.50
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	0.170 B	0.007	0.004	11.1
Toluene	0.507 B	0.014	0.007	11.5
Ethylbenzene	0.056	0.007	0.004	13.3
m/p-Xylenes	0.433	0.007	0.004	5.4
Styrene	0.336	0.014	0.007	13.6
o-Xylene	0.050	0.007	0.004	13.1
Isopropylbenzene	0.008	0.007	0.004	0
n-Propylbenzene	0.017	0.007	0.004	5.7
1,3,5-Trimethylbenzene	0.028	0.007	0.004	6.9
1,2,4-Trimethylbenzene	0.074	0.007	0.004	10.3
t-Butylbenzene	U	0.007	0.004	NA
sec-Butylbenzene	0.006 J	0.007	0.004	15.4
p-Isopropyltoluene	0.023	0.007	0.004	16
n-Butylbenzene	0.023	0.007	0.004	4.4
C1 - Benzene	0.304	0.014	0.007	12.9
C2 - Benzene	0.269	0.007	0.004	5.1
C3 - Benzene	0.105	0.007	0.004	8.2
C4 - Benzene	0.069	0.007	0.004	8.3
C5 - Benzene	0.053	0.007	0.004	7.3
trans-Decalin	0.008	0.007	0.004	11.8
cis-Decalin	U	0.007	0.004	NA
Naphthalene	3.05 B	0.007	0.004	10.9
2-Methylnaphthalene	0.894 B	0.007	0.004	10.6
1-Methylnaphthalene	0.359	0.007	0.004	9.5
C1 - Naphthalene	0.771 B	0.007	0.004	10.7
C2 - Naphthalene	0.649 B	0.007	0.004	8.7
C3- Naphthalene	0.345 B	0.007	0.004	4.3
C4- Naphthalene	0.310	0.007	0.004	1.6
Acenaphthylene	0.994	0.007	0.004	0.1
Acenaphthene	0.141	0.007	0.004	6.8
Dibenzofuran	0.493	0.007	0.004	8.9
Fluorene	0.556	0.007	0.004	9.1
C1 - Fluorene	0.289	0.007	0.004	10.5
C2 - Fluorene	0.624	0.007	0.004	12.4
C3 - Fluorene	0.507	0.007	0.004	15.6
Phenanthrene	1.74 B	0.007	0.004	9.8
Anthracene	1.54	0.007	0.004	6.9

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01DUP		
File ID:	E031813.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/9/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.50
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	1.64 B	0.007	0.004	6.9
C2 - Phenanthrene/Anthracene	0.899	0.007	0.004	5.9
C3 - Phenanthrene/Anthracene	0.656	0.007	0.004	3.3
C4 - Phenanthrene/Anthracene	0.407	0.007	0.004	1
Dibenzothiophene	0.277	0.007	0.004	9.3
C1 - Dibenzothiophene	0.351	0.007	0.004	8.7
C2 - Dibenzothiophene	0.416	0.007	0.004	4.7
C3 - Dibenzothiophene	0.481	0.007	0.004	6.6
C4 - Dibenzothiophene	0.371	0.007	0.004	6
Benzo(b)naphtho(2,1-d)thiophene	0.683	0.007	0.004	6.7
Fluoranthene	5.48 B	0.007	0.004	8.4
Pyrene	5.15 B	0.007	0.004	8.7
C1 - Fluoranthene/Pyrene	3.84	0.007	0.004	9.9
C2 - Fluoranthene/Pyrene	1.52	0.007	0.004	8.2
C3 - Fluoranthene/Pyrene	0.869	0.007	0.004	9.2
Benz[a]anthracene	3.98	0.007	0.004	6.6
Chrysene*	3.43	0.007	0.004	4.6
C1 - Benz(a)anthracene/Chrysene	1.85	0.007	0.004	10.3
C2 - Benz(a)anthracene/Chrysene	0.965	0.007	0.004	12.2
C3 - Benz(a)anthracene/Chrysene	0.541	0.007	0.004	8.5
C4 - Benz(a)anthracene/Chrysene	0.480	0.007	0.004	10.3
Benzo[b]fluoranthene	4.6	0.007	0.004	4.3
Benzo[j/k]fluoranthene	3.76	0.007	0.004	2.4
Benzo(e)pyrene	3.08	0.007	0.004	3.2
Benzo[a]pyrene	4.56	0.007	0.004	3.4
Perylene	1.43	0.007	0.004	1.4
Indeno[1,2,3-cd]pyrene	3.14	0.007	0.004	0.6
Dibenz[a,h]anthracene	0.901 B	0.007	0.004	13.4
Benzo[g,h,i]perylene	2.77	0.007	0.004	0.7
Coronene	0.705	0.007	0.004	0.9
Retene	0.155	0.007	0.004	8
Benzo(b/c)fluorenes	1.1	0.007	0.004	9.5
2-Methylpyrene	0.376	0.007	0.004	9.4
4-Methylpyrene	0.321	0.007	0.004	5.5
1-Methylpyrene	0.261	0.007	0.004	9.1
Heptadecane	0.735 B	0.014	0.007	5.4
Pristane	0.254 B	0.007	0.004	17.6
Octadecane	0.369 B	0.014	0.007	7.8
Phytane	0.378 B	0.007	0.004	10.3

3/26/2009
TA090311.xls

META 

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01DUP		
File ID:	E031813.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/9/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.50
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.027 B	0.007	0.004	33.8
2,6,10-trimethyltridecane	0.082 B	0.007	0.004	2.5
Norpristane	0.131 B	0.007	0.004	16.1
Tetraethyl lead	U	0.014	0.007	NA
Total PAH (16)	45.8	0.007	0.004	5.5
Total PAH (42)	69.8	0.007	0.004	5.7

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	73	50 - 120
Phenanthrene-d10	99	50 - 120
Benzo[a]pyrene-d12	84	50 - 120
Perylene-d12	96	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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.

**GCFID FINGERPRINTING/
MONO & POLYCYCLIC AROMATIC HYDRCARBONS (MAH/PAH)
USEPA Region III - Level IV Review**

Site: Sparrows Point

SDG #: TA090211, TA090226, TA090305 & TA090311

Client: Maryland Environmental Service, Millersville, Maryland Date: May 24, 2009

Laboratory: Meta Environmental Inc., Watertown, Massachusetts Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03A-00	TA090211-01-D	Soil
2	Duplicate of BH-SED-03A-00	TA090211-01DUP-D	Soil
3	Reference	TA090211-02	Soil
4	BH-SED-10-2	TA090226-01D	Soil
5	Duplicate of BH-SED-10-2	TA090226-01DUP-D	Soil
6	BH-SED-03A-12	TA090226-02	Soil
7	BH-SED-13C-6	TA090305-01-RE	Soil
8	Duplicate of BH-SED-13C-6	TA090305-01DUP-RE	Soil
9	BH-SED-05-4	TA090305-02-RE	Soil
10	BH-SED-03E-2	TA090311-01	Soil
11	Duplicate of BH-SED-03E-2	TA090311DUP-01	Soil
12	BH-SED-17-0	TA090311-02	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days except the following.

Sample	Date Sampled	Date Extracted	# of Days	Qualifier
7	03/04/09	03/24/09	20	J/UJ
8	03/04/09	03/24/09	20	J/UJ
9	03/04/09	03/24/09	20	J/UJ

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
03/24/09	Acenaphthylene	28.3%	None	Already qualified due to HT deficiency
	Indeno (1,2,3-cd) pyrene	26.8%	None	Already qualified due to HT deficiency

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values except the following.

LCS ID	Compound	%R	Qualifier	Affected Samples
QC090212-SBS	Benzene	63%	L/UL	1, 3
QC090303-SBS	Benzene	59%	L/UL	4, 6

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks exhibited the following contamination.

Blank ID	Compound	Conc. mg/kg	Action Level mg/kg	Qualifier	Affected Samples
QC090303-SB	1,3,5-Trimethylbenzene	0.002	0.010	B	6

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03A-00 mg/kg	Duplicate of BH-SED-03A-00 mg/kg	RPD	Qualifier
Benzene	3.0	3.96	28%	None
Toluene	2.18	1.66	27%	None
Ethylbenzene	2.13	2.11	1%	None
m/p-Xylene	1.88	1.47	24%	None
Styrene	0.404	0.320	23%	None

Compound	BH-SED-03A-00 mg/kg	Duplicate of BH-SED-03A-00 mg/kg	RPD	Qualifier
o-Xylene	0.931	0.679	31%	None
Isopropylbenzene	0.210	0.165	24%	None
n-Propylbenzene	0.196	0.159	21%	None
1,3,5-Trimethylbenzene	0.326	0.251	26%	None
1,2,4-Trimethylbenzene	1.11	0.863	25%	None
sec-Butylbenzene	0.033	0.047 U	NC	None
p-Isopropyltoluene	0.121	0.091	28%	None
n-Butylbenzene	0.151	0.120	23%	None
C1-Benzene	1.34	1.01	28%	None
C2-Benzene	2.26	1.9	17%	None
C3-Benzene	1.39	1.15	19%	None
C4-Benzene	0.835	0.665	23%	None
C5-Benzene	0.375	0.301	22%	None
trans-Decalin	0.100	0.087	14%	None
Naphthalene	151	133	13%	None
2-Methylnaphthalene	5.38	4.38	20%	None
1-Methylnaphthalene	3.5	2.59	30%	None
C1-Naphthalene	5.48	4.51	19%	None
C2-Naphthalene	3.25	2.48	27%	None
C3-Naphthalene	2.32	1.8	25%	None
C4-Naphthalene	1.5	1.14	27%	None
Acenaphthylene	3.86	4.36	12%	None
Acenaphthene	1.92	1.06	58%	None
Dibenzofuran	1.85	1.47	23%	None
Fluorene	1.46	0.990	38%	None
C1-Fluorene	0.814	0.808	1%	None
C2-Fluorene	1.3	1.33	2%	None
C3-Fluorene	1.13	0.968	15%	None
Phenanthrene	7.01	6.62	6%	None
Anthracene	3.72	9.14	84%	None
C1-Phenanthrene/Anthracene	3.51	5.58	46%	None
C2-Phenanthrene/Anthracene	2.77	3.51	24%	None
C3-Phenanthrene/Anthracene	1.66	1.51	9%	None
C4-Phenanthrene/Anthracene	1.01	0.560	57%	None
Dibenzothiophene	0.698	0.619	12%	None
C1-Dibenzothiophene	0.712	0.837	16%	None
C2-Dibenzothiophene	0.845	0.897	6%	None
C3-Dibenzothiophene	0.750	0.628	18%	None
C4-Dibenzothiophene	0.470	0.311	41%	None
Benzo (b) naphtho (2,1-d) thiophene	1.01	2.2	74%	None
Fluoranthene	14.8	35.6	83%	None
Pyrene	11.4	28.2	85%	None
C1-Fluoranthene/Pyrene	7.44	14.7	66%	None
C2-Fluoranthene/Pyrene	4.52	3.35	30%	None
C3-Fluoranthene/Pyrene	2.76	1.33	70%	None
Benzo (a) anthracene	6.93	17.0	84%	None
Chrysene	7.04	16.3	79%	None
C1-Benzo (a) anthracene /Chrysene	3.01	4.18	33%	None

Compound	BH-SED-03A-00 mg/kg	Duplicate of BH-SED-03A-00 mg/kg	RPD	Qualifier
C2-Benzo (a) anthracene /Chrysene	2.2	1.46	40%	None
C3-Benzo (a) anthracene /Chrysene	1.82	0.633	97%	None
C4-Benzo (a) anthracene /Chrysene	1.45	0.534	92%	None
Benzo (b) fluoranthene	6.65	12.8	63%	None
Benzo (j/k) fluoranthene	6.82	13.1	63%	None
Benzo (e) pyrene	5.5	9.62	54%	None
Benzo (a) pyrene	8.72	16.4	61%	None
Perylene	2.3	4.43	63%	None
Indeno (1,2,3-cd) perylene	5.16	9.08	55%	None
Dibenz (a,h) anthracene	1.21	2.06	52%	None
Benzo (g,h,i) perylene	5.05	8.84	55%	None
Coronene	1.19	2.13	57%	None
Retene	0.353	0.275	25%	None
Benzo (b/c) fluorenes	1.68	4.3	88%	None
2-Methylpyrene	0.837	1.3	43%	None
4-Methylpyrene	0.954	0.992	4%	None
1-Methylpyrene	0.731	1.1	40%	None
Heptadecane	0.758	0.865	13%	None
Pristane	1.58	1.41	11%	None
Octadecane	0.697	0.798	14%	None
Phytane	0.383	0.589	42%	None
2,6,10-Trimethyldodecane	0.268	0.195	32%	None
2,6,10-Trimethyltridecane	0.516	0.356	37%	None
Norpristane	0.265	0.232	13%	None
Total PAH (16)	243	314	25%	None
Total PAH (42)	304	384	23%	None

Compound	BH-SED-10-2 mg/kg	Duplicate of BH-SED-10-2 mg/kg	RPD	Qualifier
Benzene	0.933	1.01	8%	None
Toluene	1.69	1.58	7%	None
Ethylbenzene	0.394	0.378	4%	None
m/p-Xylene	1.72	1.61	7%	None
Styrene	1.36	1.36	0%	None
o-Xylene	0.323	0.305	6%	None
Isopropylbenzene	0.135	0.130	4%	None
n-Propylbenzene	0.067	0.057	16%	None
1,3,5-Trimethylbenzene	0.234	0.207	12%	None
1,2,4-Trimethylbenzene	0.445	0.396	12%	None
t-Butylbenzene	0.072	0.061	17%	None
sec-Butylbenzene	0.065	0.044	39%	None
p-Isopropyltoluene	0.055	0.050	10%	None
n-Butylbenzene	0.088	0.085	3%	None
C1-Benzene	1.01	0.961	5%	None
C2-Benzene	1.24	1.19	4%	None
C3-Benzene	0.690	0.640	8%	None
C4-Benzene	0.390	0.382	2%	None

Compound	BH-SED-10-2 mg/kg	Duplicate of BH-SED-10-2 mg/kg	RPD	Qualifier
C5-Benzene	0.353	0.337	5%	None
trans-Decalin	0.092 U	0.067	NC	None
Naphthalene	78.6	74.5	5%	None
2-Methylnaphthalene	2.84	2.64	7%	None
1-Methylnaphthalene	1.61	1.42	13%	None
C1-Naphthalene	2.78	2.46	12%	None
C2-Naphthalene	2.28	2.1	8%	None
C3-Naphthalene	1.73	1.48	16%	None
C4-Naphthalene	2.61	2.33	11%	None
Acenaphthylene	4.39	3.76	15%	None
Acenaphthene	3.28	2.56	25%	None
Dibenzofuran	1.99	1.7	16%	None
Fluorene	2.06	1.77	15%	None
C1-Fluorene	1.48	1.21	20%	None
C2-Fluorene	3.19	3.0	6%	None
C3-Fluorene	3.93	3.34	16%	None
Phenanthrene	8.2	6.9	17%	None
Anthracene	4.53	4.03	12%	None
C1-Phenanthrene/Anthracene	4.81	4.15	15%	None
C2-Phenanthrene/Anthracene	5.84	5.06	14%	None
C3-Phenanthrene/Anthracene	7.16	5.73	22%	None
C4-Phenanthrene/Anthracene	3.75	3.29	13%	None
Dibenzothiophene	0.962	0.838	14%	None
C1-Dibenzothiophene	1.36	1.23	10%	None
C2-Dibenzothiophene	2.59	2.34	10%	None
C3-Dibenzothiophene	3.45	3.06	12%	None
C4-Dibenzothiophene	2.17	1.92	12%	None
Benzo (b) naphtho (2,1-d) thiophene	1.94	1.83	6%	None
Fluoranthene	22.0	19.8	11%	None
Pyrene	14.9	13.4	11%	None
C1-Fluoranthene/Pyrene	13.1	11.6	12%	None
C2-Fluoranthene/Pyrene	7.24	6.29	14%	None
C3-Fluoranthene/Pyrene	5.2	4.34	18%	None
Benzo (a) anthracene	10.3	9.88	4%	None
Chrysene	7.92	7.62	4%	None
C1-Benzo (a) anthracene /Chrysene	6.58	5.67	15%	None
C2-Benzo (a) anthracene /Chrysene	5.21	3.99	27%	None
C3-Benzo (a) anthracene /Chrysene	3.5	2.73	25%	None
C4-Benzo (a) anthracene /Chrysene	3.12	2.38	27%	None
Benzo (b) fluoranthene	9.45	8.42	12%	None
Benzo (j/k) fluoranthene	9.09	8.68	5%	None
Benzo (e) pyrene	6.79	6.06	11%	None
Benzo (a) pyrene	10.3	9.28	10%	None
Perylene	2.82	2.71	4%	None
Indeno (1,2,3-cd) perylene	6.17	5.61	10%	None
Dibenz (a,h) anthracene	1.8	1.51	18%	None

Compound	BH-SED-10-2 mg/kg	Duplicate of BH-SED-10-2 mg/kg	RPD	Qualifier
Benzo (g,h,i) perylene	5.58	5.0	11%	None
Coronene	1.19	1.17	2%	None
Retene	1.79	1.53	16%	None
Benzo (b/c) fluorenes	2.96	2.7	9%	None
2-Methylpyrene	1.38	1.18	16%	None
4-Methylpyrene	1.35	1.14	17%	None
1-Methylpyrene	1.12	0.949	17%	None
Heptadecane	2.25	1.75	25%	None
Pristane	2.73	1.93	34%	None
Octadecane	1.81	1.59	13%	None
Phytane	3.28	2.48	28%	None
2,6,10-Trimethyldodecane	0.090	0.131	37%	None
2,6,10-Trimethyltridecane	0.511	0.373	31%	None
Norpristane	1.45	0.884	49%	None
Total PAH (16)	198	183	8%	None
Total PAH (42)	304	274	10%	None

Compound	BH-SED-13C-6 mg/kg	Duplicate of BH-SED-13C-6 mg/kg	RPD	Qualifier
Benzene	1.76	2.18	21%	None
Toluene	0.652	0.870	29%	None
Ethylbenzene	0.143	0.222	43%	None
m/p-Xylene	0.728	1.25	53%	None
Styrene	0.316	0.697	75%	None
o-Xylene	0.156	0.382	84%	None
Isopropylbenzene	0.010	0.018	57%	None
n-Propylbenzene	0.009	0.014	43%	None
1,3,5-Trimethylbenzene	0.091	0.276	101%	None
1,2,4-Trimethylbenzene	0.206	0.597	97%	None
sec-Butylbenzene	0.004	0.008	67%	None
p-Isopropyltoluene	0.015	0.038	87%	None
n-Butylbenzene	0.012	0.020	50%	None
C1-Benzene	0.396	0.536	30%	None
C2-Benzene	0.496	0.895	57%	None
C3-Benzene	0.201	0.552	93%	None
C4-Benzene	0.086	0.204	81%	None
C5-Benzene	0.034	0.056	49%	None
trans-Decalin	0.008	0.013	48%	None
Naphthalene	25.5	64.2	86%	None
2-Methylnaphthalene	1.63	4.66	96%	None
1-Methylnaphthalene	1.21	3.71	102%	None
C1-Naphthalene	1.76	5.15	98%	None
C2-Naphthalene	1.46	3.9	91%	None
C3-Naphthalene	0.849	2.48	98%	None
C4-Naphthalene	0.613	1.95	104%	None
Acenaphthylene	2.02	10.7	136%	None
Acenaphthene	3.86	10.7	94%	None
Dibenzofuran	2.88	7.11	85%	None
Fluorene	4.0	11.9	99%	None

Compound	BH-SED-13C-6 mg/kg	Duplicate of BH-SED-13C-6 mg/kg	RPD	Qualifier
C1-Fluorene	0.958	3.61	116%	None
C2-Fluorene	0.467	2.43	136%	None
C3-Fluorene	0.523	1.6	101%	None
Phenanthrene	12.7	47.4	115%	None
Anthracene	6.59	31.0	130%	None
C1-Phenanthrene/Anthracene	4.22	26.0	144%	None
C2-Phenanthrene/Anthracene	2.21	16.8	153%	None
C3-Phenanthrene/Anthracene	1.05	5.99	140%	None
C4-Phenanthrene/Anthracene	0.393	1.23	103%	None
Dibenzothiophene	1.58	4.95	103%	None
C1-Dibenzothiophene	0.683	2.85	123%	None
C2-Dibenzothiophene	0.576	2.55	126%	None
C3-Dibenzothiophene	0.443	1.38	103%	None
C4-Dibenzothiophene	0.266	0.606	78%	None
Benzo (b) naphtho (2,1-d) thiophene	2.09	10.2	132%	None
Fluoranthene	25.0	119	131%	None
Pyrene	16.2	77.7	131%	None
C1-Fluoranthene/Pyrene	10.2	66.2	147%	None
C2-Fluoranthene/Pyrene	2.46	19.4	155%	None
C3-Fluoranthene/Pyrene	0.848	5.83	149%	None
Benzo (a) anthracene	10.6	60.7	141%	None
Chrysene	9.72	54.2	139%	None
C1-Benzo (a) anthracene /Chrysene	3.1	22.0	151%	None
C2-Benzo (a) anthracene /Chrysene	1.01	8.06	155%	None
C3-Benzo (a) anthracene /Chrysene	0.410	2.28	139%	None
C4-Benzo (a) anthracene /Chrysene	0.346	2.11	144%	None
Benzo (b) fluoranthene	8.33	38.1	128%	None
Benzo (j/k) fluoranthene	7.96	40.8	135%	None
Benzo (e) pyrene	5.58	25.4	128%	None
Benzo (a) pyrene	9.25	44.2	131%	None
Perylene	2.79	10.3	115%	None
Indeno (1,2,3-cd) perylene	5.96	24.0	120%	None
Dibenz (a,h) anthracene	1.93	8.26	124%	None
Benzo (g,h,i) perylene	5.15	17.5	109%	None
Coronene	1.61	5.68	112%	None
Retene	0.258	0.005 U	NC	None
Benzo (b/c) fluorenes	3.27	21.1	146%	None
2-Methylpyrene	0.878	5.66	146%	None
4-Methylpyrene	0.566	3.43	143%	None
1-Methylpyrene	0.645	4.41	149%	None
Heptadecane	0.48	0.512	6%	None
Pristane	0.746	1.55	70%	None
Octadecane	0.380	0.566	39%	None
Phytane	0.792	1.53	64%	None
2,6,10-Trimethyldodecane	0.041	0.116	96%	None
2,6,10-Trimethyltridecane	0.135	0.293	74%	None

Compound	BH-SED-13C-6 mg/kg	Duplicate of BH-SED-13C-6 mg/kg	RPD	Qualifier
Norpristane	0.272	0.570	71%	None
Total PAH (16)	155	660	124%	None
Total PAH (42)	202	912	127%	None

Compound	BH-SED-03E-2 mg/kg	Duplicate of BH-SED-03E-2 mg/kg	RPD	Qualifier
Benzene	0.190	0.170	11%	None
Toluene	0.569	0.507	12%	None
Ethylbenzene	0.064	0.056	13%	None
m/p-Xylene	0.457	0.433	5%	None
Styrene	0.385	0.336	14%	None
o-Xylene	0.057	0.050	13%	None
Isopropylbenzene	0.008	0.008	0%	None
n-Propylbenzene	0.018	0.017	6%	None
1,3,5-Trimethylbenzene	0.030	0.028	7%	None
1,2,4-Trimethylbenzene	0.082	0.074	10%	None
sec-Butylbenzene	0.007	0.006	15%	None
p-Isopropyltoluene	0.027	0.023	16%	None
n-Butylbenzene	0.022	0.023	4%	None
C1-Benzene	0.346	0.304	13%	None
C2-Benzene	0.283	0.269	5%	None
C3-Benzene	0.114	0.105	8%	None
C4-Benzene	0.075	0.069	8%	None
C5-Benzene	0.057	0.053	7%	None
trans-Decalin	0.009	0.008	12%	None
Naphthalene	3.4	3.05	11%	None
2-Methylnaphthalene	0.994	0.894	11%	None
1-Methylnaphthalene	0.395	0.359	10%	None
C1-Naphthalene	0.858	0.771	11%	None
C2-Naphthalene	0.708	0.649	9%	None
C3-Naphthalene	0.360	0.345	4%	None
C4-Naphthalene	0.315	0.310	2%	None
Acenaphthylene	0.993	0.994	0%	None
Acenaphthene	0.151	0.141	7%	None
Dibenzofuran	0.539	0.493	9%	None
Fluorene	0.609	0.556	9%	None
C1-Fluorene	0.321	0.289	10%	None
C2-Fluorene	0.551	0.624	12%	None
C3-Fluorene	0.593	0.507	16%	None
Phenanthrene	1.92	1.74	10%	None
Anthracene	1.65	1.54	7%	None
C1-Phenanthrene/Anthracene	1.53	1.64	7%	None
C2-Phenanthrene/Anthracene	0.954	0.899	6%	None
C3-Phenanthrene/Anthracene	0.678	0.656	3%	None
C4-Phenanthrene/Anthracene	0.403	0.407	1%	None
Dibenzothiophene	0.304	0.277	9%	None
C1-Dibenzothiophene	0.383	0.351	9%	None
C2-Dibenzothiophene	0.436	0.416	5%	None
C3-Dibenzothiophene	0.514	0.481	7%	None
C4-Dibenzothiophene	0.394	0.371	6%	None

Compound	BH-SED-03E-2 mg/kg	Duplicate of BH-SED-03E-2 mg/kg	RPD	Qualifier
Benzo (b) naphtho (2,1-d) thiophene	0.730	0.683	7%	None
Fluoranthene	5.96	5.48	8%	None
Pyrene	5.62	5.15	9%	None
C1-Fluoranthene/Pyrene	4.24	3.84	10%	None
C2-Fluoranthene/Pyrene	1.65	1.52	8%	None
C3-Fluoranthene/Pyrene	0.953	0.869	9%	None
Benzo (a) anthracene	4.25	3.98	7%	None
Chrysene	3.59	3.43	5%	None
C1-Benzo (a) anthracene /Chrysene	2.05	1.85	10%	None
C2-Benzo (a) anthracene /Chrysene	1.09	0.965	12%	None
C3-Benzo (a) anthracene /Chrysene	0.589	0.541	8%	None
C4-Benzo (a) anthracene /Chrysene	0.532	0.480	10%	None
Benzo (b) fluoranthene	4.8	4.6	4%	None
Benzo (j/k) fluoranthene	3.85	3.76	2%	None
Benzo (e) pyrene	3.18	3.08	3%	None
Benzo (a) pyrene	4.72	4.56	3%	None
Perylene	1.41	1.43	1%	None
Indeno (1,2,3-cd) perylene	3.12	3.14	1%	None
Dibenz (a,h) anthracene	1.03	0.901	13%	None
Benzo (g,h,i) perylene	2.75	2.77	1%	None
Coronene	0.699	0.705	1%	None
Retene	0.168	0.155	8%	None
Benzo (b/c) fluorenes	1.21	1.1	10%	None
2-Methylpyrene	0.413	0.376	9%	None
4-Methylpyrene	0.339	0.321	5%	None
1-Methylpyrene	0.286	0.261	9%	None
Heptadecane	0.776	0.735	5%	None
Pristane	0.213	0.254	18%	None
Octadecane	0.399	0.369	8%	None
Phytane	0.341	0.378	10%	None
2,6,10-Trimethyldodecane	0.038	0.027	34%	None
2,6,10-Trimethyltridecane	0.080	0.082	2%	None
Norpristane	0.154	0.131	16%	None
Total PAH (16)	48.4	45.8	6%	None
Total PAH (42)	73.9	69.8	6%	None

Compound Quantitation - Several samples were reanalyzed at various dilutions due to high concentrations of target compounds. No action was required.

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-01-D		
File ID:	E021812.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.48
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	3.0 5 L	0.050	0.025	
Toluene	2.18	0.099	0.050	
Ethylbenzene	2.13	0.050	0.025	
m/p-Xylenes	1.88	0.050	0.025	
Styrene	0.404	0.099	0.050	
o-Xylene	0.931	0.050	0.025	
Isopropylbenzene	0.210	0.050	0.025	
n-Propylbenzene	0.196	0.050	0.025	
1,3,5-Trimethylbenzene	0.326	0.050	0.025	
1,2,4-Trimethylbenzene	1.11	0.050	0.025	
t-Butylbenzene	U	0.050	0.025	
sec-Butylbenzene	0.033 J	0.050	0.025	
p-Isopropyltoluene	0.121	0.050	0.025	
n-Butylbenzene	0.151	0.050	0.025	
C1 - Benzene	1.34	0.099	0.050	
C2 - Benzene	2.26	0.050	0.025	
C3 - Benzene	1.39	0.050	0.025	
C4 - Benzene	0.835	0.050	0.025	
C5 - Benzene	0.375	0.050	0.025	
trans-Decalin	0.100	0.050	0.025	
cis-Decalin	U	0.050	0.025	
Naphthalene	151 5	0.050	0.025	
2-Methylnaphthalene	5.38 5	0.050	0.025	
1-Methylnaphthalene	3.5 5	0.050	0.025	
C1 - Naphthalene	5.48 5	0.050	0.025	
C2 - Naphthalene	3.25 5	0.050	0.025	
C3- Naphthalene	2.32 5	0.050	0.025	
C4- Naphthalene	1.5	0.050	0.025	
Acenaphthylene	3.86	0.050	0.025	
Acenaphthene	1.92	0.050	0.025	
Dibenzofuran	1.85	0.050	0.025	
Fluorene	1.46	0.050	0.025	
C1 - Fluorene	0.814	0.050	0.025	
C2 - Fluorene	1.3	0.050	0.025	
C3 - Fluorene	1.13	0.050	0.025	
Phenanthrene	7.01 5	0.050	0.025	
Anthracene	3.72	0.050	0.025	

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-01-D		
File ID:	E021812.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.48
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	3.51	0.050	0.025	
C2 - Phenanthrene/Anthracene	2.77	0.050	0.025	
C3 - Phenanthrene/Anthracene	1.66	0.050	0.025	
C4 - Phenanthrene/Anthracene	1.01	0.050	0.025	
Dibenzothiophene	0.698	0.050	0.025	
C1 - Dibenzothiophene	0.712	0.050	0.025	
C2 - Dibenzothiophene	0.845	0.050	0.025	
C3 - Dibenzothiophene	0.750	0.050	0.025	
C4 - Dibenzothiophene	0.470	0.050	0.025	
Benzo(b)naphtho(2,1-d)thiophene	1.01	0.050	0.025	
Fluoranthene	14.8 B	0.050	0.025	
Pyrene	11.4 B	0.050	0.025	
C1 - Fluoranthene/Pyrene	7.44	0.050	0.025	
C2 - Fluoranthene/Pyrene	4.52	0.050	0.025	
C3 - Fluoranthene/Pyrene	2.76	0.050	0.025	
Benz[a]anthracene	6.93 B	0.050	0.025	
Chrysene*	7.04 B	0.050	0.025	
C1 - Benz(a)anthracene/Chrysene	3.01	0.050	0.025	
C2 - Benz(a)anthracene/Chrysene	2.2	0.050	0.025	
C3 - Benz(a)anthracene/Chrysene	1.82	0.050	0.025	
C4 - Benz(a)anthracene/Chrysene	1.45	0.050	0.025	
Benzo[b]fluoranthene	6.65 B	0.050	0.025	
Benzo[j/k]fluoranthene	6.82 B	0.050	0.025	
Benzo(e)pyrene	5.5 B	0.050	0.025	
Benzo[a]pyrene	8.72 B	0.050	0.025	
Perylene	2.3 B	0.050	0.025	
Indeno[1,2,3-cd]pyrene	5.16 B	0.050	0.025	
Dibenz[a,h]anthracene	1.21 B	0.050	0.025	
Benzo[g,h,i]perylene	5.05 B	0.050	0.025	
Coronene	1.19	0.050	0.025	
Retene	0.353	0.050	0.025	
Benzo(b/c)fluorenes	1.68	0.050	0.025	
2-Methylpyrene	0.837	0.050	0.025	
4-Methylpyrene	0.954	0.050	0.025	
1-Methylpyrene	0.731	0.050	0.025	
Heptadecane	0.758 B	0.099	0.050	
Pristane	1.58 B	0.050	0.025	
Octadecane	0.697 B	0.099	0.050	
Phytane	0.383 B	0.050	0.025	

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-01-D		
File ID:	E021812.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.48
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldecane	0.268	0.050	0.025	
2,6,10-trimethyltridecane	0.516	0.050	0.025	
Norpristane	0.265	0.050	0.025	
Tetraethyl lead	U	0.099	0.050	
Total PAH (16)	243	0.050	0.025	
Total PAH (42)	304	0.050	0.025	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	70	50 - 120
Phenanthrene-d10	82	50 - 120
Benzo[a]pyrene-d12	66	50 - 120
Perylene-d12	79	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

2

Field ID: Duplicate of BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-01DUP-D		
File ID:	E021813.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.66
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	3.96 P	0.047	0.024	27.6
Toluene	1.66	0.094	0.047	27.1
Ethylbenzene	2.11	0.047	0.024	0.9
m/p-Xylenes	1.47	0.047	0.024	24.5
Styrene	0.320	0.094	0.047	23.2
o-Xylene	0.679	0.047	0.024	31.3
Isopropylbenzene	0.165	0.047	0.024	24
n-Propylbenzene	0.159	0.047	0.024	20.8
1,3,5-Trimethylbenzene	0.251	0.047	0.024	26
1,2,4-Trimethylbenzene	0.863	0.047	0.024	25
t-Butylbenzene	U	0.047	0.024	NA
sec-Butylbenzene	U	0.047	0.024	NA
p-Isopropyltoluene	0.091	0.047	0.024	28.3
n-Butylbenzene	0.120	0.047	0.024	22.9
C1 - Benzene	1.01	0.094	0.047	28.1
C2 - Benzene	1.9	0.047	0.024	17.3
C3 - Benzene	1.15	0.047	0.024	18.9
C4 - Benzene	0.665	0.047	0.024	22.7
C5 - Benzene	0.301	0.047	0.024	21.9
trans-Decalin	0.087	0.047	0.024	13.9
cis-Decalin	U	0.047	0.024	NA
Naphthalene	133 P	0.047	0.024	12.7
2-Methylnaphthalene	4.38 P	0.047	0.024	20.5
1-Methylnaphthalene	2.59 P	0.047	0.024	29.9
C1 - Naphthalene	4.51 P	0.047	0.024	19.4
C2 - Naphthalene	2.48 P	0.047	0.024	26.9
C3- Naphthalene	1.8 P	0.047	0.024	25.2
C4- Naphthalene	1.14	0.047	0.024	27.3
Acenaphthylene	4.36	0.047	0.024	12.2
Acenaphthene	1.06	0.047	0.024	57.7
Dibenzofuran	1.47	0.047	0.024	22.9
Fluorene	0.990	0.047	0.024	38.4
C1 - Fluorene	0.808	0.047	0.024	0.7
C2 - Fluorene	1.33	0.047	0.024	2.3
C3 - Fluorene	0.968	0.047	0.024	15.4
Phenanthrene	6.62 P	0.047	0.024	5.7
Anthracene	9.14	0.047	0.024	84.3

led
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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

2

Field ID: Duplicate of BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-01DUP-D		
File ID:	E021813.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.66
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	5.58	0.047	0.024	45.5
C2 - Phenanthrene/Anthracene	3.51	0.047	0.024	23.6
C3 - Phenanthrene/Anthracene	1.51	0.047	0.024	9.5
C4 - Phenanthrene/Anthracene	0.560	0.047	0.024	57.3
Dibenzothiophene	0.619	0.047	0.024	12
C1 - Dibenzothiophene	0.837	0.047	0.024	16.1
C2 - Dibenzothiophene	0.897	0.047	0.024	6
C3 - Dibenzothiophene	0.628	0.047	0.024	17.7
C4 - Dibenzothiophene	0.311	0.047	0.024	40.7
Benzo(b)naphtho(2,1-d)thiophene	2.2	0.047	0.024	74.1
Fluoranthene	35.6 B	0.047	0.024	82.5
Pyrene	28.2 B	0.047	0.024	84.8
C1 - Fluoranthene/Pyrene	14.7	0.047	0.024	65.6
C2 - Fluoranthene/Pyrene	3.35	0.047	0.024	29.7
C3 - Fluoranthene/Pyrene	1.33	0.047	0.024	69.9
Benz[a]anthracene	17.0 B	0.047	0.024	84.2
Chrysene*	16.3 B	0.047	0.024	79.3
C1 - Benz(a)anthracene/Chrysene	4.18	0.047	0.024	32.5
C2 - Benz(a)anthracene/Chrysene	1.46	0.047	0.024	40.4
C3 - Benz(a)anthracene/Chrysene	0.633	0.047	0.024	96.8
C4 - Benz(a)anthracene/Chrysene	0.534	0.047	0.024	92.3
Benzo[b]fluoranthene	12.8 B	0.047	0.024	63.2
Benzo[j/k]fluoranthene	13.1 B	0.047	0.024	63.1
Benzo(e)pyrene	9.62 B	0.047	0.024	54.5
Benzo[a]pyrene	16.4 B	0.047	0.024	61.1
Perylene	4.43 B	0.047	0.024	63.3
Indeno[1,2,3-cd]pyrene	9.08 B	0.047	0.024	55.1
Dibenz[a,h]anthracene	2.06 B	0.047	0.024	52
Benzo[g,h,i]perylene	8.84 B	0.047	0.024	54.6
Coronene	2.13	0.047	0.024	56.6
Retene	0.275	0.047	0.024	24.8
Benzo(b/c)fluorenes	4.3	0.047	0.024	87.6
2-Methylpyrene	1.3	0.047	0.024	43.3
4-Methylpyrene	0.992	0.047	0.024	3.9
1-Methylpyrene	1.1	0.047	0.024	40.3
Heptadecane	0.865 B	0.094	0.047	13.2
Pristane	1.41 B	0.047	0.024	11.4
Octadecane	0.798 B	0.094	0.047	13.5
Phytane	0.589 B	0.047	0.024	42.4

lu
5/22/09

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

2

Field ID: Duplicate of BH-SED-03A-00

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-01DUP-D		
File ID:	E021813.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.66
Date Cleanup:	NA	Percent Solid:	58.0%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.195	0.047	0.024	31.5
2,6,10-trimethyltridecane	0.356	0.047	0.024	36.7
Norpristane	0.232	0.047	0.024	13.3
Tetraethyl lead	U	0.094	0.047	NA
Total PAH (16)	314	0.047	0.024	25.5
Total PAH (42)	384	0.047	0.024	23.3

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	63	50 - 120
Phenanthrene-d10	74	50 - 120
Benzo[a]pyrene-d12	61	50 - 120
Perylene-d12	72	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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.

hw
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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

3

Field ID: Reference

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-02		
File ID:	E021814.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.73
Date Cleanup:	NA	Percent Solid:	30.6%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.333 P L	0.009	0.004	
Toluene	0.841	0.018	0.009	
Ethylbenzene	0.043	0.009	0.004	
m/p-Xylenes	0.611	0.009	0.004	
Styrene	0.026	0.018	0.009	
o-Xylene	0.051	0.009	0.004	
Isopropylbenzene	0.006 J	0.009	0.004	
n-Propylbenzene	0.022	0.009	0.004	
1,3,5-Trimethylbenzene	0.018	0.009	0.004	
1,2,4-Trimethylbenzene	0.048	0.009	0.004	
t-Butylbenzene	U	0.009	0.004	
sec-Butylbenzene	U	0.009	0.004	
p-Isopropyltoluene	0.016	0.009	0.004	
n-Butylbenzene	0.023	0.009	0.004	
C1 - Benzene	0.511	0.018	0.009	
C2 - Benzene	0.349	0.009	0.004	
C3 - Benzene	0.070	0.009	0.004	
C4 - Benzene	0.051	0.009	0.004	
C5 - Benzene	0.040	0.009	0.004	
trans-Decalin	0.009 J	0.009	0.004	
cis-Decalin	U	0.009	0.004	
Naphthalene	0.873 P	0.009	0.004	
2-Methylnaphthalene	0.270 P	0.009	0.004	
1-Methylnaphthalene	0.123 P	0.009	0.004	
C1 - Naphthalene	0.247 P	0.009	0.004	
C2 - Naphthalene	0.390 P	0.009	0.004	
C3- Naphthalene	0.140 P	0.009	0.004	
C4- Naphthalene	0.094	0.009	0.004	
Acenaphthylene	0.110	0.009	0.004	
Acenaphthene	0.055	0.009	0.004	
Dibenzofuran	0.075	0.009	0.004	
Fluorene	0.092	0.009	0.004	
C1 - Fluorene	0.066	0.009	0.004	
C2 - Fluorene	0.217	0.009	0.004	
C3 - Fluorene	0.157	0.009	0.004	
Phenanthrene	0.370 P	0.009	0.004	
Anthracene	0.196	0.009	0.004	

luw
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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

3

Field ID: Reference

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090211-02		
File ID:	E021814.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.73
Date Cleanup:	NA	Percent Solid:	30.6%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.662	0.009	0.004	
C2 - Phenanthrene/Anthracene	0.276	0.009	0.004	
C3 - Phenanthrene/Anthracene	0.155	0.009	0.004	
C4 - Phenanthrene/Anthracene	0.081	0.009	0.004	
Dibenzothiophene	0.055	0.009	0.004	
C1 - Dibenzothiophene	0.074	0.009	0.004	
C2 - Dibenzothiophene	0.112	0.009	0.004	
C3 - Dibenzothiophene	0.096	0.009	0.004	
C4 - Dibenzothiophene	0.070	0.009	0.004	
Benzo(b)naphtho(2,1-d)thiophene	0.065	0.009	0.004	
Fluoranthene	0.693 B	0.009	0.004	
Pyrene	0.669 B	0.009	0.004	
C1 - Fluoranthene/Pyrene	0.450	0.009	0.004	
C2 - Fluoranthene/Pyrene	0.281	0.009	0.004	
C3 - Fluoranthene/Pyrene	0.145	0.009	0.004	
Benz[a]anthracene	0.337 B	0.009	0.004	
Chrysene*	0.370 B	0.009	0.004	
C1 - Benz(a)anthracene/Chrysene	0.245	0.009	0.004	
C2 - Benz(a)anthracene/Chrysene	0.170	0.009	0.004	
C3 - Benz(a)anthracene/Chrysene	0.093	0.009	0.004	
C4 - Benz(a)anthracene/Chrysene	0.096	0.009	0.004	
Benzo[b]fluoranthene	0.516 B	0.009	0.004	
Benzo[j/k]fluoranthene	0.442 B	0.009	0.004	
Benzo(e)pyrene	0.368 B	0.009	0.004	
Benzo[a]pyrene	0.468 B	0.009	0.004	
Perylene	0.271 B	0.009	0.004	
Indeno[1,2,3-cd]pyrene	0.344 B	0.009	0.004	
Dibenz[a,h]anthracene	0.082 B	0.009	0.004	
Benzo[g,h,i]perylene	0.360 B	0.009	0.004	
Coronene	0.096	0.009	0.004	
Retene	0.040	0.009	0.004	
Benzo(b/c)fluorenes	0.087	0.009	0.004	
2-Methylpyrene	0.058	0.009	0.004	
4-Methylpyrene	0.050	0.009	0.004	
1-Methylpyrene	0.043	0.009	0.004	
Heptadecane	0.362 B	0.018	0.009	
Pristane	0.053 B	0.009	0.004	
Octadecane	0.097 B	0.018	0.009	
Phytane	0.064 B	0.009	0.004	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

3

Field ID: Reference

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID:	TA090211-02		
File ID:	E021814.D	Matrix:	Sediment
		Preservation:	None
		Decanted:	None
Date Sampled:	1/0/1900		
Date Received:	2/9/2009		
Date Prepared:	2/12/2009	Sample Size (g):	3.73
Date Cleanup:	NA	Percent Solid:	30.6%
Date Analyzed:	2/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090212-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldecane	0.025	0.009	0.004	
2,6,10-trimethyltridecane	0.040	0.009	0.004	
Norpristane	0.020	0.009	0.004	
Tetraethyl lead	U	0.018	0.009	
Total PAH (16)	5.98	0.009	0.004	
Total PAH (42)	11.1	0.009	0.004	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	67	50 - 120
Phenanthrene-d10	85	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 DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

META Environmental, Inc.

4

Field ID: BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01-D		
File ID:	E030516.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.62
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	0.933 B L	0.092	0.046	
Toluene	1.69 B	0.092	0.046	
Ethylbenzene	0.394	0.092	0.046	
m/p-Xylenes	1.72 B	0.092	0.046	
Styrene	1.36 B	0.092	0.046	
o-Xylene	0.323	0.092	0.046	
Isopropylbenzene	0.135	0.092	0.046	
n-Propylbenzene	0.067 J	0.092	0.046	
1,3,5-Trimethylbenzene	0.234 B	0.092	0.046	
1,2,4-Trimethylbenzene	0.445	0.092	0.046	
t-Butylbenzene	0.072 J	0.092	0.046	
sec-Butylbenzene	0.065 J	0.092	0.046	
p-Isopropyltoluene	0.055 J	0.092	0.046	
n-Butylbenzene	0.088 J	0.092	0.046	
C1 - Benzene	1.01 B	0.092	0.046	
C2 - Benzene	1.24	0.092	0.046	
C3 - Benzene	0.690	0.092	0.046	
C4 - Benzene	0.390	0.092	0.046	
C5 - Benzene	0.353	0.092	0.046	
trans-Decalin	U	0.092	0.046	
cis-Decalin	U	0.092	0.046	
Naphthalene	78.6 B	0.092	0.046	
2-Methylnaphthalene	2.84 B	0.092	0.046	
1-Methylnaphthalene	1.61 B	0.092	0.046	
C1 - Naphthalene	2.78 B	0.092	0.046	
C2 - Naphthalene	2.28	0.092	0.046	
C3 - Naphthalene	1.73	0.092	0.046	
C4 - Naphthalene	2.61	0.092	0.046	
Acenaphthylene	4.39 B	0.092	0.046	
Acenaphthene	3.28	0.092	0.046	
Dibenzofuran	1.99	0.092	0.046	
Fluorene	2.06 B	0.092	0.046	
C1 - Fluorene	1.48	0.092	0.046	
C2 - Fluorene	3.19	0.092	0.046	
C3 - Fluorene	3.93	0.092	0.046	
Phenanthrene	8.2 B	0.092	0.046	
Anthracene	4.53 B	0.092	0.046	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01-D		
File ID:	E030516.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.62
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (μl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	4.81 B	0.092	0.046	
C2 - Phenanthrene/Anthracene	5.84	0.092	0.046	
C3 - Phenanthrene/Anthracene	7.16	0.092	0.046	
C4 - Phenanthrene/Anthracene	3.75	0.092	0.046	
Dibenzothiophene	0.962 B	0.092	0.046	
C1 - Dibenzothiophene	1.36	0.092	0.046	
C2 - Dibenzothiophene	2.59	0.092	0.046	
C3 - Dibenzothiophene	3.45	0.092	0.046	
C4 - Dibenzothiophene	2.17	0.092	0.046	
Benzo(b)naphtho(2,1-d)thiophene	1.94	0.092	0.046	
Fluoranthene	22.0 B	0.092	0.046	
Pyrene	14.9 B	0.092	0.046	
C1 - Fluoranthene/Pyrene	13.1	0.092	0.046	
C2 - Fluoranthene/Pyrene	7.24	0.092	0.046	
C3 - Fluoranthene/Pyrene	5.2	0.092	0.046	
Benz[a]anthracene	10.3 B	0.092	0.046	
Chrysene*	7.92 B	0.092	0.046	
C1 - Benz(a)anthracene/Chrysene	6.58	0.092	0.046	
C2 - Benz(a)anthracene/Chrysene	5.21	0.092	0.046	
C3 - Benz(a)anthracene/Chrysene	3.5	0.092	0.046	
C4 - Benz(a)anthracene/Chrysene	3.12	0.092	0.046	
Benzo[b]fluoranthene	9.45 B	0.092	0.046	
Benzo[j/k]fluoranthene	9.09 B	0.092	0.046	
Benzo(e)pyrene	6.79 B	0.092	0.046	
Benzo[a]pyrene	10.3 B	0.092	0.046	
Perylene	2.82	0.092	0.046	
Indeno[1,2,3-cd]pyrene	6.17 B	0.092	0.046	
Dibenz[a,h]anthracene	1.8 B	0.092	0.046	
Benzo[g,h,i]perylene	5.58 B	0.092	0.046	
Coronene	1.19	0.092	0.046	
Retene	1.79	0.092	0.046	
Benzo(b/c)fluorenes	2.96	0.092	0.046	
2-Methylpyrene	1.38	0.092	0.046	
4-Methylpyrene	1.35	0.092	0.046	
1-Methylpyrene	1.12	0.092	0.046	
Heptadecane	2.25 B	0.092	0.046	
Pristane	2.73	0.092	0.046	
Octadecane	1.81 B	0.092	0.046	
Phytane	3.28	0.092	0.046	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01-D		
File ID:	E030516.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.62
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.090 J	0.092	0.046	
2,6,10-trimethyltridecane	0.511	0.092	0.046	
Norpristane	1.45	0.092	0.046	
Tetraethyl lead	U	0.092	0.046	
Total PAH (16)	198	0.092	0.046	
Total PAH (42)	304	0.092	0.046	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	60	50 - 120
Phenanthrene-d10	89	50 - 120
Benzo[a]pyrene-d12	65	50 - 120
Perylene-d12	77	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: Duplicate of BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01DUP-D		
File ID:	E030517.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.98
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	1.01 B	0.081	0.041	7.9
Toluene	1.58 B	0.081	0.041	6.7
Ethylbenzene	0.378	0.081	0.041	4.1
m/p-Xylenes	1.61 B	0.081	0.041	6.6
Styrene	1.36 B	0.081	0.041	0
o-Xylene	0.305	0.081	0.041	5.7
Isopropylbenzene	0.130	0.081	0.041	3.8
n-Propylbenzene	0.057 J	0.081	0.041	16.1
1,3,5-Trimethylbenzene	0.207 B	0.081	0.041	12.2
1,2,4-Trimethylbenzene	0.396	0.081	0.041	11.7
t-Butylbenzene	0.061 J	0.081	0.041	16.5
sec-Butylbenzene	0.044 J	0.081	0.041	38.5
p-Isopropyltoluene	0.050 J	0.081	0.041	9.5
n-Butylbenzene	0.085	0.081	0.041	3.5
C1 - Benzene	0.961 B	0.081	0.041	5
C2 - Benzene	1.19	0.081	0.041	4.1
C3 - Benzene	0.640	0.081	0.041	7.5
C4 - Benzene	0.382	0.081	0.041	2.1
C5 - Benzene	0.337	0.081	0.041	4.6
trans-Decalin	0.067 J	0.081	0.041	NA
cis-Decalin	U	0.081	0.041	NA
Naphthalene	74.5 B	0.081	0.041	5.4
2-Methylnaphthalene	2.64 B	0.081	0.041	7.3
1-Methylnaphthalene	1.42 B	0.081	0.041	12.5
C1 - Naphthalene	2.46 B	0.081	0.041	12.2
C2 - Naphthalene	2.1	0.081	0.041	8.2
C3 - Naphthalene	1.48	0.081	0.041	15.6
C4 - Naphthalene	2.33	0.081	0.041	11.3
Acenaphthylene	3.76 B	0.081	0.041	15.5
Acenaphthene	2.56	0.081	0.041	24.7
Dibenzofuran	1.7	0.081	0.041	15.7
Fluorene	1.77 B	0.081	0.041	15.1
C1 - Fluorene	1.21	0.081	0.041	20.1
C2 - Fluorene	3.0	0.081	0.041	6.1
C3 - Fluorene	3.34	0.081	0.041	16.2
Phenanthrene	6.9 B	0.081	0.041	17.2
Anthracene	4.03 B	0.081	0.041	11.7

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Field ID: Duplicate of BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01DUP-D		
File ID:	E030517.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.98
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	4.15 B	0.081	0.041	14.7
C2 - Phenanthrene/Anthracene	5.06	0.081	0.041	14.3
C3 - Phenanthrene/Anthracene	5.73	0.081	0.041	22.2
C4 - Phenanthrene/Anthracene	3.29	0.081	0.041	13.1
Dibenzothiophene	0.838 B	0.081	0.041	13.8
C1 - Dibenzothiophene	1.23	0.081	0.041	10
C2 - Dibenzothiophene	2.34	0.081	0.041	10.1
C3 - Dibenzothiophene	3.06	0.081	0.041	12
C4 - Dibenzothiophene	1.92	0.081	0.041	12.2
Benzo(b)naphtho(2,1-d)thiophene	1.83	0.081	0.041	5.8
Fluoranthene	19.8 B	0.081	0.041	10.5
Pyrene	13.4 B	0.081	0.041	10.6
C1 - Fluoranthene/Pyrene	11.6	0.081	0.041	12.1
C2 - Fluoranthene/Pyrene	6.29	0.081	0.041	14
C3 - Fluoranthene/Pyrene	4.34	0.081	0.041	18
Benz[a]anthracene	9.88 B	0.081	0.041	4.2
Chrysene*	7.62 B	0.081	0.041	3.9
C1 - Benz(a)anthracene/Chrysene	5.67	0.081	0.041	14.9
C2 - Benz(a)anthracene/Chrysene	3.99	0.081	0.041	26.5
C3 - Benz(a)anthracene/Chrysene	2.73	0.081	0.041	24.7
C4 - Benz(a)anthracene/Chrysene	2.38	0.081	0.041	26.9
Benzo[b]fluoranthene	8.42 B	0.081	0.041	11.5
Benzo[j/k]fluoranthene	8.68 B	0.081	0.041	4.6
Benzo(e)pyrene	6.06 B	0.081	0.041	11.4
Benzo[a]pyrene	9.28 B	0.081	0.041	10.4
Perylene	2.71	0.081	0.041	4
Indeno[1,2,3-cd]pyrene	5.61 B	0.081	0.041	9.5
Dibenz[a,h]anthracene	1.51 B	0.081	0.041	17.5
Benzo[g,h,i]perylene	5.0 B	0.081	0.041	11
Coronene	1.17	0.081	0.041	1.7
Retene	1.53	0.081	0.041	15.7
Benzo(b/c)fluorenes	2.7	0.081	0.041	9.2
2-Methylpyrene	1.18	0.081	0.041	15.6
4-Methylpyrene	1.14	0.081	0.041	16.9
1-Methylpyrene	0.949	0.081	0.041	16.5
Heptadecane	1.75 B	0.081	0.041	25
Pristane	1.93	0.081	0.041	34.3
Octadecane	1.59 B	0.081	0.041	12.9
Phytane	2.48	0.081	0.041	27.8

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: Duplicate of BH-SED-10-2

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-01DUP-D		
File ID:	E030517.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/24/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.98
Date Cleanup:	NA	Percent Solid:	41.4%
Date Analyzed:	3/6/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	10
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.131	0.081	0.041	37.1
2,6,10-trimethyltridecane	0.373	0.081	0.041	31.2
Norpristane	0.884	0.081	0.041	48.5
Tetraethyl lead	U	0.081	0.041	NA
Total PAH (16)	183	0.081	0.041	7.9
Total PAH (42)	274	0.081	0.041	10.4

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	68	50 - 120
Phenanthrene-d10	86	50 - 120
Benzo[a]pyrene-d12	65	50 - 120
Perylene-d12	75	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-03A-12

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-02		
File ID:	E030518.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/25/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.88
Date Cleanup:	NA	Percent Solid:	76.6%
Date Analyzed:	3/7/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	0.534 B L	0.005	0.002	
Toluene	0.247 B	0.005	0.002	
Ethylbenzene	0.037	0.005	0.002	
m/p-Xylenes	0.235 B	0.005	0.002	
Styrene	0.139 B	0.005	0.002	
o-Xylene	0.047	0.005	0.002	
Isopropylbenzene	0.003 J	0.005	0.002	
n-Propylbenzene	0.008	0.005	0.002	
1,3,5-Trimethylbenzene	0.094 B B	0.005	0.002	
1,2,4-Trimethylbenzene	0.239	0.005	0.002	
t-Butylbenzene	U	0.005	0.002	
sec-Butylbenzene	U	0.005	0.002	
p-Isopropyltoluene	0.012	0.005	0.002	
n-Butylbenzene	0.017	0.005	0.002	
C1 - Benzene	0.150 B	0.005	0.002	
C2 - Benzene	0.155	0.005	0.002	
C3 - Benzene	0.219	0.005	0.002	
C4 - Benzene	0.130	0.005	0.002	
C5 - Benzene	0.039	0.005	0.002	
trans-Decalin	0.005 J	0.005	0.002	
cis-Decalin	U	0.005	0.002	
Naphthalene	46.0 B	0.005	0.002	
2-Methylnaphthalene	1.66 B	0.005	0.002	
1-Methylnaphthalene	0.616 B	0.005	0.002	
C1 - Naphthalene	1.4 B	0.005	0.002	
C2 - Naphthalene	0.238	0.005	0.002	
C3- Naphthalene	0.093	0.005	0.002	
C4- Naphthalene	0.067	0.005	0.002	
Acenaphthylene	0.342 B	0.005	0.002	
Acenaphthene	0.075	0.005	0.002	
Dibenzofuran	0.207	0.005	0.002	
Fluorene	0.340 B	0.005	0.002	
C1 - Fluorene	0.052	0.005	0.002	
C2 - Fluorene	0.088	0.005	0.002	
C3 - Fluorene	0.106	0.005	0.002	
Phenanthrene	0.529 B	0.005	0.002	
Anthracene	0.199 B	0.005	0.002	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-03A-12

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-02		
File ID:	E030518.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/25/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.88
Date Cleanup:	NA	Percent Solid:	76.6%
Date Analyzed:	3/7/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.345 B	0.005	0.002	
C2 - Phenanthrene/Anthracene	0.364	0.005	0.002	
C3 - Phenanthrene/Anthracene	0.254	0.005	0.002	
C4 - Phenanthrene/Anthracene	0.136	0.005	0.002	
Dibenzothiophene	0.049 B	0.005	0.002	
C1 - Dibenzothiophene	0.100	0.005	0.002	
C2 - Dibenzothiophene	0.089	0.005	0.002	
C3 - Dibenzothiophene	0.114	0.005	0.002	
C4 - Dibenzothiophene	0.077	0.005	0.002	
Benzo(b)naphtho(2,1-d)thiophene	0.084	0.005	0.002	
Fluoranthene	0.681 B	0.005	0.002	
Pyrene	0.741 B	0.005	0.002	
C1 - Fluoranthene/Pyrene	0.601	0.005	0.002	
C2 - Fluoranthene/Pyrene	0.380	0.005	0.002	
C3 - Fluoranthene/Pyrene	0.258	0.005	0.002	
Benz[a]anthracene	0.464 B	0.005	0.002	
Chrysene*	0.376 B	0.005	0.002	
C1 - Benz(a)anthracene/Chrysene	0.429	0.005	0.002	
C2 - Benz(a)anthracene/Chrysene	0.378	0.005	0.002	
C3 - Benz(a)anthracene/Chrysene	0.224	0.005	0.002	
C4 - Benz(a)anthracene/Chrysene	0.150	0.005	0.002	
Benzo[b]fluoranthene	0.415 B	0.005	0.002	
Benzo[j/k]fluoranthene	0.409 B	0.005	0.002	
Benzo(e)pyrene	0.321 B	0.005	0.002	
Benzo[a]pyrene	0.469 B	0.005	0.002	
Perylene	0.142	0.005	0.002	
Indeno[1,2,3-cd]pyrene	0.290 B	0.005	0.002	
Dibenz[a,h]anthracene	0.085 B	0.005	0.002	
Benzo[g,h,i]perylene	0.273 B	0.005	0.002	
Coronene	0.066	0.005	0.002	
Retene	0.042	0.005	0.002	
Benzo(b/c)fluorenes	0.127	0.005	0.002	
2-Methylpyrene	0.107	0.005	0.002	
4-Methylpyrene	0.073	0.005	0.002	
1-Methylpyrene	0.055	0.005	0.002	
Heptadecane	0.127 B	0.005	0.002	
Pristane	0.059	0.005	0.002	
Octadecane	0.114 B	0.005	0.002	
Phytane	0.072	0.005	0.002	

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META 

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-03A-12

Client:	Test America	Preparation Method:	EPA 3570M
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090226-02		
File ID:	E030518.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	2/25/2009		
Date Received:	2/26/2009		
Date Prepared:	3/3/2009	Sample Size (g):	2.88
Date Cleanup:	NA	Percent Solid:	76.6%
Date Analyzed:	3/7/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL/JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090303-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.010	0.005	0.002	
2,6,10-trimethyltridecane	0.015	0.005	0.002	
Norpristane	0.020	0.005	0.002	
Tetraethyl lead	U	0.005	0.002	
Total PAH (16)	51.7	0.005	0.002	
Total PAH (42)	58.4	0.005	0.002	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	65	50 - 120
Phenanthrene-d10	80	50 - 120
Benzo[a]pyrene-d12	63	50 - 120
Perylene-d12	71	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-13C-6

Client: Test America
Project: Sparrows Point

Preparation Method: EPA 3570
Cleanup Method(s): NA
Analysis Method: EPA 8270M

Lab ID: TA090305-01-R~~E~~
File ID: E032408.D

Matrix: Soil
Preservation: None
Decanted: None

Date Sampled: 3/4/2009
Date Received: 3/5/2009
Date Prepared: 3/24/2009
Date Cleanup: NA
Date Analyzed: 3/25/2009
Instrument: EI Camino
Operator: ERL

Sample Size (g): 2.68
Percent Solid: 77.0%
Extract Volume (μl): 2000
Prep DF: 1
Analysis DF: 1
Injection Volume (μl): 1.00

Batch QC: QC090324-SB

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	1.76 ^B J	0.005	0.002
Toluene	0.652	0.010	0.005
Ethylbenzene	0.143	0.005	0.002
m/p-Xylenes	0.728	0.005	0.002
Styrene	0.316	0.010	0.005
o-Xylene	0.156	0.005	0.002
Isopropylbenzene	0.010	0.005	0.002
n-Propylbenzene	0.009	0.005	0.002
1,3,5-Trimethylbenzene	0.091	0.005	0.002
1,2,4-Trimethylbenzene	0.206	0.005	0.002
t-Butylbenzene	0.004 ^Y ⁴ J	0.005	0.002
sec-Butylbenzene	0.015	0.005	0.002
p-Isopropyltoluene	0.012	0.005	0.002
n-Butylbenzene	0.396	0.010	0.005
C1 - Benzene	0.496	0.005	0.002
C2 - Benzene	0.201	0.005	0.002
C3 - Benzene	0.086	0.005	0.002
C4 - Benzene	0.034	0.005	0.002
C5 - Benzene	0.008	0.005	0.002
trans-Decalin	25.5 ^Y ⁴ J	0.005	0.002
cis-Decalin	1.63	0.005	0.002
Naphthalene	1.21	0.005	0.002
2-Methylnaphthalene	1.76	0.005	0.002
1-Methylnaphthalene	1.46	0.005	0.002
C1 - Naphthalene	0.849	0.005	0.002
C2 - Naphthalene	0.613	0.005	0.002
C3 - Naphthalene	2.02	0.005	0.002
C4 - Naphthalene	3.86	0.005	0.002
Acenaphthylene	2.88	0.005	0.002
Acenaphthene	4.0	0.005	0.002
Dibenzofuran	0.958	0.005	0.002
Fluorene	0.467	0.005	0.002
C1 - Fluorene	0.523	0.005	0.002
C2 - Fluorene	12.7	0.005	0.002
C3 - Fluorene	6.59	0.005	0.002
Phenanthrene			
Anthracene			

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01-R ₂		
File ID:	E032408.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.68
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	4.22	0.005	0.002	
C2 - Phenanthrene/Anthracene	2.21	0.005	0.002	
C3 - Phenanthrene/Anthracene	1.05	0.005	0.002	
C4 - Phenanthrene/Anthracene	0.393	0.005	0.002	
Dibenzothiophene	1.58	0.005	0.002	
C1 - Dibenzothiophene	0.683	0.005	0.002	
C2 - Dibenzothiophene	0.576	0.005	0.002	
C3 - Dibenzothiophene	0.443	0.005	0.002	
C4 - Dibenzothiophene	0.266	0.005	0.002	
Benzo(b)napththo(2,1-d)thiophene	2.09	0.005	0.002	
Fluoranthene	25.0	0.005	0.002	
Pyrene	16.2	0.005	0.002	
C1 - Fluoranthene/Pyrene	10.2	0.005	0.002	
C2 - Fluoranthene/Pyrene	2.46	0.005	0.002	
C3 - Fluoranthene/Pyrene	0.848	0.005	0.002	
Benz[a]anthracene	10.6	0.005	0.002	
Chrysene*	9.72	0.005	0.002	
C1 - Benz(a)anthracene/Chrysene	3.1	0.005	0.002	
C2 - Benz(a)anthracene/Chrysene	1.01	0.005	0.002	
C3 - Benz(a)anthracene/Chrysene	0.410	0.005	0.002	
C4 - Benz(a)anthracene/Chrysene	0.346	0.005	0.002	
Benzo[b]fluoranthene	8.33	0.005	0.002	
Benzo[j/k]fluoranthene	7.96	0.005	0.002	
Benzo(e)pyrene	5.58	0.005	0.002	
Benzo[a]pyrene	9.25	0.005	0.002	
Perylene	2.79	0.005	0.002	
Indeno[1,2,3-cd]pyrene	5.96	0.005	0.002	
Dibenz[a,h]anthracene	1.93	0.005	0.002	
Benzo[g,h,i]perylene	5.15	0.005	0.002	
Coronene	1.61	0.005	0.002	
Retene	0.258	0.005	0.002	
Benzo(b/c)fluorenes	3.27	0.005	0.002	
2-Methylpyrene	0.878	0.005	0.002	
4-Methylpyrene	0.566	0.005	0.002	
1-Methylpyrene	0.645	0.005	0.002	
Heptadecane	0.418	0.010	0.005	
Pristane	0.746	0.005	0.002	
Octadecane	0.380	0.010	0.005	
Phytane	0.792	0.005	0.002	

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Field ID: BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01-R 1		
File ID:	E032408.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.68
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldecane	0.041 J	0.005	0.002	
2,6,10-trimethyltridecane	0.135 J	0.005	0.002	
Norpristane	0.272 J	0.005	0.002	
Tetraethyl lead	0.010 J	0.010	0.005	
Total PAH (16)	155 J	0.005	0.002	
Total PAH (42)	202 J	0.005	0.002	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	81	50 - 120
Phenanthrene-d10	92	50 - 120
Benzo[a]pyrene-d12	82	50 - 120
Perylene-d12	94	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics

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Field ID: Duplicate of BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01DUP-RE		
File ID:	E032409.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.85
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	2.18 J	0.005	0.002	21.3
Toluene	0.870	0.009	0.005	28.6
Ethylbenzene	0.222	0.005	0.002	43.3
m/p-Xylenes	1.25	0.005	0.002	52.8
Styrene	0.697	0.009	0.005	75.2
o-Xylene	0.382	0.005	0.002	84
Isopropylbenzene	0.018	0.005	0.002	57.1
n-Propylbenzene	0.014	0.005	0.002	43.5
1,3,5-Trimethylbenzene	0.276	0.005	0.002	100.8
1,2,4-Trimethylbenzene	0.597	0.005	0.002	97.4
t-Butylbenzene	0.008	0.005	0.002	NA
sec-Butylbenzene	0.008	0.005	0.002	66.7
p-Isopropyltoluene	0.038	0.005	0.002	86.8
n-Butylbenzene	0.020	0.005	0.002	50
C1 - Benzene	0.536	0.009	0.005	30
C2 - Benzene	0.895	0.005	0.002	57.4
C3 - Benzene	0.552	0.005	0.002	93.2
C4 - Benzene	0.204	0.005	0.002	81.4
C5 - Benzene	0.056	0.005	0.002	48.9
trans-Decalin	0.013	0.005	0.002	47.6
cis-Decalin	0.013	0.005	0.002	NA
Naphthalene	64.2 J	0.005	0.002	86.3
2-Methylnaphthalene	4.66	0.005	0.002	96.3
1-Methylnaphthalene	3.71	0.005	0.002	101.6
C1 - Naphthalene	5.15	0.005	0.002	98.1
C2 - Naphthalene	3.9	0.005	0.002	91
C3 - Naphthalene	2.48	0.005	0.002	98
C4 - Naphthalene	1.95	0.005	0.002	104.3
Acenaphthylene	10.7	0.005	0.002	136.5
Acenaphthene	10.7	0.005	0.002	94
Dibenzofuran	7.11	0.005	0.002	84.7
Fluorene	11.9	0.005	0.002	99.4
C1 - Fluorene	3.61	0.005	0.002	116.1
C2 - Fluorene	2.43	0.005	0.002	135.5
C3 - Fluorene	1.6	0.005	0.002	101.5
Phenanthrene	47.4	0.005	0.002	115.5
Anthracene	31.0	0.005	0.002	129.9

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Field ID: Duplicate of BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01DUP-RE		
File ID:	E032409.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.85
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	26.0	0.005	0.002	144.1
C2 - Phenanthrene/Anthracene	16.8	0.005	0.002	153.5
C3 - Phenanthrene/Anthracene	5.99	0.005	0.002	140.3
C4 - Phenanthrene/Anthracene	1.23	0.005	0.002	103.1
Dibenzothiophene	4.95	0.005	0.002	103.2
C1 - Dibenzothiophene	2.85	0.005	0.002	122.7
C2 - Dibenzothiophene	2.55	0.005	0.002	126.3
C3 - Dibenzothiophene	1.38	0.005	0.002	102.8
C4 - Dibenzothiophene	0.606	0.005	0.002	78
Benzo(b)naphtho(2,1-d)thiophene	10.2	0.005	0.002	132
Fluoranthene	119	0.005	0.002	130.6
Pyrene	77.7	0.005	0.002	131
C1 - Fluoranthene/Pyrene	66.2	0.005	0.002	146.6
C2 - Fluoranthene/Pyrene	19.4	0.005	0.002	155
C3 - Fluoranthene/Pyrene	5.83	0.005	0.002	149.2
Benz[a]anthracene	60.7	0.005	0.002	140.5
Chrysene*	54.2	0.005	0.002	139.2
C1 - Benz(a)anthracene/Chrysene	22.0	0.005	0.002	150.6
C2 - Benz(a)anthracene/Chrysene	8.06	0.005	0.002	155.5
C3 - Benz(a)anthracene/Chrysene	2.28	0.005	0.002	139
C4 - Benz(a)anthracene/Chrysene	2.11	0.005	0.002	143.6
Benzo[b]fluoranthene	38.1	0.005	0.002	128.2
Benzo[j,k]fluoranthene	40.8	0.005	0.002	134.7
Benzo(e)pyrene	25.4	0.005	0.002	128
Benzo[a]pyrene	44.2	0.005	0.002	130.8
Perylene	10.3	0.005	0.002	114.7
Indeno[1,2,3-cd]pyrene	24.0	0.005	0.002	120.4
Dibenz[a,h]anthracene	8.26	0.005	0.002	124.2
Benzo[g,h,i]perylene	17.5	0.005	0.002	109.1
Coronene	5.68	0.005	0.002	111.7
Retene		0.005	0.002	NA
Benzo(b,c)fluorenes	21.1	0.005	0.002	146.3
2-Methylpyrene	5.66	0.005	0.002	146.3
4-Methylpyrene	3.43	0.005	0.002	143.3
1-Methylpyrene	4.41	0.005	0.002	149
Heptadecane	0.512	0.009	0.005	20.2
Pristane	1.55	0.005	0.002	70
Octadecane	0.566	0.009	0.005	39.3
Phytane	1.53	0.005	0.002	63.6

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: Duplicate of BH-SED-13C-6

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-01DUP-R E		
File ID:	E032409.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.85
Date Cleanup:	NA	Percent Solid:	77.0%
Date Analyzed:	3/25/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.116 J	0.005	0.002	95.5
2,6,10-trimethyltridecane	0.293 J	0.005	0.002	73.8
Norpristane	0.570 J	0.005	0.002	70.8
Tetraethyl lead	µµJ	0.009	0.005	NA
Total PAH (16)	660 J	0.005	0.002	123.9
Total PAH (42)	912 J	0.005	0.002	127.5

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	76	50 - 120
Phenanthrene-d10	86	50 - 120
Benzo[a]pyrene-d12	81	50 - 120
Perylene-d12	108	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-05-4

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-02-R ²		
File ID:	E032410.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.67
Date Cleanup:	NA	Percent Solid:	50.7%
Date Analyzed:	3/25/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
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MAH & PAH COMPOUNDS:

Benzene	0.478 ^{BJ}	0.007	0.004	
Toluene	0.291	0.015	0.007	
Ethylbenzene	0.120	0.007	0.004	
m/p-Xylenes	0.434	0.007	0.004	
Styrene	0.213	0.015	0.007	
o-Xylene	0.140	0.007	0.004	
Isopropylbenzene	0.013	0.007	0.004	
n-Propylbenzene	0.013	0.007	0.004	
1,3,5-Trimethylbenzene	0.227	0.007	0.004	
1,2,4-Trimethylbenzene	0.457	0.007	0.004	
t-Butylbenzene	^{uJ}	0.007	0.004	
sec-Butylbenzene	^{uJ}	0.007	0.004	
p-Isopropyltoluene	0.040	0.007	0.004	
n-Butylbenzene	0.037	0.007	0.004	
C1 - Benzene	0.179	0.015	0.007	
C2 - Benzene	0.331	0.007	0.004	
C3 - Benzene	0.455	0.007	0.004	
C4 - Benzene	0.327	0.007	0.004	
C5 - Benzene	0.122	0.007	0.004	
trans-Decalin	0.024	0.007	0.004	
cis-Decalin	^{uJ}	0.007	0.004	
Naphthalene	226 ^{uJ}	0.007	0.004	
2-Methylnaphthalene	11.3	0.007	0.004	
1-Methylnaphthalene	5.04	0.007	0.004	
C1 - Naphthalene	10.1	0.007	0.004	
C2 - Naphthalene	3.64	0.007	0.004	
C3 - Naphthalene	1.28	0.007	0.004	
C4 - Naphthalene	0.626	0.007	0.004	
Acenaphthylene	2.02	0.007	0.004	
Acenaphthene	16.7	0.007	0.004	
Dibenzofuran	9.56	0.007	0.004	
Fluorene	12.8	0.007	0.004	
C1 - Fluorene	1.36	0.007	0.004	
C2 - Fluorene	0.773	0.007	0.004	
C3 - Fluorene	0.540	0.007	0.004	
Phenanthrene	35.4 ^{BJ}	0.007	0.004	
Anthracene	9.03 ^{BJ}	0.007	0.004	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-05-4

Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-02-R <i>2</i>		
File ID:	E032410.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.67
Date Cleanup:	NA	Percent Solid:	50.7%
Date Analyzed:	3/25/2009	Extract Volume (μl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	5.86	0.007	0.004	
C2 - Phenanthrene/Anthracene	2.23	0.007	0.004	
C3 - Phenanthrene/Anthracene	0.924	0.007	0.004	
C4 - Phenanthrene/Anthracene	0.347	0.007	0.004	
Dibenzothiophene	3.0	0.007	0.004	
C1 - Dibenzothiophene	0.836	0.007	0.004	
C2 - Dibenzothiophene	0.504	0.007	0.004	
C3 - Dibenzothiophene	0.403	0.007	0.004	
C4 - Dibenzothiophene	0.219	0.007	0.004	
Benzo(b)naphtho(2,1-d)thiophene	1.36	0.007	0.004	
Fluoranthene	23.9	0.007	0.004	
Pyrene	16.1	0.007	0.004	
C1 - Fluoranthene/Pyrene	8.7	0.007	0.004	
C2 - Fluoranthene/Pyrene	1.97	0.007	0.004	
C3 - Fluoranthene/Pyrene	0.648	0.007	0.004	
Benz[a]anthracene	8.49	0.007	0.004	
Chrysene*	6.71	0.007	0.004	
C1 - Benz(a)anthracene/Chrysene	2.17	0.007	0.004	
C2 - Benz(a)anthracene/Chrysene	0.701	0.007	0.004	
C3 - Benz(a)anthracene/Chrysene	0.350	0.007	0.004	
C4 - Benz(a)anthracene/Chrysene	0.261	0.007	0.004	
Benzo[b]fluoranthene	5.55	0.007	0.004	
Benzo[j/k]fluoranthene	5.56	0.007	0.004	
Benzo(e)pyrene	3.64	0.007	0.004	
Benzo[a]pyrene	6.45	0.007	0.004	
Perylene	1.93	0.007	0.004	
Indeno[1,2,3-cd]pyrene	3.92	0.007	0.004	
Dibenz[a,h]anthracene	1.23	0.007	0.004	
Benzo[g,h,i]perylene	3.26	0.007	0.004	
Coronene	1.0	0.007	0.004	
Retene	0.204	0.007	0.004	
Benzo(b/c)fluorenes	2.7	0.007	0.004	
2-Methylpyrene	0.716	0.007	0.004	
4-Methylpyrene	0.518	0.007	0.004	
1-Methylpyrene	0.601	0.007	0.004	
Heptadecane	0.953 <i>B</i>	0.015	0.007	
Pristane	1.07 <i>B</i>	0.007	0.004	
Octadecane	1.18 <i>B</i>	0.015	0.007	
Phytane	1.06 <i>B</i>	0.007	0.004	

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META *HW*

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: BH-SED-05-4

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Client:	Test America	Preparation Method:	EPA 3570
Project:	Sparrows Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090305-02-R Σ		
File ID:	E032410.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/4/2009		
Date Received:	3/5/2009		
Date Prepared:	3/24/2009	Sample Size (g):	2.67
Date Cleanup:	NA	Percent Solid:	50.7%
Date Analyzed:	3/25/2009	Extract Volume (μ l):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (μ l):	1.00
Batch QC:	QC090324-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldecane	0.105 J	0.007	0.004	
2,6,10-trimethyltridecane	0.172	0.007	0.004	
Norpristane	0.260	0.007	0.004	
Tetraethyl lead	μ UJ	0.015	0.007	
Total PAH (16)	383 J	0.007	0.004	
Total PAH (42)	446 J	0.007	0.004	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	80	50 - 120
Phenanthrene-d10	93	50 - 120
Benzo[a]pyrene-d12	88	50 - 120
Perylene-d12	101	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

10

Field ID: BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01		
File ID:	E031812.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/9/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.97
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	0.190 P	0.006	0.003	
Toluene	0.569 P	0.012	0.006	
Ethylbenzene	0.064	0.006	0.003	
m/p-Xylenes	0.457	0.006	0.003	
Styrene	0.385	0.012	0.006	
o-Xylene	0.057	0.006	0.003	
Isopropylbenzene	0.008	0.006	0.003	
n-Propylbenzene	0.018	0.006	0.003	
1,3,5-Trimethylbenzene	0.030	0.006	0.003	
1,2,4-Trimethylbenzene	0.082	0.006	0.003	
t-Butylbenzene	U	0.006	0.003	
sec-Butylbenzene	0.007	0.006	0.003	
p-Isopropyltoluene	0.027	0.006	0.003	
n-Butylbenzene	0.022	0.006	0.003	
C1 - Benzene	0.346	0.012	0.006	
C2 - Benzene	0.283	0.006	0.003	
C3 - Benzene	0.114	0.006	0.003	
C4 - Benzene	0.075	0.006	0.003	
C5 - Benzene	0.057	0.006	0.003	
trans-Decalin	0.009	0.006	0.003	
cis-Decalin	U	0.006	0.003	
Naphthalene	3.4 P	0.006	0.003	
2-Methylnaphthalene	0.994 P	0.006	0.003	
1-Methylnaphthalene	0.395	0.006	0.003	
C1 - Naphthalene	0.858 P	0.006	0.003	
C2 - Naphthalene	0.708 P	0.006	0.003	
C3- Naphthalene	0.360 P	0.006	0.003	
C4- Naphthalene	0.315	0.006	0.003	
Acenaphthylene	0.993	0.006	0.003	
Acenaphthene	0.151	0.006	0.003	
Dibenzofuran	0.539	0.006	0.003	
Fluorene	0.609	0.006	0.003	
C1 - Fluorene	0.321	0.006	0.003	
C2 - Fluorene	0.551	0.006	0.003	
C3 - Fluorene	0.593	0.006	0.003	
Phenanthrene	1.92 P	0.006	0.003	
Anthracene	1.65	0.006	0.003	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

10

Field ID: BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01		
File ID:	E031812.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/9/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.97
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	1.53 B	0.006	0.003	
C2 - Phenanthrene/Anthracene	0.954	0.006	0.003	
C3 - Phenanthrene/Anthracene	0.678	0.006	0.003	
C4 - Phenanthrene/Anthracene	0.403	0.006	0.003	
Dibenzothiophene	0.304	0.006	0.003	
C1 - Dibenzothiophene	0.383	0.006	0.003	
C2 - Dibenzothiophene	0.436	0.006	0.003	
C3 - Dibenzothiophene	0.514	0.006	0.003	
C4 - Dibenzothiophene	0.394	0.006	0.003	
Benzo(b)naphtho(2,1-d)thiophene	0.730	0.006	0.003	
Fluoranthene	5.96 B	0.006	0.003	
Pyrene	5.62 B	0.006	0.003	
C1 - Fluoranthene/Pyrene	4.24	0.006	0.003	
C2 - Fluoranthene/Pyrene	1.65	0.006	0.003	
C3 - Fluoranthene/Pyrene	0.953	0.006	0.003	
Benz[a]anthracene	4.25	0.006	0.003	
Chrysene*	3.59	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	2.05	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	1.09	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	0.589	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	0.532	0.006	0.003	
Benzo[b]fluoranthene	4.8	0.006	0.003	
Benzo[j]/k]fluoranthene	3.85	0.006	0.003	
Benzo(e)pyrene	3.18	0.006	0.003	
Benzo[a]pyrene	4.72	0.006	0.003	
Perylene	1.41	0.006	0.003	
Indeno[1,2,3-cd]pyrene	3.12	0.006	0.003	
Dibenz[a,h]anthracene	1.03 B	0.006	0.003	
Benzo[g,h,i]perylene	2.75	0.006	0.003	
Coronene	0.699	0.006	0.003	
Retene	0.168	0.006	0.003	
Benzo(b/c)fluorenes	1.21	0.006	0.003	
2-Methylpyrene	0.413	0.006	0.003	
4-Methylpyrene	0.339	0.006	0.003	
1-Methylpyrene	0.286	0.006	0.003	
Heptadecane	0.776 B	0.012	0.006	
Pristane	0.213 B	0.006	0.003	
Octadecane	0.399 B	0.012	0.006	
Phytane	0.341 B	0.006	0.003	

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

10

Field ID: BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID:	TA090311-01		
File ID:	E031812.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/9/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.97
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.038 ✓	0.006	0.003	
2,6,10-trimethyltridecane	0.080 ✓	0.006	0.003	
Norpristane	0.154 ✓	0.006	0.003	
Tetraethyl lead	U	0.012	0.006	
Total PAH (16)	48.4	0.006	0.003	
Total PAH (42)	73.9	0.006	0.003	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	83	50 - 120
Phenanthrene-d10	103	50 - 120
Benzo[a]pyrene-d12	86	50 - 120
Perylene-d12	98	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: Duplicate of BH-SED-03E-2

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-01DUP		
File ID:	E031813.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	3/9/2009	Decanted:	None
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.50
Date Cleanup:	NA	Percent Solid:	40.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				RPD
Benzene	0.170 B	0.007	0.004	11.1
Toluene	0.507 B	0.014	0.007	11.5
Ethylbenzene	0.056	0.007	0.004	13.3
m/p-Xylenes	0.433	0.007	0.004	5.4
Styrene	0.336	0.014	0.007	13.6
o-Xylene	0.050	0.007	0.004	13.1
Isopropylbenzene	0.008	0.007	0.004	0
n-Propylbenzene	0.017	0.007	0.004	5.7
1,3,5-Trimethylbenzene	0.028	0.007	0.004	6.9
1,2,4-Trimethylbenzene	0.074	0.007	0.004	10.3
t-Butylbenzene	U	0.007	0.004	NA
sec-Butylbenzene	0.006 J	0.007	0.004	15.4
p-Isopropyltoluene	0.023	0.007	0.004	16
n-Butylbenzene	0.023	0.007	0.004	4.4
C1 - Benzene	0.304	0.014	0.007	12.9
C2 - Benzene	0.269	0.007	0.004	5.1
C3 - Benzene	0.105	0.007	0.004	8.2
C4 - Benzene	0.069	0.007	0.004	8.3
C5 - Benzene	0.053	0.007	0.004	7.3
trans-Decalin	0.008	0.007	0.004	11.8
cis-Decalin	U	0.007	0.004	NA
Naphthalene	3.05 B	0.007	0.004	10.9
2-Methylnaphthalene	0.894 B	0.007	0.004	10.6
1-Methylnaphthalene	0.359	0.007	0.004	9.5
C1 - Naphthalene	0.771 B	0.007	0.004	10.7
C2 - Naphthalene	0.649 B	0.007	0.004	8.7
C3 - Naphthalene	0.345 B	0.007	0.004	4.3
C4 - Naphthalene	0.310	0.007	0.004	1.6
Acenaphthylene	0.994	0.007	0.004	0.1
Acenaphthene	0.141	0.007	0.004	6.8
Dibenzofuran	0.493	0.007	0.004	8.9
Fluorene	0.556	0.007	0.004	9.1
C1 - Fluorene	0.289	0.007	0.004	10.5
C2 - Fluorene	0.624	0.007	0.004	12.4
C3 - Fluorene	0.507	0.007	0.004	15.6
Phenanthrene	1.74 B	0.007	0.004	9.8
Anthracene	1.54	0.007	0.004	6.9

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-03E-2

Client: TestAmerica Preparation Method: EPA 3570
 Project: Sparrow's Point Cleanup Method(s): NA
 Analysis Method: EPA 8270M
 Lab ID: TA090311-01DUP
 File ID: E031813.D Matrix: Soil
 Preservation: None
 Decanted: None
 Date Sampled: 3/9/2009
 Date Received: 3/11/2009
 Date Prepared: 3/12/2009 Sample Size (g): 3.50
 Date Cleanup: NA Percent Solid: 40.4%
 Date Analyzed: 3/19/2009 Extract Volume (μl): 2000
 Instrument: El Camino Prep DF: 1
 Operator: JAR Analysis DF: 1
 Injection Volume (μl): 1.00
 Batch QC: QC090312-SB

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	1.64 β	0.007	0.004	6.9
C2 - Phenanthrene/Anthracene	0.899	0.007	0.004	5.9
C3 - Phenanthrene/Anthracene	0.656	0.007	0.004	3.3
C4 - Phenanthrene/Anthracene	0.407	0.007	0.004	1
Dibenzothiophene	0.277	0.007	0.004	9.3
C1 - Dibenzothiophene	0.351	0.007	0.004	8.7
C2 - Dibenzothiophene	0.416	0.007	0.004	4.7
C3 - Dibenzothiophene	0.481	0.007	0.004	6.6
C4 - Dibenzothiophene	0.371	0.007	0.004	6
Benzo(b)naphtho(2,1-d)thiophene	0.683	0.007	0.004	6.7
Fluoranthene	5.48 β	0.007	0.004	8.4
Pyrene	5.15 β	0.007	0.004	8.7
C1 - Fluoranthene/Pyrene	3.84	0.007	0.004	9.9
C2 - Fluoranthene/Pyrene	1.52	0.007	0.004	8.2
C3 - Fluoranthene/Pyrene	0.869	0.007	0.004	9.2
Benz[a]anthracene	3.98	0.007	0.004	6.6
Chrysene*	3.43	0.007	0.004	4.6
C1 - Benz(a)anthracene/Chrysene	1.85	0.007	0.004	10.3
C2 - Benz(a)anthracene/Chrysene	0.965	0.007	0.004	12.2
C3 - Benz(a)anthracene/Chrysene	0.541	0.007	0.004	8.5
C4 - Benz(a)anthracene/Chrysene	0.480	0.007	0.004	10.3
Benzo[b]fluoranthene	4.6	0.007	0.004	4.3
Benzo[j/k]fluoranthene	3.76	0.007	0.004	2.4
Benzo(e)pyrene	3.08	0.007	0.004	3.2
Benzo[a]pyrene	4.56	0.007	0.004	3.4
Perylene	1.43	0.007	0.004	1.4
Indeno[1,2,3-cd]pyrene	3.14	0.007	0.004	0.6
Dibenz[a,h]anthracene	0.901 β	0.007	0.004	13.4
Benzo[g,h,i]perylene	2.77	0.007	0.004	0.7
Coronene	0.705	0.007	0.004	0.9
Retene	0.155	0.007	0.004	8
Benzo(b/c)fluorenes	1.1	0.007	0.004	9.5
2-Methylpyrene	0.376	0.007	0.004	9.4
4-Methylpyrene	0.321	0.007	0.004	5.5
1-Methylpyrene	0.261	0.007	0.004	9.1
Heptadecane	0.735 β	0.014	0.007	5.4
Pristane	0.254 β	0.007	0.004	17.6
Octadecane	0.369 β	0.014	0.007	7.8
Phytane	0.378 β	0.007	0.004	10.3

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Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

Field ID: Duplicate of BH-SED-03E-2

Client: TestAmerica Preparation Method: EPA 3570
 Project: Sparrow's Point Cleanup Method(s): NA
 Analysis Method: EPA 8270M
 Lab ID: TA090311-01DUP
 File ID: E031813.D Matrix: Soil
 Preservation: None
 Decanted: None
 Date Sampled: 3/9/2009
 Date Received: 3/11/2009
 Date Prepared: 3/12/2009 Sample Size (g): 3.50
 Date Cleanup: NA Percent Solid: 40.4%
 Date Analyzed: 3/19/2009 Extract Volume (μl): 2000
 Instrument: EI Camino Prep DF: 1
 Operator: JAR Analysis DF: 1
 Injection Volume (μl): 1.00
 Batch QC: QC090312-SB

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.027 B	0.007	0.004	33.8
2,6,10-trimethyltridecane	0.082 B	0.007	0.004	2.5
Norpristane	0.131 B	0.007	0.004	16.1
Tetraethyl lead	U	0.014	0.007	NA
Total PAH (16)	45.8	0.007	0.004	5.5
Total PAH (42)	69.8	0.007	0.004	5.7

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	73	50 - 120
Phenanthrene-d10	99	50 - 120
Benzo[a]pyrene-d12	84	50 - 120
Perylene-d12	96	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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 Volatile and Semivolatile Organics META Environmental, Inc.

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Field ID: BH-SED-17-0

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-02		
File ID:	E031814.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/10/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.87
Date Cleanup:	NA	Percent Solid:	42.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	0.289 B	0.006	0.003	
Toluene	0.761 B	0.012	0.006	
Ethylbenzene	0.075	0.006	0.003	
m/p-Xylenes	0.649	0.006	0.003	
Styrene	0.294	0.012	0.006	
o-Xylene	0.076	0.006	0.003	
Isopropylbenzene	0.008	0.006	0.003	
n-Propylbenzene	0.022	0.006	0.003	
1,3,5-Trimethylbenzene	0.036	0.006	0.003	
1,2,4-Trimethylbenzene	0.093	0.006	0.003	
t-Butylbenzene	U	0.006	0.003	
sec-Butylbenzene	0.004 J	0.006	0.003	
p-Isopropyltoluene	0.020	0.006	0.003	
n-Butylbenzene	0.028	0.006	0.003	
C1 - Benzene	0.464	0.012	0.006	
C2 - Benzene	0.391	0.006	0.003	
C3 - Benzene	0.122	0.006	0.003	
C4 - Benzene	0.076	0.006	0.003	
C5 - Benzene	0.057	0.006	0.003	
trans-Decalin	0.011	0.006	0.003	
cis-Decalin	U	0.006	0.003	
Naphthalene	4.9 B	0.006	0.003	
2-Methylnaphthalene	0.711 B	0.006	0.003	
1-Methylnaphthalene	0.278	0.006	0.003	
C1 - Naphthalene	0.611 B	0.006	0.003	
C2 - Naphthalene	0.559 B	0.006	0.003	
C3- Naphthalene	0.305 B	0.006	0.003	
C4- Naphthalene	0.277	0.006	0.003	
Acenaphthylene	0.888	0.006	0.003	
Acenaphthene	0.082	0.006	0.003	
Dibenzofuran	0.337	0.006	0.003	
Fluorene	0.302	0.006	0.003	
C1 - Fluorene	0.212	0.006	0.003	
C2 - Fluorene	0.618	0.006	0.003	
C3 - Fluorene	0.421	0.006	0.003	
Phenanthrene	1.1 B	0.006	0.003	
Anthracene	0.866	0.006	0.003	

lew
5/22/09

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

12

Field ID: BH-SED-17-0

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-02		
File ID:	E031814.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/10/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.87
Date Cleanup:	NA	Percent Solid:	42.4%
Date Analyzed:	3/19/2009	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	1.27 B	0.006	0.003	
C2 - Phenanthrene/Anthracene	0.680	0.006	0.003	
C3 - Phenanthrene/Anthracene	0.583	0.006	0.003	
C4 - Phenanthrene/Anthracene	0.476	0.006	0.003	
Dibenzothiophene	0.166	0.006	0.003	
C1 - Dibenzothiophene	0.271	0.006	0.003	
C2 - Dibenzothiophene	0.312	0.006	0.003	
C3 - Dibenzothiophene	0.302	0.006	0.003	
C4 - Dibenzothiophene	0.278	0.006	0.003	
Benzo(b)naphtho(2,1-d)thiophene	0.274	0.006	0.003	
Fluoranthene	2.03 B	0.006	0.003	
Pyrene	3.5 B	0.006	0.003	
C1 - Fluoranthene/Pyrene	2.23	0.006	0.003	
C2 - Fluoranthene/Pyrene	1.42	0.006	0.003	
C3 - Fluoranthene/Pyrene	0.986	0.006	0.003	
Benz[a]anthracene	1.57	0.006	0.003	
Chrysene*	1.5	0.006	0.003	
C1 - Benz(a)anthracene/Chrysene	1.18	0.006	0.003	
C2 - Benz(a)anthracene/Chrysene	1.14	0.006	0.003	
C3 - Benz(a)anthracene/Chrysene	0.779	0.006	0.003	
C4 - Benz(a)anthracene/Chrysene	0.682	0.006	0.003	
Benzo[b]fluoranthene	3.22	0.006	0.003	
Benzo[j/k]fluoranthene	2.7	0.006	0.003	
Benzo(e)pyrene	2.21	0.006	0.003	
Benzo[a]pyrene	3.22	0.006	0.003	
Perylene	0.567	0.006	0.003	
Indeno[1,2,3-cd]pyrene	2.21	0.006	0.003	
Dibenz[a,h]anthracene	0.626 B	0.006	0.003	
Benzo[g,h,i]perylene	1.99	0.006	0.003	
Coronene	0.492	0.006	0.003	
Retene	0.115	0.006	0.003	
Benzo(b/c)fluorenes	0.437	0.006	0.003	
2-Methylpyrene	0.317	0.006	0.003	
4-Methylpyrene	0.336	0.006	0.003	
1-Methylpyrene	0.217	0.006	0.003	
Heptadecane	0.712 B	0.012	0.006	
Pristane	0.242 B	0.006	0.003	
Octadecane	0.411 B	0.012	0.006	
Phytane	0.278 B	0.006	0.003	

lew
5/22/09

Analytical Results for Volatile and Semivolatile Organics META Environmental, Inc.

12

Field ID: BH-SED-17-0

Client:	TestAmerica	Preparation Method:	EPA 3570
Project:	Sparrow's Point	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	TA090311-02		
File ID:	E031814.D	Matrix:	Soil
		Preservation:	None
		Decanted:	None
Date Sampled:	3/10/2009		
Date Received:	3/11/2009		
Date Prepared:	3/12/2009	Sample Size (g):	3.87
Date Cleanup:	NA	Percent Solid:	42.4%
Date Analyzed:	3/19/2009	Extract Volume (μl):	2000
Instrument:	EI Camino	Prep DF:	1
Operator:	JAR	Analysis DF:	1
		Injection Volume (μl):	1.00
Batch QC:	QC090312-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.024 B	0.006	0.003	
2,6,10-trimethyltridecane	0.051 B	0.006	0.003	
Norpristane	0.079 B	0.006	0.003	
Tetraethyl lead	U	0.012	0.006	
Total PAH (16)	30.7	0.006	0.003	
Total PAH (42)	49.6	0.006	0.003	

Extraction Surrogate Recoveries (%)

		Limits
Toluene-d8	79	50 - 120
Phenanthrene-d10	94	50 - 120
Benzo[a]pyrene-d12	80	50 - 120
Perylene-d12	91	50 - 120

NA - Not applicable.

B - Analyte detected in the Blank.

J - Estimated value; detected between the RL and DL.

U - Analyte not detected above DL.

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.

few
5/22/09

SURFACE SEDIMENT ANALYTICAL REPORTS

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

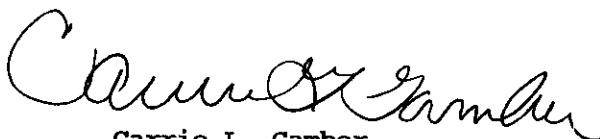
EA/MES Sparrows Point 18001868

Lot #: C9B070192

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.


Carrie L. Gamber
Project Manager

March 12, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
US Dept of Agriculture	NA	NAVY	X
Arkansas	(#P330-07-00101)	Foreign Soil Import Permit	X
	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE

EA Engineering Sparrows Point

LOT # C9B070192

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 7, 2009. The coolers were received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

GC/MS Semivolatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard F021209C1; but were within expected performance range for these compounds: 1,4-dioxane 32%, 2,2-oxybis(1-chloropropane) 29%, 2,4-dinitrophenol 31%, benzaldehyde 29%, benzyl alcohol 44%, and caprolactam 30%.

The following compounds had the %D > 25% in the calibration verification standard F021609C2; but were within expected performance range for these compounds: 1,4-dioxane 45%, 2,2-oxybis(1-chloropropane) 27%, 2,4-dinitrophenol 46%, 3,3-dichlorobenzidine 26%, 4,6-dinitro-2-methylphenol 31%, 4-chloroaniline 32%, aniline 29%, and benzidine 39%.

Due to the concentration of compounds detected and/or matrix interference, the samples were analyzed at a dilution. Several samples had the surrogates diluted out.

The matrix spike and matrix spike duplicate recoveries were diluted out.

CASE NARRATIVE

EA Engineering Sparrows Point

LOT # C9B070192

GC/MS Semivolatiles cont.:

Some samples had perylene-d12 internal standard area counts outside the daily control limits due to matrix interference.

Metals:

The serial dilution percent difference was outside the control limit for antimony in sample BH-SED-04-00.

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

For the matrix spike and matrix spike duplicate, arsenic, chromium, lead and zinc recoveries were not calculated due to the concentration of analyte in the sample being >4 times the concentration of spike added.

The matrix spike and matrix spike duplicate recovered below the control limit for antimony.

The matrix spike recovered below the control limit for mercury, copper and selenium.

General Chemistry:

The samples were analyzed at a dilution for TOC.

The matrix spike and matrix spike duplicate recovered above the control limit for TOC.

TestAmerica's Burlington laboratory analyzed the grain sized and moisture. See enclosed email about broken jar.

Gamber, Carrie

From: Olsen, Karin [kolsen@eaest.com]
Sent: Wednesday, February 11, 2009 9:44 AM
To: Gamber, Carrie; Ward, Todd
Cc: Pentkowski, Ron
Subject: RE: C9B070192 grain size samples (Sparrows Point)

Carrie -

That sounds like the best way to proceed.

Karin

From: Gamber, Carrie [mailto:Carrie.Gamber@testamericainc.com]
Sent: Wednesday, February 11, 2009 8:28 AM
To: Olsen, Karin; Ward, Todd
Cc: Pentkowski, Ron
Subject: C9B070192 grain size samples (Sparrows Point)

Hi Karin and Todd,

The samples from the lot above were received at Burlington for grain size and moisture. All the jars had taken on water from the cooler. And sample BH-SED-04-00 had a cracked lid but the sample was still usable.

We are going to send a new aliquot for moisture up to them. The grain size is dried prior to analysis so they are going to use the volume they received that had taken on cooler water.

Please let me know if it is OK to proceed this way.

Thanks, Carrie

Carrie Gamber
Project Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

301 Alpha Drive
Pittsburgh, PA 15238
Tel 412.963.2428 dd | Fax 412.963.2468
www.testamericainc.com
Leaders in Environmental Testing

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2/11/2009

C9B070192

5

(1 - 135)

TestAmerica Laboratories, Inc.

February 26, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9B070192

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on February 10th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/10/09 ETR No: 130103			
784466	BH-SED-01-00	02/06/09	SOLID
784467	BH-SED-02-00	02/06/09	SOLID
784468	BH-SED-03A-00	02/06/09	SOLID
784469	BH-SED-03B-00	02/06/09	SOLID
784470	BH-SED-03C-00	02/06/09	SOLID
784471	BH-SED-04-00	02/06/09	SOLID
784471DP	BH-SED-04-00REP	02/06/09	SOLID
784472	BH-SED-05-00	02/06/09	SOLID
784473	DUP-1	02/06/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The samples were analyzed for particle size by ASTM D422 and moisture content by ASTM D2216. Replicate analysis was performed on sample BH-SED-04-00 for the particle size determination.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Dusalton for

Ron Penkowski
Project Manager

Enclosure

METHODS SUMMARY

C9B070192

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B070192

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K6W50	001	BH-SED-01-00	02/06/09	10:15
K6W51	002	BH-SED-02-00	02/06/09	11:15
K6W52	003	BH-SED-03A-00	02/06/09	12:00
K6W53	004	BH-SED-03B-00	02/06/09	13:00
K6W54	005	BH-SED-03C-00	02/06/09	13:30
K6W55	006	BH-SED-04-00	02/06/09	14:00
K6W56	007	BH-SED-05-00	02/06/09	14:30
K6W57	008	DUP-1	02/06/09	
K6W9K	009	SRM	02/06/09	

NOTE(S) :

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

Client: EA Engineering Science, and Technology, Inc. 15 Loveton Circle Sparks, MD 21152				Project Manager: Frank Barranco Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250				Parameters/Method Numbers for Analysis												Chain of Custody Record									
Project Name: Sparrows Point Offshore Areas				Project#: 14534.06																Laboratory: TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber									
Page 1 of 1				Sediment Samples																Remarks									
Date	Time	Water	Sediment	Sample Identification				No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids													
2/6/09	1015		X	BH-SED-01-00				6	X	X	X	X	X	X	X	X													SEE PROJECT SPECIFIC ANALYTE LIST
	1115			BH-SED-02-00																									
	1200			BH-SED-03A-00																									
	1300			BH-SED-03B-00																									
	1330			BH-SED-03C-00																									
	1400			BH-SED-04-00																									
	1400			BH-SED-04-00 M.S																									
	1400			BH-SED-04-00 M.S.D																									
	1430			BH-SED-05-00																									
				DUP-1																									
Sampled by: (Signature)				Date/Time				Relinquished by: (Signature)				Date/Time				SEDIMENT													
Todd Ward				2/6/09 1430				Todd Ward				2/6/09 1730																	
Relinquished by: (Signature)				Date/Time				Received by Laboratory: (Signature)				Date/Time																	
								[Signature]				2-7-09 0950																	

Cooler Receipt Form
TestAmerica Pittsburgh

Client: EA Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 2-7-09

Coolers Opened and Unpacked on: 2-7-09 By: [Signature]

(Signature)

TestAmerica Pittsburgh Lot Number: C9B070192

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

Explain any discrepancies: _____

Level 2 Review _____
Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved

UP: Unpreserved

[illegible]

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

Comments: _____

Cooler Number	Temperature*	Thermometer ID
---------------	--------------	----------------

[illegible]

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Sample	Lot Number**
--------	--------------

[illegible]

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

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

Nitric Acid

Hydrochloric Acid

Sulfuric Acid

Sodium Hydroxide

206

500

FedEx *US Airbill*
Express
FedEx
Tracking
Number

8565 6932 6525

1 From This portion can be removed for Recipient's records.

Date 2/6/09

FedEx Tracking Number

856569326525

Sender's
NameTODD WARDPhone 410 746-1250Company E A ENGINEERING SCIENCE & TECHAddress 15 LOVETON CIR

Dept./Floor/Suite/Room

City SPARKS GLENCOEState MDZIP 21152

2 Your Internal Billing Reference

1453406

3 To

Recipient's
NameSAMPLE MANAGEMENT Phone 412 963-2468

Company

TEST AMERICA - PITTSBURGHRecipient's
Address301 ALPHA DRIVE

Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

RIDC PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City

PITTSBURGHState PAZIP 15238

0326761324



8565 6932 6525

Recipient's Copy

4a Express Package Service

☒ **FedEx Priority Overnight**
Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ **FedEx Standard Overnight**
Next business afternoon.*
Saturday Delivery NOT available.

Packages up to 150 lbs.

☐ **FedEx First Overnight**
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.

☐ **FedEx 2Day**
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.
FedEx Envelope rate not available. Minimum charge: One-pound rate.

☐ **FedEx Express Saver**
Third business day.*
Saturday Delivery NOT available.

* To most locations.

4b Express Freight Service

☐ **FedEx 1Day Freight***
Next business day.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ **FedEx 2Day Freight**
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

Packages over 150 lbs.

☐ **FedEx 3Day Freight**
Third business day.*
Saturday Delivery NOT available.

** To most locations.

* Call for Confirmation.

5 Packaging

☐ **FedEx Envelope***
☐ **FedEx Pak***
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.

☐ **FedEx Box**
☐ **FedEx Tube**
☒ **Other**
* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3.

☒ **SATURDAY Delivery**

 Not available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.

☐ **HOLD Weekday**
at FedEx Location

 Not available for
FedEx First Overnight.

☐ **HOLD Saturday**
at FedEx Location

 Available ONLY for FedEx Priority
Overnight and FedEx 2Day
to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☒ **No**
☐ **Yes**
As per attached
Shipper's Declaration.

☐ **Yes**
Shipper's Declaration
not required.

☐ **Dry Ice**
Dry Ice, 9 UN 1845 _____ x _____ kg

☐ **Cargo Aircraft Only**

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip.
Acct. No.
☒ **Sender**
Acct. No. in Section
I will be billed.

☐ **Recipient**
☐ **Third Party**
☐ **Credit Card**
☐ **Cash/Check**


Total Packages

Total Weight

Total Charges

153.16

Credit Card Auth.

Your liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

☐ **No Signature
Required**
Package may be left with-
out obtaining a signature
for delivery.

☐ **Direct Signature**
Anyone at recipient's
address may sign for delivery.
Fee applies.

☐ **Indirect Signature**
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 8/05-Prt. #158279-01/09-2005 FedEx-PRINTED IN U.S.A.-SRS

fedex.com 1800.GoFedEx 1800.463.3339

RECIPIENT: PEEL HERE

C9B070192

12

(1 - 135)

207

500

fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx® US Airbill

Express

FedEx Tracking Number

8565 6932 6536

1 From: This portion can be removed for Recipient's records.
Date 2/6/09 FedEx Tracking Number 856569326536
Sender's Name TODD WARD Phone 410 746-1250
Company E A ENGINEERING SCIENCE & TECH
Address 15 LOVETON CIR
City SPARKS GLENCOE State MD ZIP 21152
2 Your Internal Billing Reference 1453406
3 To:
Recipient's Name SAMPLE MANAGEMENT Phone 412 963-2468
Company TEST AMERICA - PITTSBURGH
Recipient's Address 301 ALPHA DRIVE
Address R IDC PARK
City PITTSBURGH State PA ZIP 15238



8565 6932 6536

0326961324

Recipient's Copy

4a Express Package Service

☒ **FedEx Priority Overnight**
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx Standard Overnight**
Next business afternoon.* Saturday Delivery NOT available.
☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
☐ **FedEx 2Day**
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx Express Saver**
Third business day.* Saturday Delivery NOT available.
* To meet locations.

4b Express Freight Service

☐ **FedEx 1Day Freight***
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 2Day Freight**
Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ **FedEx 3Day Freight**
Third business day.** Saturday Delivery NOT available.
** To meet locations.

5 Packaging

☐ **FedEx Envelope*** ☐ **FedEx Pak*** Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. ☐ **FedEx Box** ☐ **FedEx Tube** ☒ **Other**
* Declared value limit \$500.

6 Special Handling

☒ **SATURDAY Delivery**
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
☐ **HOLD Weekday at FedEx Location**
Not available for FedEx First Overnight.
☐ **HOLD Saturday at FedEx Location**
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
☒ **No** ☐ **Yes** As per attached Shipper's Declaration. ☐ **Yes** Shipper's Declaration not required. ☐ **Dry Ice** Dry Ice, 9, UN 1845 x kg ☐ **Cargo Aircraft Only**
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment

Bill to: Enter FedEx Acct. No. or Credit Card No. below. ☐ Obtain Recip. Acct. No.
☒ **Sender** Acct. No. in Section 1 will be billed. ☐ **Recipient** ☐ **Third Party** ☐ **Credit Card** ☐ **Cash/Check**
Total Packages 1 Total Weight 54.16 Total Charges 519
Credit Card Auth.

8 NEW Residential Delivery Signature Options

☐ **No Signature Required**
Package may be left without obtaining a signature for delivery.
☐ **Direct Signature**
Anyone at recipient's address may sign for delivery. Few applies.
☐ **Indirect Signature**
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Few applies.

Rev. Date 9/05/Part #158279-©1994-2005 FedEx-PRINTED IN U.S.A.-SRS



Chain of Custody

C9B070192

REVISED

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EAMES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

2/10/09

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-01-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W501AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W501AV METAL: XX

SMP#: 2 CLIENT ID: BH-SED-02-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W511AX METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W511AW METAL: XX

SMP#: 3 CLIENT ID: BH-SED-03A-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W521AX METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W521AW METAL: XX

SMP#: 4 CLIENT ID: BH-SED-03B-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W531AX METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W531AW METAL: XX

SMP#: 5 CLIENT ID: BH-SED-03C-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

C9B070192

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

WORKORDER K6W541AXMETAL: XXMETHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) BurlingtonEXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SETWORKORDER K6W541AWMETAL: XX

SMP#: 6

CLIENT ID: BH-SED-04-00DATE SAMPLED: 20090206MATRIX: A SOLIDSAMPLE COMMENTS:

QC-006

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture BurlingtonEXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SETWORKORDER K6W551AXMETAL: XXMETHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) BurlingtonEXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SETWORKORDER K6W551AWMETAL: XXWORKORDER K6W551C6 DMETAL: XXWORKORDER K6W551C5 SMETAL: XX

SMP#: 7

CLIENT ID: BH-SED-05-00DATE SAMPLED: 20090206MATRIX: A SOLIDSAMPLE COMMENTS:METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture BurlingtonEXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SETWORKORDER K6W561AXMETAL: XXMETHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) BurlingtonEXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SETWORKORDER K6W561AWMETAL: XX

SMP#: 8

CLIENT ID: DUP-1DATE SAMPLED: 20090206MATRIX: A SOLIDSAMPLE COMMENTS:METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture BurlingtonEXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SETWORKORDER K6W571AXMETAL: XXMETHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) BurlingtonEXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SETWORKORDER K6W571AWMETAL: XX

C9B070192

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: _____ DATE: _____

RECEIVED FOR LAB BY:  for Greg Marion DATE: 02-10-09

REVISED 2/10/09 - QCL on 006

CM 2/10/09

C9B070192

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-01-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W501AW METAL: XX

~~METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington~~
~~EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET~~
~~WORKORDER K6W501AV METAL: XX~~

SMP#: 2 CLIENT ID: BH-SED-02-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W511AX METAL: XX

~~METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington~~
~~EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET~~
~~WORKORDER K6W511AW METAL: XX~~

SMP#: 3 CLIENT ID: BH-SED-03A-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W521AX METAL: XX

~~METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington~~
~~EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET~~
~~WORKORDER K6W521AW METAL: XX~~

SMP#: 4 CLIENT ID: BH-SED-03B-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W531AX METAL: XX

~~METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington~~
~~EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET~~
~~WORKORDER K6W531AW METAL: XX~~

SMP#: 5 CLIENT ID: BH-SED-03C-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

WORKORDER K6W541AX

METAL: XX

METHOD: ~~Z0~~ NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K6W541AW

METAL: XX

SMP#: 6

CLIENT ID: BH-SED-04-00

DATE SAMPLED: 20090206

MATRIX: A SOLID

SAMPLE COMMENTS:

QC-006

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K6W551AX

METAL: XX

METHOD: ~~Z0~~ NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K6W551AW

METAL: XX

WORKORDER K6W551C6 D

METAL: XX

WORKORDER K6W551C5 S

METAL: XX

SMP#: 7

CLIENT ID: BH-SED-05-00

DATE SAMPLED: 20090206

MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K6W561AX

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: ~~88~~ NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K6W561AW

METAL: XX

SMP#: 8

CLIENT ID: DUP-1

DATE SAMPLED: 20090206

MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K6W571AX

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: ~~88~~ NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K6W571AW

METAL: XX

COMMENTS:

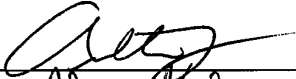

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY:  DATE: 2-11-09
RECEIVED FOR LAB BY:  DATE: 2/12/09 1000

Replacement moisture volume
for this set

Chris 2/11/09

~ 35 grams per sample

C9B070192

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-01-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W501AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W501AV METAL: XX

SMP#: 2 CLIENT ID: BH-SED-02-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W511AX METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W511AW METAL: XX

SMP#: 3 CLIENT ID: BH-SED-03A-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W521AX METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W521AW METAL: XX

SMP#: 4 CLIENT ID: BH-SED-03B-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W531AX METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W531AW METAL: XX
WORKORDER K6W531C6 D METAL: XX
WORKORDER K6W531C5 S METAL: XX

SMP#: 5 CLIENT ID: BH-SED-03C-00 DATE SAMPLED: 20090206 MATRIX: A SOLID

SAMPLE COMMENTS:

C9B070192

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W541AX

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W541AW

METAL: XX

SMP#: 6 CLIENT ID: BH-SED-04-00 DATE SAMPLED: 20090206 MATRIX: A SOLID
SAMPLE COMMENTS: QC-006

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W551AX

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W551AW

METAL: XX

SMP#: 7 CLIENT ID: BH-SED-05-00 DATE SAMPLED: 20090206 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W561AX

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W561AW

METAL: XX

SMP#: 8 CLIENT ID: DUP-1 DATE SAMPLED: 20090206 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W571AX

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K6W571AW

METAL: XX

COMMENTS:


Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW. EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-07
Analytical Due Date: 2009-03-05
Report Due Date: 2009-03-06

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: 

DATE: 2-9-09

RECEIVED FOR LAB BY: 

DATE: 2/10/09 1020

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-01-00

GC/MS Volatiles

Lot-Sample #... : C9B070192-001	Work Order #... : K6W501A0	Matrix..... : SOLID
Date Sampled... : 02/06/09	Date Received... : 02/07/09	MS Run #..... : 9041024
Prep Date..... : 02/10/09	Analysis Date... : 02/10/09	
Prep Batch #... : 9041036	Analysis Time... : 08:40	
Dilution Factor: 1.05	Initial Wgt/Vol: 4.74 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 82	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	580	ug/kg	41
Acrylonitrile	ND	580	ug/kg	60
Benzene	ND	29	ug/kg	3.9
Bromodichloromethane	ND	29	ug/kg	3.2
Bromoform	ND	29	ug/kg	2.5
Bromomethane	ND	29	ug/kg	4.3
2-Butanone (MEK)	ND	29	ug/kg	5.1
Carbon tetrachloride	ND	29	ug/kg	2.6
Chloroethane	ND	29	ug/kg	8.9
2-Chloroethyl vinyl ether	ND	58	ug/kg	4.5
Chloroform	ND	29	ug/kg	3.4
Chloromethane	ND	29	ug/kg	4.9
Dibromochloromethane	ND	29	ug/kg	4.1
1,2-Dichlorobenzene	ND	29	ug/kg	4.6
1,3-Dichlorobenzene	ND	29	ug/kg	3.8
1,4-Dichlorobenzene	ND	29	ug/kg	3.7
trans-1,2-Dichloroethene	ND	29	ug/kg	3.4
Dichlorodifluoromethane	ND	29	ug/kg	3.8
1,1-Dichloroethane	ND	29	ug/kg	3.3
1,2-Dichloroethane	ND	29	ug/kg	3.5
1,1-Dichloroethene	ND	29	ug/kg	4.9
1,2-Dichloropropane	ND	29	ug/kg	3.1
cis-1,3-Dichloropropene	ND	29	ug/kg	3.9
trans-1,3-Dichloropropene	ND	29	ug/kg	3.4
Ethylbenzene	ND	29	ug/kg	3.7
Methylene chloride	ND	29	ug/kg	3.9
1,1,2,2-Tetrachloroethane	ND	29	ug/kg	4.1
Tetrachloroethene	ND	29	ug/kg	3.9
Toluene	ND	29	ug/kg	4.2
1,1,1-Trichloroethane	ND	29	ug/kg	2.8
1,1,2-Trichloroethane	ND	29	ug/kg	4.8
Trichloroethene	ND	29	ug/kg	3.8
Trichlorofluoromethane	ND	29	ug/kg	5.3
Vinyl chloride	ND	29	ug/kg	2.7

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-001 Work Order #...: K6W501A0 Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	82	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	93	(63 - 120)
Dibromofluoromethane	103	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-002	Work Order #...: K6W511AA	Matrix.....: SOLID
Date Sampled...: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #...: 9041036	Analysis Time...: 09:05	
Dilution Factor: 1.08	Initial Wgt/Vol: 4.65 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 34	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	160	ug/kg	12
Acrylonitrile	ND	160	ug/kg	17
Benzene	4.0 J	8.2	ug/kg	1.1
Bromodichloromethane	ND	8.2	ug/kg	0.92
Bromoform	ND	8.2	ug/kg	0.72
Bromomethane	ND	8.2	ug/kg	1.2
2-Butanone (MEK)	ND	8.2	ug/kg	1.4
Carbon tetrachloride	ND	8.2	ug/kg	0.73
Chloroethane	ND	8.2	ug/kg	2.5
2-Chloroethyl vinyl ether	ND	16	ug/kg	1.3
Chloroform	ND	8.2	ug/kg	0.96
Chloromethane	ND	8.2	ug/kg	1.4
Dibromochloromethane	ND	8.2	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.2	ug/kg	1.3
1,3-Dichlorobenzene	ND	8.2	ug/kg	1.1
1,4-Dichlorobenzene	ND	8.2	ug/kg	1.0
trans-1,2-Dichloroethene	ND	8.2	ug/kg	0.97
Dichlorodifluoromethane	ND	8.2	ug/kg	1.1
1,1-Dichloroethane	ND	8.2	ug/kg	0.94
1,2-Dichloroethane	ND	8.2	ug/kg	1.0
1,1-Dichloroethene	ND	8.2	ug/kg	1.4
1,2-Dichloropropane	ND	8.2	ug/kg	0.89
cis-1,3-Dichloropropene	ND	8.2	ug/kg	1.1
trans-1,3-Dichloropropene	ND	8.2	ug/kg	0.98
Ethylbenzene	ND	8.2	ug/kg	1.1
Methylene chloride	ND	8.2	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg	1.2
Tetrachloroethene	ND	8.2	ug/kg	1.1
Toluene	ND	8.2	ug/kg	1.2
1,1,1-Trichloroethane	ND	8.2	ug/kg	0.80
1,1,2-Trichloroethane	ND	8.2	ug/kg	1.4
Trichloroethene	ND	8.2	ug/kg	1.1
Trichlorofluoromethane	ND	8.2	ug/kg	1.5
Vinyl chloride	ND	8.2	ug/kg	0.77

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-002 Work Order #...: K6W511AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(52 - 124)
Toluene-d8	96	(72 - 127)
4-Bromofluorobenzene	96	(63 - 120)
Dibromofluoromethane	111	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-003	Work Order #...: K6W521AA	Matrix.....: SOLID
Date Sampled...: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #...: 9041036	Analysis Time...: 09:29	
Dilution Factor: 0.89	Initial Wgt/Vol: 5.62 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 43	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	160	ug/kg	11
Acrylonitrile	ND	160	ug/kg	16
Benzene	ND	7.8	ug/kg	1.1
Bromodichloromethane	ND	7.8	ug/kg	0.88
Bromoform	ND	7.8	ug/kg	0.69
Bromomethane	ND	7.8	ug/kg	1.2
2-Butanone (MEK)	ND	7.8	ug/kg	1.4
Carbon tetrachloride	ND	7.8	ug/kg	0.70
Chloroethane	ND	7.8	ug/kg	2.4
2-Chloroethyl vinyl ether	ND	16	ug/kg	1.2
Chloroform	ND	7.8	ug/kg	0.91
Chloromethane	ND	7.8	ug/kg	1.3
Dibromochloromethane	ND	7.8	ug/kg	1.1
1,2-Dichlorobenzene	ND	7.8	ug/kg	1.2
1,3-Dichlorobenzene	ND	7.8	ug/kg	1.0
1,4-Dichlorobenzene	ND	7.8	ug/kg	1.0
trans-1,2-Dichloroethene	ND	7.8	ug/kg	0.93
Dichlorodifluoromethane	ND	7.8	ug/kg	1.0
1,1-Dichloroethane	ND	7.8	ug/kg	0.90
1,2-Dichloroethane	ND	7.8	ug/kg	0.96
1,1-Dichloroethene	ND	7.8	ug/kg	1.3
1,2-Dichloropropane	ND	7.8	ug/kg	0.85
cis-1,3-Dichloropropene	ND	7.8	ug/kg	1.1
trans-1,3-Dichloropropene	ND	7.8	ug/kg	0.93
Ethylbenzene	ND	7.8	ug/kg	1.0
Methylene chloride	ND	7.8	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	7.8	ug/kg	1.1
Tetrachloroethene	ND	7.8	ug/kg	1.1
Toluene	ND	7.8	ug/kg	1.1
1,1,1-Trichloroethane	ND	7.8	ug/kg	0.76
1,1,2-Trichloroethane	ND	7.8	ug/kg	1.3
Trichloroethene	ND	7.8	ug/kg	1.0
Trichlorofluoromethane	ND	7.8	ug/kg	1.4
Vinyl chloride	ND	7.8	ug/kg	0.73

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-003 Work Order #...: K6W521AA Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	88	(52 - 124)
Toluene-d8	94	(72 - 127)
4-Bromofluorobenzene	90	(63 - 120)
Dibromofluoromethane	107	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-004	Work Order #....: K6W531AA	Matrix.....: SOLID
Date Sampled...: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 10:19	
Dilution Factor: 0.95	Initial Wgt/Vol: 5.27 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 64	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	260	ug/kg	19
Acrylonitrile	ND	260	ug/kg	27
Benzene	ND	13	ug/kg	1.8
Bromodichloromethane	ND	13	ug/kg	1.5
Bromoform	ND	13	ug/kg	1.2
Bromomethane	ND	13	ug/kg	1.9
2-Butanone (MEK)	ND	13	ug/kg	2.3
Carbon tetrachloride	ND	13	ug/kg	1.2
Chloroethane	ND	13	ug/kg	4.1
2-Chloroethyl vinyl ether	ND	26	ug/kg	2.0
Chloroform	ND	13	ug/kg	1.5
Chloromethane	ND	13	ug/kg	2.2
Dibromochloromethane	ND	13	ug/kg	1.9
1,2-Dichlorobenzene	ND	13	ug/kg	2.1
1,3-Dichlorobenzene	ND	13	ug/kg	1.7
1,4-Dichlorobenzene	ND	13	ug/kg	1.7
trans-1,2-Dichloroethene	ND	13	ug/kg	1.6
Dichlorodifluoromethane	ND	13	ug/kg	1.8
1,1-Dichloroethane	ND	13	ug/kg	1.5
1,2-Dichloroethane	ND	13	ug/kg	1.6
1,1-Dichloroethene	ND	13	ug/kg	2.2
1,2-Dichloropropane	ND	13	ug/kg	1.4
cis-1,3-Dichloropropene	ND	13	ug/kg	1.8
trans-1,3-Dichloropropene	ND	13	ug/kg	1.6
Ethylbenzene	ND	13	ug/kg	1.7
Methylene chloride	ND	13	ug/kg	1.8
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.9
Tetrachloroethene	ND	13	ug/kg	1.8
Toluene	ND	13	ug/kg	1.9
1,1,1-Trichloroethane	ND	13	ug/kg	1.3
1,1,2-Trichloroethane	ND	13	ug/kg	2.2
Trichloroethene	ND	13	ug/kg	1.7
Trichlorofluoromethane	ND	13	ug/kg	2.4
Vinyl chloride	ND	13	ug/kg	1.2

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-03B-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-004 Work Order #...: K6W531AA Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	89	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	93	(63 - 120)
Dibromofluoromethane	108	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-005	Work Order #....: K6W541AA	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 09:54	
Dilution Factor: 1	Initial Wgt/Vol: 4.99 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 69	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	320	ug/kg	22
Acrylonitrile	ND	320	ug/kg	33
Benzene	ND	16	ug/kg	2.1
Bromodichloromethane	ND	16	ug/kg	1.8
Bromoform	ND	16	ug/kg	1.4
Bromomethane	ND	16	ug/kg	2.3
2-Butanone (MEK)	ND	16	ug/kg	2.8
Carbon tetrachloride	ND	16	ug/kg	1.4
Chloroethane	ND	16	ug/kg	4.9
2-Chloroethyl vinyl ether	ND	32	ug/kg	2.5
Chloroform	ND	16	ug/kg	1.9
Chloromethane	ND	16	ug/kg	2.7
Dibromochloromethane	ND	16	ug/kg	2.3
1,2-Dichlorobenzene	ND	16	ug/kg	2.5
1,3-Dichlorobenzene	ND	16	ug/kg	2.1
1,4-Dichlorobenzene	ND	16	ug/kg	2.0
trans-1,2-Dichloroethene	ND	16	ug/kg	1.9
Dichlorodifluoromethane	ND	16	ug/kg	2.1
1,1-Dichloroethane	ND	16	ug/kg	1.8
1,2-Dichloroethane	ND	16	ug/kg	1.9
1,1-Dichloroethene	ND	16	ug/kg	2.7
1,2-Dichloropropane	ND	16	ug/kg	1.7
cis-1,3-Dichloropropene	ND	16	ug/kg	2.2
trans-1,3-Dichloropropene	ND	16	ug/kg	1.9
Ethylbenzene	ND	16	ug/kg	2.0
Methylene chloride	ND	16	ug/kg	2.1
1,1,2,2-Tetrachloroethane	ND	16	ug/kg	2.3
Tetrachloroethene	ND	16	ug/kg	2.2
Toluene	ND	16	ug/kg	2.3
1,1,1-Trichloroethane	ND	16	ug/kg	1.5
1,1,2-Trichloroethane	ND	16	ug/kg	2.5
Trichloroethene	ND	16	ug/kg	2.1
Trichlorofluoromethane	ND	16	ug/kg	2.9
Vinyl chloride	ND	16	ug/kg	1.5

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-005 Work Order #...: K6W541AA Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	96	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-006	Work Order #....: K6W551AA	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 06:14	
Dilution Factor: 0.96	Initial Wgt/Vol: 5.19 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 45	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	ML
Acrolein	ND	180	ug/kg	12
Acrylonitrile	ND	180	ug/kg	18
Benzene	ND	8.8	ug/kg	1.2
Bromodichloromethane	ND	8.8	ug/kg	0.99
Bromoform	ND	8.8	ug/kg	0.78
Bromomethane	ND	8.8	ug/kg	1.3
2-Butanone (MEK)	ND	8.8	ug/kg	1.5
Carbon tetrachloride	ND	8.8	ug/kg	0.78
Chloroethane	ND	8.8	ug/kg	2.7
2-Chloroethyl vinyl ether	ND	18	ug/kg	1.4
Chloroform	ND	8.8	ug/kg	1.0
Chloromethane	ND	8.8	ug/kg	1.5
Dibromochloromethane	ND	8.8	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.8	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.8	ug/kg	1.2
1,4-Dichlorobenzene	ND	8.8	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.8	ug/kg	1.0
Dichlorodifluoromethane	ND	8.8	ug/kg	1.2
1,1-Dichloroethane	ND	8.8	ug/kg	1.0
1,2-Dichloroethane	ND	8.8	ug/kg	1.1
1,1-Dichloroethene	ND	8.8	ug/kg	1.5
1,2-Dichloropropane	ND	8.8	ug/kg	0.95
cis-1,3-Dichloropropene	ND	8.8	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.8	ug/kg	1.0
Ethylbenzene	ND	8.8	ug/kg	1.1
Methylene chloride	ND	8.8	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.8	ug/kg	1.3
Tetrachloroethene	ND	8.8	ug/kg	1.2
Toluene	ND	8.8	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.8	ug/kg	0.85
1,1,2-Trichloroethane	ND	8.8	ug/kg	1.5
Trichloroethene	ND	8.8	ug/kg	1.2
Trichlorofluoromethane	ND	8.8	ug/kg	1.6
Vinyl chloride	ND	8.8	ug/kg	0.82

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-04-00

GC/MS Volatiles

Lot-Sample #...: C9B070192-006 Work Order #...: K6W551AA Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	97	(72 - 127)
4-Bromofluorobenzene	98	(63 - 120)
Dibromofluoromethane	107	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-007	Work Order #....: K6W561AA	Matrix.....: SOLID
Date Sampled...: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 10:43	
Dilution Factor: 0.93	Initial Wgt/Vol: 5.39 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 38	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	150	ug/kg	11
Acrylonitrile	ND	150	ug/kg	16
Benzene	11	7.5	ug/kg	1.0
Bromodichloromethane	ND	7.5	ug/kg	0.85
Bromoform	ND	7.5	ug/kg	0.67
Bromomethane	ND	7.5	ug/kg	1.1
2-Butanone (MEK)	ND	7.5	ug/kg	1.3
Carbon tetrachloride	ND	7.5	ug/kg	0.67
Chloroethane	ND	7.5	ug/kg	2.3
2-Chloroethyl vinyl ether	ND	15	ug/kg	1.2
Chloroform	ND	7.5	ug/kg	0.88
Chloromethane	ND	7.5	ug/kg	1.3
Dibromochloromethane	ND	7.5	ug/kg	1.1
1,2-Dichlorobenzene	ND	7.5	ug/kg	1.2
1,3-Dichlorobenzene	ND	7.5	ug/kg	0.99
1,4-Dichlorobenzene	ND	7.5	ug/kg	0.96
trans-1,2-Dichloroethene	ND	7.5	ug/kg	0.90
Dichlorodifluoromethane	ND	7.5	ug/kg	1.0
1,1-Dichloroethane	ND	7.5	ug/kg	0.87
1,2-Dichloroethane	ND	7.5	ug/kg	0.93
1,1-Dichloroethene	ND	7.5	ug/kg	1.3
1,2-Dichloropropane	ND	7.5	ug/kg	0.82
cis-1,3-Dichloropropene	ND	7.5	ug/kg	1.0
trans-1,3-Dichloropropene	ND	7.5	ug/kg	0.90
Ethylbenzene	ND	7.5	ug/kg	0.97
Methylene chloride	ND	7.5	ug/kg	1.0
1,1,2,2-Tetrachloroethane	ND	7.5	ug/kg	1.1
Tetrachloroethene	ND	7.5	ug/kg	1.0
Toluene	2.4 J	7.5	ug/kg	1.1
1,1,1-Trichloroethane	ND	7.5	ug/kg	0.73
1,1,2-Trichloroethane	ND	7.5	ug/kg	1.3
Trichloroethene	ND	7.5	ug/kg	0.99
Trichlorofluoromethane	ND	7.5	ug/kg	1.4
Vinyl chloride	ND	7.5	ug/kg	0.71

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-007 Work Order #....: K6W561AA Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	89	(52 - 124)
Toluene-d8	98	(72 - 127)
4-Bromofluorobenzene	89	(63 - 120)
Dibromofluoromethane	110	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9B070192-008	Work Order #....: K6W571AA	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 11:07	
Dilution Factor: 1.02	Initial Wgt/Vol: 4.92 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 65	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	290	ug/kg	21
Acrylonitrile	ND	290	ug/kg	30
Benzene	ND	15	ug/kg	2.0
Bromodichloromethane	ND	15	ug/kg	1.6
Bromoform	ND	15	ug/kg	1.3
Bromomethane	ND	15	ug/kg	2.2
2-Butanone (MEK)	ND	15	ug/kg	2.6
Carbon tetrachloride	ND	15	ug/kg	1.3
Chloroethane	ND	15	ug/kg	4.5
2-Chloroethyl vinyl ether	ND	29	ug/kg	2.3
Chloroform	ND	15	ug/kg	1.7
Chloromethane	ND	15	ug/kg	2.5
Dibromochloromethane	ND	15	ug/kg	2.1
1,2-Dichlorobenzene	ND	15	ug/kg	2.3
1,3-Dichlorobenzene	ND	15	ug/kg	1.9
1,4-Dichlorobenzene	ND	15	ug/kg	1.9
trans-1,2-Dichloroethene	ND	15	ug/kg	1.7
Dichlorodifluoromethane	ND	15	ug/kg	1.9
1,1-Dichloroethane	ND	15	ug/kg	1.7
1,2-Dichloroethane	ND	15	ug/kg	1.8
1,1-Dichloroethene	ND	15	ug/kg	2.5
1,2-Dichloropropane	ND	15	ug/kg	1.6
cis-1,3-Dichloropropene	ND	15	ug/kg	2.0
trans-1,3-Dichloropropene	ND	15	ug/kg	1.7
Ethylbenzene	ND	15	ug/kg	1.9
Methylene chloride	ND	15	ug/kg	2.0
1,1,2,2-Tetrachloroethane	ND	15	ug/kg	2.1
Tetrachloroethene	ND	15	ug/kg	2.0
Toluene	ND	15	ug/kg	2.1
1,1,1-Trichloroethane	ND	15	ug/kg	1.4
1,1,2-Trichloroethane	ND	15	ug/kg	2.4
Trichloroethene	ND	15	ug/kg	1.9
Trichlorofluoromethane	ND	15	ug/kg	2.7
Vinyl chloride	ND	15	ug/kg	1.4

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #...: C9B070192-008 Work Order #...: K6W571AA Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B070192

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-01-00	82	95	93	103	00
02	BH-SED-02-00	95	96	96	111	00
03	BH-SED-03A-00	88	94	90	107	00
04	BH-SED-03B-00	89	95	93	108	00
05	BH-SED-03C-00	86	96	91	106	00
06	BH-SED-04-00	90	97	98	107	00
07	BH-SED-05-00	89	98	89	110	00
08	DUP-1	90	95	91	104	00
09	METHOD BLK. K60EM1AA	103	94	84	103	00
10	LCS K60EM1AC	99	102	103	104	00
11	BH-SED-04-00 D	79	101	96	98	00
12	BH-SED-04-00 S	76	100	93	94	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B100000

WO #: K60EM1AC

BATCH: 9041036

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	42.4	106	59 - 129	
Trichloroethene	40.0	40.2	100	76 - 119	
Benzene	40.0	43.8	110	77 - 120	
Toluene	40.0	42.9	107	78 - 124	
Chlorobenzene	40.0	41.0	102	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-04-00

Level: (low/med) LOW

Lot #: C9B070192

WO #: K6W551A1

BATCH: 9041036

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	69.5	ND	78.9	114	59 - 129	
Trichloroethene	69.5	ND	74.6	107	76 - 119	
Benzene	69.5	ND	78.4	113	77 - 120	
Toluene	69.5	ND	78.2	112	78 - 124	
Chlorobenzene	69.5	ND	72.0	104	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-04-00

Level: (low/med) LOW

Lot #: C9B070192

WO #: K6W551A2

BATCH: 9041036

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
1,1-Dichloroethene	70.3	78.7	112	0.32	25	59 - 129	
Trichloroethene	70.3	73.0	104	2.2	21	76 - 119	
Benzene	70.3	76.3	109	2.7	20	77 - 120	
Toluene	70.3	76.6	109	2.1	21	78 - 124	
Chlorobenzene	70.3	70.6	101	1.9	20	79 - 120	

NOTES(S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

K60EM1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3021001.D

Lot Number: C9B070192

Date Analyzed: 02/10/09

Time Analyzed: 05:50

Matrix: SOLID

Date Extracted: 02/10/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-01-00	K6W501A0	3021008.D	02/10/09	08:40
02	BH-SED-02-00	K6W511AA	3021009.D	02/10/09	09:05
03	BH-SED-03A-00	K6W521AA	3021010.D	02/10/09	09:29
04	BH-SED-03B-00	K6W531AA	3021012.D	02/10/09	10:19
05	BH-SED-03C-00	K6W541AA	3021011.D	02/10/09	09:54
06	BH-SED-04-00	K6W551AA	3021002.D	02/10/09	06:14
07	BH-SED-04-00	K6W551A1 S	3021005.D	02/10/09	07:27
08	BH-SED-04-00	K6W551A2 D	3021006.D	02/10/09	07:51
09	BH-SED-05-00	K6W561AA	3021013.D	02/10/09	10:43
10	DUP-1	K6W571AA	3021014.D	02/10/09	11:07
11	CHECK SAMPLE	K60EM1AC C	3021004.D	02/10/09	07:02
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
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27					
28					
29					
30					

COMMENTS:

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B070192
MB Lot-Sample #: C9B100000-036

Work Order #...: K60EM1AA

Matrix.....: SOLID

Analysis Date...: 02/10/09
Dilution Factor: 1

Prep Date.....: 02/10/09

Prep Batch #...: 9041036

Initial Wgt/Vol: 5 g

Analyst ID.....: 010099

Analysis Time...: 05:50

Final Wgt/Vol...: 5 mL

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	103	(52 - 124)
Toluene-d8	94	(72 - 127)
4-Bromofluorobenzene	84	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B070192

Work Order #...: K60EM1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromofluoromethane	103	(68 - 121)		

NOTE(S) :

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

GC/MS SEMIVOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

GC/MS Semivolatiles

Lot-Sample #...: C9B070192-001 Work Order #...: K6W501AC Matrix.....: SOLID
 Date Sampled...: 02/06/09 10:15 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #...: 9043011 Analysis Time...: 01:12
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 82 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	170 J	180	ug/kg	28
2-Methylnaphthalene	340	180	ug/kg	36
Naphthalene	3700	180	ug/kg	27
Acenaphthylene	230	180	ug/kg	36
Acenaphthene	73 J	180	ug/kg	29
Fluorene	200	180	ug/kg	28
Phenanthrene	610	180	ug/kg	22
Anthracene	310 J	900	ug/kg	32
Fluoranthene	1300	180	ug/kg	15
Pyrene	1200	180	ug/kg	49
Benzo (a) anthracene	680	180	ug/kg	29
Chrysene	680	180	ug/kg	32
Benzo (b) fluoranthene	1300	180	ug/kg	37
Benzo (k) fluoranthene	440	180	ug/kg	38
Benzo (a) pyrene	1100	180	ug/kg	51
Indeno (1,2,3-cd) pyrene	740	180	ug/kg	10
Dibenzo (a,h) anthracene	190	180	ug/kg	40
Benzo (ghi) perylene	950	180	ug/kg	13

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(27 - 110)
Terphenyl-d14	65	(21 - 130)
2-Fluorobiphenyl	67	(28 - 108)
2-Fluorophenol	57	(28 - 107)
Phenol-d5	56	(30 - 112)
2,4,6-Tribromophenol	78	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Semivolatiles

Lot-Sample #...: C9B070192-002 Work Order #...: K6W511AD Matrix.....: SOLID
 Date Sampled...: 02/06/09 11:15 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #...: 9043011 Analysis Time...: 09:28
 Dilution Factor: 12.98 Initial Wgt/Vol: 23.1 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 34 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1800	130	ug/kg	20
2-Methylnaphthalene	3200	130	ug/kg	26
Naphthalene	43000 E	130	ug/kg	19
Acenaphthylene	4300	130	ug/kg	26
Acenaphthene	1000	130	ug/kg	21
Fluorene	3000	130	ug/kg	20
Phenanthrene	14000	130	ug/kg	16
Anthracene	5000	650	ug/kg	23
Fluoranthene	25000	130	ug/kg	11
Pyrene	16000	130	ug/kg	35
Benzo (a) anthracene	7600	130	ug/kg	21
Chrysene	6500	130	ug/kg	23
Benzo (b) fluoranthene	9300	130	ug/kg	27
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	9300	130	ug/kg	37
Indeno (1, 2, 3-cd) pyrene	5300	130	ug/kg	7.2
Dibenzo (a, h) anthracene	1300	130	ug/kg	29
Benzo (ghi) perylene	6300	130	ug/kg	9.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2, 4, 6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-002 Work Order #....: K6W512AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 11:15 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 01:34
 Dilution Factor: 129.8 Initial Wgt/Vol: 23.1 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 34 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	2600	1300	ug/kg	200
2-Methylnaphthalene	5000	1300	ug/kg	260
Naphthalene	85000	1300	ug/kg	190
Acenaphthylene	5500	1300	ug/kg	260
Acenaphthene	1500	1300	ug/kg	210
Fluorene	4400	1300	ug/kg	200
Phenanthrene	20000	1300	ug/kg	160
Anthracene	7300	6500	ug/kg	230
Fluoranthene	33000	1300	ug/kg	110
Pyrene	28000	1300	ug/kg	350
Benzo (a) anthracene	12000	1300	ug/kg	210
Chrysene	11000	1300	ug/kg	230
Benzo (b) fluoranthene	19000	1300	ug/kg	270
Benzo (k) fluoranthene	ND	1300	ug/kg	270
Benzo (a) pyrene	13000	1300	ug/kg	370
Indeno (1, 2, 3-cd) pyrene	7100	1300	ug/kg	72
Dibenzo (a, h) anthracene	1700	1300	ug/kg	290
Benzo (ghi) perylene	8100	1300	ug/kg	96

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC: The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-003 Work Order #....: K6W521AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 12:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 09:50
 Dilution Factor: 10.98 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 43 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1300	130	ug/kg	19
2-Methylnaphthalene	1800	130	ug/kg	25
Naphthalene	43000 E	130	ug/kg	19
Acenaphthylene	1700	130	ug/kg	26
Acenaphthene	830	130	ug/kg	21
Fluorene	690	130	ug/kg	19
Phenanthrene	3200	130	ug/kg	15
Anthracene	1700	640	ug/kg	23
Fluoranthene	8400	130	ug/kg	11
Pyrene	5600	130	ug/kg	34
Benzo (a) anthracene	4400	130	ug/kg	21
Chrysene	3900	130	ug/kg	22
Benzo (b) fluoranthene	5500	130	ug/kg	26
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	5300	130	ug/kg	36
Indeno (1, 2, 3-cd) pyrene	3500	130	ug/kg	7.1
Dibenzo (a, h) anthracene	ND	130	ug/kg	28
Benzo (ghi) perylene	3900	130	ug/kg	9.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-003 Work Order #....: K6W522AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 12:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 01:56
 Dilution Factor: 109.9 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 43 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	2100	1300	ug/kg	190
2-Methylnaphthalene	3000	1300	ug/kg	250
Naphthalene	90000	1300	ug/kg	190
Acenaphthylene	2300	1300	ug/kg	260
Acenaphthene	1300	1300	ug/kg	210
Fluorene	1000 J	1300	ug/kg	190
Phenanthrene	4800	1300	ug/kg	150
Anthracene	2300 J	6400	ug/kg	230
Fluoranthene	12000	1300	ug/kg	110
Pyrene	9800	1300	ug/kg	340
Benzo (a) anthracene	6700	1300	ug/kg	210
Chrysene	5500	1300	ug/kg	230
Benzo (b) fluoranthene	11000	1300	ug/kg	260
Benzo (k) fluoranthene	ND	1300	ug/kg	270
Benzo (a) pyrene	7600	1300	ug/kg	360
Indeno (1,2,3-cd) pyrene	5100	1300	ug/kg	71
Dibenzo (a,h) anthracene	1100 J	1300	ug/kg	280
Benzo (ghi) perylene	5300	1300	ug/kg	95

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-004 Work Order #....: K6W531AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 13:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 10:12
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 64 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2800	190	ug/kg	28
2-Methylnaphthalene	6500	190	ug/kg	36
Naphthalene	240000 E	190	ug/kg	27
Acenaphthylene	1400	190	ug/kg	37
Acenaphthene	5900	190	ug/kg	30
Fluorene	3500	190	ug/kg	28
Phenanthrene	20000	190	ug/kg	22
Anthracene	8200	920	ug/kg	32
Fluoranthene	32000	190	ug/kg	16
Pyrene	21000	190	ug/kg	49
Benzo (a) anthracene	11000	190	ug/kg	30
Chrysene	8100	190	ug/kg	32
Benzo (b) fluoranthene	10000	190	ug/kg	37
Benzo (k) fluoranthene	ND	190	ug/kg	39
Benzo (a) pyrene	9900	190	ug/kg	52
Indeno (1,2,3-cd) pyrene	6000	190	ug/kg	10
Dibenzo (a,h) anthracene	900	190	ug/kg	41
Benzo (ghi) perylene	7000	190	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC: The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E: Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-004	Work Order #....: K6W532AD	Matrix.....: SOLID
Date Sampled....: 02/06/09 13:00	Date Received...: 02/07/09 09:50	MS Run #.....: 9043002
Prep Date.....: 02/12/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9043011	Analysis Time...: 04:27	
Dilution Factor: 6000	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 64	Analyst ID.....: 007062	Instrument ID...: 722
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	110000	ug/kg	17000
2-Methylnaphthalene	ND	110000	ug/kg	22000
Naphthalene	7200000	110000	ug/kg	16000
Acenaphthylene	ND	110000	ug/kg	22000
Acenaphthene	ND	110000	ug/kg	18000
Fluorene	ND	110000	ug/kg	17000
Phenanthrene	88000 J	110000	ug/kg	13000
Anthracene	36000 J	550000	ug/kg	19000
Fluoranthene	140000	110000	ug/kg	9400
Pyrene	110000	110000	ug/kg	29000
Benzo (a) anthracene	57000 J	110000	ug/kg	18000
Chrysene	54000 J	110000	ug/kg	19000
Benzo (b) fluoranthene	57000 J	110000	ug/kg	22000
Benzo (k) fluoranthene	30000 J	110000	ug/kg	23000
Benzo (a) pyrene	ND	110000	ug/kg	31000
Indeno (1,2,3-cd) pyrene	ND	110000	ug/kg	6100
Dibenzo (a,h) anthracene	ND	110000	ug/kg	24000
Benzo (ghi) perylene	ND	110000	ug/kg	8200

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC: The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J: Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-005	Work Order #....: K6W541AD	Matrix.....: SOLID
Date Sampled....: 02/06/09 13:30	Date Received...: 02/07/09 09:50	MS Run #.....: 9043002
Prep Date.....: 02/12/09	Analysis Date...: 02/13/09	
Prep Batch #....: 9043011	Analysis Time...: 10:34	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 69	Analyst ID.....: 007062	Instrument ID...: 722
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	2500	210	ug/kg	32
2-Methylnaphthalene	4200	210	ug/kg	42
Naphthalene	82000 E	210	ug/kg	31
Acenaphthylene	1700	210	ug/kg	42
Acenaphthene	3000	210	ug/kg	34
Fluorene	1900	210	ug/kg	32
Phenanthrene	5600	210	ug/kg	25
Anthracene	3800	1000	ug/kg	37
Fluoranthene	25000	210	ug/kg	18
Pyrene	15000	210	ug/kg	56
Benzo (a) anthracene	9300	210	ug/kg	34
Chrysene	8500	210	ug/kg	37
Benzo (b) fluoranthene	11000	210	ug/kg	43
Benzo (k) fluoranthene	ND	210	ug/kg	44
Benzo (a) pyrene	10000	210	ug/kg	59
Indeno (1,2,3-cd) pyrene	6100	210	ug/kg	12
Dibenzo (a,h) anthracene	1900	210	ug/kg	47
Benzo (ghi) perylene	7200	210	ug/kg	16

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-005 Work Order #....: K6W542AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 13:30 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 02:39
 Dilution Factor: 100 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 69 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	4100	2100	ug/kg	320
2-Methylnaphthalene	5900	2100	ug/kg	420
Naphthalene	190000	2100	ug/kg	310
Acenaphthylene	2000 J	2100	ug/kg	420
Acenaphthene	4200	2100	ug/kg	340
Fluorene	2800	2100	ug/kg	320
Phenanthrene	6900	2100	ug/kg	250
Anthracene	5000 J	10000	ug/kg	370
Fluoranthene	30000	2100	ug/kg	180
Pyrene	23000	2100	ug/kg	560
Benzo (a) anthracene	13000	2100	ug/kg	340
Chrysene	10000	2100	ug/kg	370
Benzo (b) fluoranthene	21000	2100	ug/kg	430
Benzo (k) fluoranthene	ND	2100	ug/kg	440
Benzo (a) pyrene	15000	2100	ug/kg	590
Indeno (1,2,3-cd) pyrene	7800	2100	ug/kg	120
Dibenzo (a,h) anthracene	2000 J	2100	ug/kg	470
Benzo (ghi) perylene	8000	2100	ug/kg	160

SURROGATE	PERCENT	
	RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

GC/MS Semivolatiles

Lot-Sample #...: C9B070192-006 Work Order #...: K6W551AD Matrix.....: SOLID
 Date Sampled...: 02/06/09 14:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #...: 9043011 Analysis Time...: 08:02
 Dilution Factor: 10.98 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 45 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	1600	130	ug/kg	20
2-Methylnaphthalene	3800	130	ug/kg	26
Naphthalene	48000 E	130	ug/kg	19
Acenaphthylene	1700	130	ug/kg	27
Acenaphthene	580	130	ug/kg	22
Fluorene	1300	130	ug/kg	20
Phenanthrene	5200	130	ug/kg	16
Anthracene	2400	660	ug/kg	23
Fluoranthene	9000	130	ug/kg	11
Pyrene	5500	130	ug/kg	36
Benzo (a) anthracene	4800	130	ug/kg	21
Chrysene	4300	130	ug/kg	23
Benzo (b) fluoranthene	6000	130	ug/kg	27
Benzo (k) fluoranthene	ND	130	ug/kg	28
Benzo (a) pyrene	6000	130	ug/kg	38
Indeno (1,2,3-cd) pyrene	3700	130	ug/kg	7.4
Dibenzo (a,h) anthracene	890	130	ug/kg	29
Benzo (ghi) perylene	4200	130	ug/kg	9.8

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

GC/MS Semivolatiles

Lot-Sample #...: C9B070192-006 Work Order #...: K6W552AD Matrix.....: SOLID
 Date Sampled...: 02/06/09 14:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #...: 9043011 Analysis Time...: 00:51
 Dilution Factor: 109.9 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 45 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2500	1300	ug/kg	200
2-Methylnaphthalene	5900	1300	ug/kg	260
Naphthalene	97000	1300	ug/kg	190
Acenaphthylene	2200	1300	ug/kg	270
Acenaphthene	830 J	1300	ug/kg	220
Fluorene	1800	1300	ug/kg	200
Phenanthrene	7400	1300	ug/kg	160
Anthracene	3100 J	6600	ug/kg	240
Fluoranthene	12000	1300	ug/kg	110
Pyrene	8700	1300	ug/kg	360
Benzo (a) anthracene	6900	1300	ug/kg	210
Chrysene	5400	1300	ug/kg	230
Benzo (b) fluoranthene	12000	1300	ug/kg	270
Benzo (k) fluoranthene	ND	1300	ug/kg	280
Benzo (a) pyrene	8500	1300	ug/kg	380
Indeno (1,2,3-cd) pyrene	4300	1300	ug/kg	74
Dibenzo (a,h) anthracene	910 J	1300	ug/kg	300
Benzo (ghi) perylene	5000	1300	ug/kg	99

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-007 Work Order #....: K6W561AD Matrix.....: SOLID
 Date Sampled...: 02/06/09 14:30 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 10:56
 Dilution Factor: 12 Initial Wgt/Vol: 25 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 38 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1100	130	ug/kg	20
2-Methylnaphthalene	2300	130	ug/kg	26
Naphthalene	27000 E	130	ug/kg	19
Acenaphthylene	9100	130	ug/kg	26
Acenaphthene	3300	130	ug/kg	21
Fluorene	2500	130	ug/kg	20
Phenanthrene	17000	130	ug/kg	16
Anthracene	17000	640	ug/kg	23
Fluoranthene	64000 E	130	ug/kg	11
Pyrene	32000 E	130	ug/kg	35
Benzo (a) anthracene	33000 E	130	ug/kg	21
Chrysene	29000 E	130	ug/kg	23
Benzo (b) fluoranthene	45000 E	130	ug/kg	26
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	26000	130	ug/kg	36
Indeno (1,2,3-cd) pyrene	25000	130	ug/kg	7.1
Dibenzo (a,h) anthracene	ND	130	ug/kg	29
Benzo (ghi) perylene	16000	130	ug/kg	9.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-007 Work Order #....: K6W562AD Matrix.....: SOLID
 Date Sampled...: 02/06/09 14:30 Date Received..: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 03:00
 Dilution Factor: 120 Initial Wgt/Vol: 25 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 38 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1700	1300	ug/kg	200
2-Methylnaphthalene	3400	1300	ug/kg	260
Naphthalene	50000	1300	ug/kg	190
Acenaphthylene	9000	1300	ug/kg	260
Acenaphthene	4500	1300	ug/kg	210
Fluorene	3500	1300	ug/kg	200
Phenanthrene	23000	1300	ug/kg	160
Anthracene	22000	6400	ug/kg	230
Fluoranthene	88000	1300	ug/kg	110
Pyrene	59000	1300	ug/kg	350
Benzo (a) anthracene	48000	1300	ug/kg	210
Chrysene	40000	1300	ug/kg	230
Benzo (b) fluoranthene	53000	1300	ug/kg	260
Benzo (k) fluoranthene	19000	1300	ug/kg	270
Benzo (a) pyrene	48000	1300	ug/kg	360
Indeno (1,2,3-cd) pyrene	31000	1300	ug/kg	71
Dibenzo (a,h) anthracene	9200	1300	ug/kg	290
Benzo (ghi) perylene	31000	1300	ug/kg	95

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #...: C9B070192-008 Work Order #...: K6W571AD Matrix.....: SOLID
 Date Sampled...: 02/06/09 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #...: 9043011 Analysis Time...: 11:17
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 65 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2800	190	ug/kg	29
2-Methylnaphthalene	5600	190	ug/kg	37
Naphthalene	190000 E	190	ug/kg	28
Acenaphthylene	1900	190	ug/kg	38
Acenaphthene	6900	190	ug/kg	31
Fluorene	3900	190	ug/kg	29
Phenanthrene	30000	190	ug/kg	23
Anthracene	13000	940	ug/kg	33
Fluoranthene	56000 E	190	ug/kg	16
Pyrene	31000	190	ug/kg	51
Benzo (a) anthracene	18000	190	ug/kg	30
Chrysene	16000	190	ug/kg	33
Benzo (b) fluoranthene	21000	190	ug/kg	39
Benzo (k) fluoranthene	6300	190	ug/kg	40
Benzo (a) pyrene	21000	190	ug/kg	53
Indeno (1,2,3-cd) pyrene	13000	190	ug/kg	10
Dibenzo (a,h) anthracene	ND	190	ug/kg	42
Benzo (ghi) perylene	15000	190	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #...: C9B070192-008 Work Order #...: K6W572AD Matrix.....: SOLID
 Date Sampled...: 02/06/09 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #...: 9043011 Analysis Time...: 04:49
 Dilution Factor: 3000 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 65 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	57000	ug/kg	8600
2-Methylnaphthalene	20000 J	57000	ug/kg	11000
Naphthalene	4000000	57000	ug/kg	8300
Acenaphthylene	ND	57000	ug/kg	11000
Acenaphthene	20000 J	57000	ug/kg	9200
Fluorene	ND	57000	ug/kg	8600
Phenanthrene	77000	57000	ug/kg	6800
Anthracene	37000 J	280000	ug/kg	10000
Fluoranthene	140000	57000	ug/kg	4800
Pyrene	120000	57000	ug/kg	15000
Benzo (a) anthracene	58000	57000	ug/kg	9100
Chrysene	52000 J	57000	ug/kg	10000
Benzo (b) fluoranthene	74000	57000	ug/kg	12000
Benzo (k) fluoranthene	ND	57000	ug/kg	12000
Benzo (a) pyrene	61000	57000	ug/kg	16000
Indeno (1,2,3-cd) pyrene	34000 J	57000	ug/kg	3100
Dibenzo (a,h) anthracene	ND	57000	ug/kg	13000
Benzo (ghi) perylene	45000 J	57000	ug/kg	4200

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: SRM

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-009	Work Order #....: K6W9K1AA	Matrix.....: SOLID
Date Sampled...: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9043002
Prep Date.....: 02/12/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9043011	Analysis Time...: 03:44	
Dilution Factor: 30	Initial Wgt/Vol: 5 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....:	Analyst ID.....: 007062	Instrument ID...: 722
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	260	200	ug/kg	30
2-Methylnaphthalene	300	200	ug/kg	39
Naphthalene	2500	200	ug/kg	29
Acenaphthylene	760	200	ug/kg	40
Acenaphthene	220	200	ug/kg	32
Fluorene	260	200	ug/kg	30
Phenanthrene	3400	200	ug/kg	24
Anthracene	860 J	990	ug/kg	35
Fluoranthene	5800	200	ug/kg	17
Pyrene	5000	200	ug/kg	53
Benzo (a) anthracene	2800	200	ug/kg	32
Chrysene	3600	200	ug/kg	35
Benzo (b) fluoranthene	2300	200	ug/kg	41
Benzo (k) fluoranthene	2200	200	ug/kg	42
Benzo (a) pyrene	2400	200	ug/kg	56
Indeno (1,2,3-cd) pyrene	1700	200	ug/kg	11
Dibenzo (a,h) anthracene	440	200	ug/kg	44
Benzo (ghi) perylene	2200	200	ug/kg	15

SURROGATE	PERCENT		RECOVERY	
	RECOVERY		LIMITS	
Nitrobenzene-d5	51		(27 - 110)	
Terphenyl-d14	68		(21 - 130)	
2-Fluorobiphenyl	64		(28 - 108)	
2-Fluorophenol	55		(28 - 107)	
Phenol-d5	56		(30 - 112)	
2,4,6-Tribromophenol	82		(21 - 116)	

NOTE(S) :

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B070192

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	BH-SED-01-00	52	65	67	57	56	78	00
02	BH-SED-02-00	0 D	0 D	0 D	0 D	0 D	0 D	06
03	BH-SED-02-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
04	BH-SED-03A-00	0 D	0 D	0 D	0 D	0 D	0 D	06
05	BH-SED-03A-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
06	BH-SED-03B-00	0 D	0 D	0 D	0 D	0 D	0 D	06
07	BH-SED-03B-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
08	BH-SED-03C-00	0 D	0 D	0 D	0 D	0 D	0 D	06
09	BH-SED-03C-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
10	BH-SED-04-00	0 D	0 D	0 D	0 D	0 D	0 D	06
11	BH-SED-04-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
12	BH-SED-05-00	0 D	0 D	0 D	0 D	0 D	0 D	06
13	BH-SED-05-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
14	DUP-1	0 D	0 D	0 D	0 D	0 D	0 D	06
15	DUP-1 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
16	SRM	51	68	64	55	56	82	00
17	METHOD BLK. K632W1AA	38	67	48	36	31	66	00
18	LCS K632W1AC	72	92	79	87	82	104	00
19	BH-SED-04-00 D	0 D	0 D	0 D	0 D	0 D	0 D	06
20	BH-SED-04-00 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C SIM SRM RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA

Lab Code: STLPIT

SDG No: N/A

Lot #: c9b070192

SOIL SRM 1944

Compound	Certified Value		Units	Quant. Value	Units	% REC
Naphthalene	1650.00	+/- 310	ug/Kg	2462.00	ug/Kg	149.21
Phenanthrene	5270.00	+/- 220	ug/Kg	3372.00	ug/Kg	63.98
Anthracene	1770.00	+/- 330	ug/Kg	861.00	ug/Kg	48.64
Fluoranthene	8920.00	+/- 320	ug/Kg	5811.00	ug/Kg	65.15
Pyrene	9700.00	+/- 420	ug/Kg	5022.00	ug/Kg	51.77
Benzo(a)anthracene	4720.00	+/- 110	ug/Kg	2818.00	ug/Kg	59.70
Chrysene	4860.00	+/- 100	ug/Kg	3637.00	ug/Kg	74.84
Benzo(b)fluoranthene	3870.00	+/- 420	ug/Kg	2299.00	ug/Kg	59.41
Benzo(k)fluoranthene	2300.00	+/- 200	ug/Kg	2203.00	ug/Kg	95.78
Benzo(a)pyrene	4300.00	+/- 130	ug/Kg	2431.00	ug/Kg	56.53
Benzo(ghi)perylene	2840.00	+/- 100	ug/Kg	2219.00	ug/Kg	78.13
Indeno(1,2,3-cd)pyrene	2780.00	+/- 100	ug/Kg	1691.00	ug/Kg	60.83

If the certified concentrations are < 10 times the MDL established for the method, the SRM result will not be evaluated.

The results of the SRM are included with the associated analytical data.

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B120000

WO #: K632W1AC

BATCH: 9043011

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Naphthalene	333	266	80	42 - 104	
4-Bromophenyl phenyl ethe	333	298	89	43 - 111	
Butyl benzyl phthalate	333	270	81	40 - 117	
Phenol	333	252	76	39 - 105	
2-Chlorophenol	333	278	83	40 - 105	
1,4-Dichlorobenzene	333	285	86	41 - 101	
N-Nitrosodi-n-propylamine	333	234	70	42 - 108	
1,2,4-Trichlorobenzene	333	286	86	41 - 105	
4-Chloro-3-methylphenol	333	269	81	43 - 110	
Acenaphthene	333	252	76	42 - 104	
4-Nitrophenol	333	286	86	27 - 131	
2,4-Dinitrotoluene	333	301	90	48 - 118	
Pentachlorophenol	333	223	67	18 - 125	
Pyrene	333	265	79	39 - 113	
4-Methylphenol	667	518	78	43 - 107	
Hexachloroethane	333	263	79	40 - 102	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-04-00

Level: (low/med) LOW

Lot #: C9B070192

WO #: K6W551A5

BATCH: 9043011

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	670	ND		0*	39 - 105	DIL
2-Chlorophenol	670	ND		0*	40 - 105	DIL
1,4-Dichlorobenzene	670	ND		0*	41 - 101	DIL
N-Nitrosodi-n-propylamine	670	ND		0*	42 - 108	DIL
1,2,4-Trichlorobenzene	670	ND		0*	41 - 105	DIL
4-Chloro-3-methylphenol	670	ND		0*	43 - 110	DIL
Acenaphthene	670	580		0*	42 - 104	DIL
4-Nitrophenol	670	ND		0*	27 - 131	DIL
2,4-Dinitrotoluene	670	60		0*	48 - 118	DIL
Pentachlorophenol	670	ND		0*	18 - 125	DIL
Pyrene	670	5500		0*	39 - 113	DIL
4-Methylphenol	1340	52		0*	43 - 107	DIL
Hexachloroethane	670	ND		0*	40 - 102	DIL
Naphthalene	670	48000		0*	42 - 104	DIL
4-Bromophenyl phenyl ethe	670	ND		0*	43 - 111	DIL
Butyl benzyl phthalate	670	ND		0*	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-04-00

Level: (low/med) LOW

Lot #: C9B070192

WO #: K6W551A6

BATCH: 9043011

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
4-Bromophenyl phenyl ethe	670		0*	0.0	20	43 - 111	DIL
Butyl benzyl phthalate	670		0*	0.0	34	40 - 117	DIL
Phenol	670		0*	0.0	40	39 - 105	DIL
2-Chlorophenol	670		0*	0.0	37	40 - 105	DIL
1,4-Dichlorobenzene	670		0*	0.0	32	41 - 101	DIL
N-Nitrosodi-n-propylamine	670		0*	0.0	32	42 - 108	DIL
1,2,4-Trichlorobenzene	670		0*	0.0	36	41 - 105	DIL
4-Chloro-3-methylphenol	670		0*	0.0	31	43 - 110	DIL
Acenaphthene	670		0*	0.0	34	42 - 104	DIL
4-Nitrophenol	670		0*	0.0	33	27 - 131	DIL
2,4-Dinitrotoluene	670		0*	0.0	33	48 - 118	DIL
Pentachlorophenol	670		0*	0.0	34	18 - 125	DIL
Pyrene	670		0*	0.0	28	39 - 113	DIL
4-Methylphenol	1340		0*	0.0	36	43 - 107	DIL
Hexachloroethane	670		0*	0.0	34	40 - 102	DIL
Naphthalene	670		0*	0.0	25	42 - 104	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

K632W1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0212017.

Lot Number: C9B070192

Date Analyzed: 02/13/09

Time Analyzed: 07:19

Matrix: SOLID

Date Extracted: 02/12/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-01-00	K6W501AC	F0216005.	02/17/09	01:12
02	BH-SED-02-00	K6W511AD	F0212023.	02/13/09	09:28
03	BH-SED-02-00	K6W512AD	F0216006.	02/17/09	01:34
04	BH-SED-03A-00	K6W521AD	F0212024.	02/13/09	09:50
05	BH-SED-03A-00	K6W522AD	F0216007.	02/17/09	01:56
06	BH-SED-03B-00	K6W531AD	F0212025.	02/13/09	10:12
07	BH-SED-03B-00	K6W532AD	F0216024.	02/17/09	04:27
08	BH-SED-03C-00	K6W541AD	F0212026.	02/13/09	10:34
09	BH-SED-03C-00	K6W542AD	F0216009.	02/17/09	02:39
10	BH-SED-04-00	K6W551AD	F0212019.	02/13/09	08:02
11	BH-SED-04-00	K6W551A5 S	F0212020.	02/13/09	08:23
12	BH-SED-04-00	K6W551A6 D	F0212021.	02/13/09	08:45
13	BH-SED-04-00	K6W552AD	F0216004.	02/17/09	00:51
14	BH-SED-05-00	K6W561AD	F0212027.	02/13/09	10:56
15	BH-SED-05-00	K6W562AD	F0216010.	02/17/09	03:00
16	DUP-1	K6W571AD	F0212028.	02/13/09	11:17
17	DUP-1	K6W572AD	F0216025.	02/17/09	04:49
18	SRM	K6W9K1AA	F0216012.	02/17/09	03:44
19	CHECK SAMPLE	K632W1AC C	F0216026.	02/17/09	09:08
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B070192
MB Lot-Sample #: C9B120000-011

Work Order #...: K632W1AA

Matrix.....: SOLID

Analysis Date...: 02/13/09
Dilution Factor: 0.5

Prep Date.....: 02/12/09
Prep Batch #...: 9043011
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 07:19
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo(a,h)anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	38	(27 - 110)
Terphenyl-d14	67	(21 - 130)
2-Fluorobiphenyl	48	(28 - 108)
2-Fluorophenol	36	(28 - 107)
Phenol-d5	31	(30 - 112)
2,4,6-Tribromophenol	66	(21 - 116)

NOTE(S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B070192

Lab File ID (Standard): F02120C1

Date Analyzed: 02/13/09

Instrument ID: 722

Time Analyzed: 0012

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	73796	4.32	261570	5.31	151032	6.65
UPPER LIMIT	147592	4.82	523140	5.81	302064	7.15
LOWER LIMIT	36898	3.82	130785	4.81	75516	6.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	64676	4.32	211162	5.31	106443	6.66
02 BH-SED-04-00	75774	4.32	268605	5.31	133267	6.65
03 BH-SED-04-00	79194	4.32	267608	5.31	136660	6.65
04 BH-SED-04-00	83852	4.32	287255	5.31	139615	6.66
05 BH-SED-02-00	80777	4.32	272223	5.31	134139	6.65
06 BH-SED-03A-0	82777	4.32	284189	5.31	140466	6.66
07 BH-SED-03B-0	91523	4.32	340333	5.33	160864	6.65
08 BH-SED-03C-0	79918	4.32	269815	5.31	135242	6.66
09 BH-SED-05-00	89964	4.32	289236	5.31	144438	6.66
10 DUP-1	81802	4.32	336625	5.33	151909	6.66
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B070192

Lab File ID (Standard): F02120C1

Date Analyzed: 02/13/09

Instrument ID: 722

Time Analyzed: 0012

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	222157	7.80	149721	10.13	115276	11.69
UPPER LIMIT	444314	8.30	299442	10.63	230552	12.19
LOWER LIMIT	111079	7.30	74861	9.63	57638	11.19
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	158543	7.80	138261	10.11	130521	11.67
02 BH-SED-04-00	203616	7.80	174367	10.11	166132	11.67
03 BH-SED-04-00	195576	7.80	186578	10.12	175397	11.68
04 BH-SED-04-00	201745	7.80	193959	10.11	196957	11.67
05 BH-SED-02-00	200171	7.80	189838	10.12	194443	11.68
06 BH-SED-03A-0	196751	7.80	177074	10.11	182184	11.68
07 BH-SED-03B-0	251889	7.80	237854	10.12	245364*	11.68
08 BH-SED-03C-0	208627	7.81	194256	10.12	206245	11.68
09 BH-SED-05-00	224308	7.80	261053	10.13	250850*	11.69
10 DUP-1	222345	7.80	229694	10.12	223214	11.68
11						
12						
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14						
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18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B070192
 Lab File ID (Standard): F02160C2 Date Analyzed: 02/16/09
 Instrument ID: 722 Time Analyzed: 2324

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	82243	4.32	298349	5.31	174754	6.66
UPPER LIMIT	164486	4.82	596698	5.81	349508	7.16
LOWER LIMIT	41122	3.82	149175	4.81	87377	6.16
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-04-00	84020	4.32	307112	5.30	174578	6.65
02 BH-SED-01-00	77528	4.32	281725	5.30	157953	6.66
03 BH-SED-02-00	79670	4.32	294345	5.31	167509	6.66
04 BH-SED-03A-0	86103	4.32	308360	5.31	178317	6.65
05 BH-SED-03C-0	86530	4.32	323551	5.31	186081	6.65
06 BH-SED-05-00	86859	4.32	318350	5.31	183662	6.66
07 SRM	78001	4.32	271053	5.31	161539	6.65
08 BH-SED-03B-0	65335	4.32	233671	5.31	135728	6.66
09 DUP-1	63025	4.32	237096	5.31	143453	6.66
10 INTRA-LAB CH	56693	4.32	223302	5.31	135492	6.65
11						
12						
13						
14						
15						
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17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B070192

Lab File ID (Standard): F02160C2

Date Analyzed: 02/16/09

Instrument ID: 722

Time Analyzed: 2324

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	300500	7.80	208191	10.11	150619	11.68
UPPER LIMIT	601000	8.30	416382	10.61	301238	12.18
LOWER LIMIT	150250	7.30	104096	9.61	75310	11.18
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-04-00	300542	7.80	214789	10.11	160327	11.66
02 BH-SED-01-00	247376	7.80	193182	10.11	181783	11.67
03 BH-SED-02-00	270941	7.80	191560	10.11	168787	11.67
04 BH-SED-03A-0	277841	7.80	196409	10.11	164712	11.67
05 BH-SED-03C-0	300869	7.80	213082	10.11	178116	11.67
06 BH-SED-05-00	289082	7.80	212623	10.11	176003	11.67
07 SRM	250682	7.80	234012	10.11	210892	11.67
08 BH-SED-03B-0	215281	7.81	161048	10.12	137594	11.67
09 DUP-1	233291	7.80	156615	10.11	142462	11.67
10 INTRA-LAB CH	218464	7.80	164007	10.10	132300	11.66
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

METALS SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

TOTAL Metals

Lot-Sample #...: C9B070192-001

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 82

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9043112						
Mercury	0.47	0.090	mg/kg	SW846 7471A	02/12/09	K6W501AR
		Dilution Factor: 0.5		Analysis Time...: 13:08	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0068	
Prep Batch #...: 9061169						
Silver	1.4	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AQ
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0066	
Arsenic	17.2	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AD
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.045	
Beryllium	1.9	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AE
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.010	
Cadmium	2.1	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AF
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.025	
Chromium	249 J	0.55	mg/kg	SW846 6020	03/02-03/04/09	K6W501AG
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.022	
Copper	139	0.55	mg/kg	SW846 6020	03/02-03/04/09	K6W501AH
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.023	
Nickel	56.2	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AJ
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.019	
Lead	175	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AK
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0093	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

TOTAL Metals

Lot-Sample #...: C9B070192-001

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	1.6	0.55	mg/kg	SW846 6020	03/02-03/04/09	K6W501AL
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0090	
Selenium	2.8	1.4	mg/kg	SW846 6020	03/02-03/04/09	K6W501AM
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.11	
Thallium	0.49	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AN
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0055	
Zinc	861 J	1.4	mg/kg	SW846 6020	03/02-03/04/09	K6W501AP
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.032	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

TOTAL Metals

Lot-Sample #...: C9B070192-002

Date Sampled...: 02/06/09

% Moisture.....: 34

Date Received...: 02/07/09

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9043112						
Mercury	0.33	0.032	mg/kg	SW846 7471A	02/12/09	K6W511AT
		Dilution Factor: 0.65		Analysis Time...: 13:10	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0025	
Prep Batch #...: 9061169						
Silver	0.34	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AR
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	
Arsenic	4.5	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AE
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.50	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AF
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0036	
Cadmium	0.93	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AG
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0090	
Chromium	105 J	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W511AH
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0079	
Copper	50.1	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W511AJ
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0084	
Nickel	17.7	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AK
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0067	
Lead	68.4	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AL
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

TOTAL Metals

Lot-Sample #...: C9B070192-002

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.39	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W511AM
		Dilution Factor: 0.65		Analysis Time..: 21:16	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Selenium	0.48 B	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W511AN
		Dilution Factor: 0.65		Analysis Time..: 21:16	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.040	
Thallium	0.53	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AP
		Dilution Factor: 0.65		Analysis Time..: 21:16	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	
Zinc	373 J	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W511AQ
		Dilution Factor: 0.65		Analysis Time..: 21:16	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

TOTAL Metals

Lot-Sample #...: C9B070192-003

Date Sampled...: 02/06/09

Date Received...: 02/07/09

Matrix.....: SOLID

% Moisture.....: 43

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9043112						
Mercury	0.24	0.032	mg/kg	SW846 7471A	02/12/09	K6W521AT
		Dilution Factor: 0.55		Analysis Time...: 13:12	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0024	
Prep Batch #...: 9061169						
Silver	0.30	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AR
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0023	
Arsenic	9.8	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AE
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.98	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AF
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0036	
Cadmium	0.80	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AG
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0088	
Chromium	120 J	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W521AH
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0077	
Copper	44.5	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W521AJ
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0082	
Nickel	24.0	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AK
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0066	
Lead	65.8	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AL
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

TOTAL Metals

Lot-Sample #...: C9B070192-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.47	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W521AM
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Selenium	1.4	0.48	mg/kg	SW846 6020	03/02-03/04/09	K6W521AN
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.039	
Thallium	0.23	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AP
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0019	
Zinc	279 J	0.48	mg/kg	SW846 6020	03/02-03/04/09	K6W521AQ
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

TOTAL Metals

Lot-Sample #...: C9B070192-004

Date Sampled...: 02/06/09

Date Received...: 02/07/09

Matrix.....: SOLID

% Moisture.....: 64

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9043112						
Mercury	0.70	0.046	mg/kg	SW846 7471A	02/12/09	K6W531AT
		Dilution Factor: 0.5		Analysis Time...: 13:17	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0035	
Prep Batch #...: 9061169						
Silver	1.8	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AR
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	
Arsenic	25.2	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AE
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.023	
Beryllium	1.3	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AF
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0051	
Cadmium	3.4	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AG
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Chromium	296 J	0.28	mg/kg	SW846 6020	03/02-03/04/09	K6W531AH
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Copper	177	0.28	mg/kg	SW846 6020	03/02-03/04/09	K6W531AJ
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	
Nickel	37.9	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AK
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0094	
Lead	373	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AL
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0047	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

TOTAL Metals

Lot-Sample #...: C9B070192-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.1	0.28	mg/kg	SW846 6020	03/02-03/04/09	K6W531AM
		Dilution Factor: 0.5		Analysis Time..: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0046	
Selenium	3.5	0.69	mg/kg	SW846 6020	03/02-03/04/09	K6W531AN
		Dilution Factor: 0.5		Analysis Time..: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.056	
Thallium	0.71	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AP
		Dilution Factor: 0.5		Analysis Time..: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0028	
Zinc	1070 J	0.69	mg/kg	SW846 6020	03/02-03/04/09	K6W531AQ
		Dilution Factor: 0.5		Analysis Time..: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

TOTAL Metals

Lot-Sample #...: C9B070192-005

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 69

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9043112						
Mercury	1.1	0.052	mg/kg	SW846 7471A	02/12/09	K6W541AT
		Dilution Factor: 0.5		Analysis Time...: 13:19	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0040	
Prep Batch #...: 9061169						
Silver	2.8	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AR
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0038	
Arsenic	50.1	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AE
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.026	
Beryllium	1.4	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AF
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0059	
Cadmium	4.9	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AG
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Chromium	450 J	0.32	mg/kg	SW846 6020	03/02-03/04/09	K6W541AH
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Copper	595	0.32	mg/kg	SW846 6020	03/02-03/04/09	K6W541AJ
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Nickel	51.6	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AK
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Lead	602	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AL
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0054	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

TOTAL Metals

Lot-Sample #...: C9B070192-005

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Antimony	2.3	0.32	mg/kg	SW846 6020	03/02-03/04/09	K6W541AM
		Dilution Factor: 0.5		Analysis Time..: 21:29	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0052	
Selenium	7.7	0.79	mg/kg	SW846 6020	03/02-03/04/09	K6W541AN
		Dilution Factor: 0.5		Analysis Time..: 21:29	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.065	
Thallium	0.95	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AP
		Dilution Factor: 0.5		Analysis Time..: 21:29	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Zinc	1790 J	0.79	mg/kg	SW846 6020	03/02-03/04/09	K6W541AQ
		Dilution Factor: 0.5		Analysis Time..: 21:29	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.019	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

TOTAL Metals

Lot-Sample #...: C9B070192-006

Date Sampled...: 02/06/09

% Moisture.....: 45

Date Received...: 02/07/09

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9043112						
Mercury	0.34	0.033	mg/kg	SW846 7471A	02/12/09	K6W551AT
		Dilution Factor: 0.55		Analysis Time...: 12:58	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0025	
Prep Batch #...: 9061169						
Silver	0.61	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AR
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	
Arsenic	21.4	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AE
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.017	
Beryllium	0.93	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AF
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0037	
Cadmium	1.8	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AG
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0092	
Chromium	376 J	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W551AH
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0081	
Copper	81.7	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W551AJ
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0086	
Nickel	34.9	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AK
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0068	
Lead	216	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AL
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

TOTAL Metals

Lot-Sample #...: C9B070192-006

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.80 E	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W551AM
		Dilution Factor: 0.55		Analysis Time..: 21:33	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	
Selenium	1.9	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W551AN
		Dilution Factor: 0.55		Analysis Time..: 21:33	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.041	
Thallium	0.33	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AP
		Dilution Factor: 0.55		Analysis Time..: 21:33	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	
Zinc	838 J	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W551AQ
		Dilution Factor: 0.55		Analysis Time..: 21:33	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

E Matrix interference.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

TOTAL Metals

Lot-Sample #...: C9B070192-007

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 38

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9043112						
Mercury	0.24	0.032	mg/kg	SW846 7471A	02/12/09	K6W561AT
		Dilution Factor: 0.6		Analysis Time...: 13:03	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0024	
Prep Batch #...: 9061169						
Silver	0.30	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AR
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0023	
Arsenic	9.4	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AE
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.96	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AF
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0036	
Cadmium	1.0	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AG
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0089	
Chromium	138 J	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W561AH
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0078	
Copper	51.7	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W561AJ
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0083	
Nickel	28.7	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AK
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0066	
Lead	70.6	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AL
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

TOTAL Metals

Lot-Sample #...: C9B070192-007

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.58	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W561AM
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Selenium	1.5	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W561AN
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.040	
Thallium	0.22	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AP
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0019	
Zinc	418 J	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W561AQ
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #... C9B070192-008

Matrix..... SOLID

Date Sampled... 02/06/09

Date Received... 02/07/09

% Moisture..... 65

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9043112						
Mercury	0.96	0.047	mg/kg	SW846 7471A	02/12/09	K6W571AT
		Dilution Factor: 0.5		Analysis Time...: 13:05	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0036	
Prep Batch #...: 9061169						
Silver	1.9	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AR
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	
Arsenic	26.1	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AE
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.024	
Beryllium	1.4	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AF
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0053	
Cadmium	3.2	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AG
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Chromium	263 J	0.29	mg/kg	SW846 6020	03/02-03/04/09	K6W571AH
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Copper	178	0.29	mg/kg	SW846 6020	03/02-03/04/09	K6W571AJ
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	
Nickel	37.3	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AK
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0097	
Lead	376	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AL
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0049	

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EA Engineering, Science and Technology

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #...: C9B070192-008

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.1	0.29	mg/kg	SW846 6020	03/02-03/04/09	K6W571AM
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0047	
Selenium	4.0	0.71	mg/kg	SW846 6020	03/02-03/04/09	K6W571AN
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.058	
Thallium	0.74	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AP
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0029	
Zinc	1070 J	0.71	mg/kg	SW846 6020	03/02-03/04/09	K6W571AQ
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.017	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #...: C9B070192-009

Date Sampled...: 02/06/09

Date Received...: 02/07/09

Matrix.....: SOLID

% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9043112						
Mercury	0.025 B	0.033	mg/kg	SW846 7471A	02/12/09	K6W9K1AQ
		Dilution Factor: 1		Analysis Time...: 13:07	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0025	
Prep Batch #...: 9061169						
Silver	0.048 B	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AP
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	
Arsenic	4.5	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AC
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.31	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AD
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0037	
Cadmium	0.19	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AE
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0091	
Chromium	21.1 J	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AF
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0080	
Copper	9.3	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AG
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0085	
Nickel	19.6	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AH
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0068	
Lead	7.6	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AJ
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	

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EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #...: C9B070192-009

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.090 B	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AK
		Dilution Factor: 1		Analysis Time..: 22:13	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	
Selenium	0.46 B	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AL
		Dilution Factor: 1		Analysis Time..: 22:13	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.041	
Thallium	0.084 B	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AM
		Dilution Factor: 1		Analysis Time..: 22:13	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	
Zinc	31.6 J	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AN
		Dilution Factor: 1		Analysis Time..: 22:13	Analyst ID.....: 400149	
		Instrument ID..: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	

NOTE(S) :

B Estimated result. Result is less than RL.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9B120000-112 Prep Batch #...: 9043112						
Mercury	ND	0.016	mg/kg	SW846 7471A	02/12/09	K636K1AA
Dilution Factor: 0.5						
Analysis Time...: 12:52 Analyst ID.....: 403938 Instrument ID...: HGH						
MB Lot-Sample #: C9C020000-169 Prep Batch #...: 9061169						
Antimony	ND	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AJ
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Arsenic	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AA
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Beryllium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AC
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Cadmium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AD
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Chromium	0.033 B	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AE
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Copper	ND	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AF
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Lead	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AH
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Nickel	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AG
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						
Selenium	ND	0.25	mg/kg	SW846 6020	03/02-03/04/09	K7W191AK
Dilution Factor: 0.5						
Analysis Time...: 21:03 Analyst ID.....: 400149 Instrument ID...: ICP						

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Silver	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AN
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AL
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Zinc	0.015 B	0.25	mg/kg	SW846 6020	03/02-03/04/09	K7W191AM
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9B120000-112 Prep Batch #... : 9043112					
Mercury	104	(80 - 120)	SW846 7471A	02/12/09	K636K1AC
		Dilution Factor: 0.5	Analysis Time...: 12:57	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C020000-169 Prep Batch #... : 9061169					
Arsenic	90	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AP
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Beryllium	96	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AQ
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Cadmium	100	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AR
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Chromium	108	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AT
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Copper	106	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AU
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Nickel	110	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AV
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Lead	102	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AW
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Antimony	91	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AX
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Selenium	95	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191AO
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	99	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191A1
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Zinc	95	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191A2
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Silver	55	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191A3
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9B120000-112 Prep Batch #...: 9043112							
Mercury	0.208	0.217	mg/kg	104	SW846 7471A	02/12/09	K636K1AC
Dilution Factor: 0.5 Analysis Time...: 12:57 Analyst ID.....: 403938							
Instrument ID...: HGHYDRA							
LCS Lot-Sample#: C9C020000-169 Prep Batch #...: 9061169							
Arsenic	2.00	1.79	mg/kg	90	SW846 6020	03/02-03/04/09	K7W191AP
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Beryllium	2.50	2.40	mg/kg	96	SW846 6020	03/02-03/04/09	K7W191AQ
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Cadmium	2.50	2.50	mg/kg	100	SW846 6020	03/02-03/04/09	K7W191AR
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Chromium	10.0	10.8	mg/kg	108	SW846 6020	03/02-03/04/09	K7W191AT
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Copper	12.5	13.3	mg/kg	106	SW846 6020	03/02-03/04/09	K7W191AU
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Nickel	25.0	27.5	mg/kg	110	SW846 6020	03/02-03/04/09	K7W191AV
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Lead	1.00	1.02	mg/kg	102	SW846 6020	03/02-03/04/09	K7W191AW
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Antimony	25.0	22.7	mg/kg	91	SW846 6020	03/02-03/04/09	K7W191AX
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Selenium	0.500	0.476	mg/kg	95	SW846 6020	03/02-03/04/09	K7W191A0
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	2.50	2.46	mg/kg	99	SW846 6020	03/02-03/04/09	K7W191A1
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Zinc	25.0	23.8	mg/kg	95	SW846 6020	03/02-03/04/09	K7W191A2
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Silver	5.00	2.76	mg/kg	55	SW846 6020	03/02-03/04/09	K7W191A3
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9043112							
						% Moisture.....: 45	
Mercury	116	(75 - 125)			SW846 7471A	02/12/09	K6W551C1
	71 N	(75 - 125)	15	(0-20)	SW846 7471A	02/12/09	K6W551C2
Dilution Factor: 0.55							
Analysis Time...: 13:00 Instrument ID...: HGHYDRA Analyst ID.....: 403938							
MS Run #.....: 9043064							
MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9061169							
						% Moisture.....: 45	
Antimony	55 N	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CN
	52 N	(75 - 125)	4.4	(0-20)	SW846 6020	03/02-03/04/09	K6W551CP
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Arsenic	NC	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551A7
	NC	(75 - 125)		(0-20)	SW846 6020	03/02-03/04/09	K6W551A8
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Beryllium	96	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551A9
	91	(75 - 125)	5.1	(0-20)	SW846 6020	03/02-03/04/09	K6W551CA
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Cadmium	94	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CC
	87	(75 - 125)	5.8	(0-20)	SW846 6020	03/02-03/04/09	K6W551CD
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Chromium	NC	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CE
	NC	(75 - 125)		(0-20)	SW846 6020	03/02-03/04/09	K6W551CF
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Copper	118	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CG
	74 N	(75 - 125)	10	(0-20)	SW846 6020	03/02-03/04/09	K6W551CH
		Dilution Factor: 0.55					
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149					
		MS Run #.....: 9061115					
Lead	NC	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CL
	NC	(75 - 125)		(0-20)	SW846 6020	03/02-03/04/09	K6W551CM
		Dilution Factor: 0.55					
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149					
		MS Run #.....: 9061115					
Nickel	101	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CJ
	92	(75 - 125)	5.4	(0-20)	SW846 6020	03/02-03/04/09	K6W551CK
		Dilution Factor: 0.55					
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149					
		MS Run #.....: 9061115					
Selenium	85	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CQ
	66 N	(75 - 125)	7.2	(0-20)	SW846 6020	03/02-03/04/09	K6W551CR
		Dilution Factor: 0.55					
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149					
		MS Run #.....: 9061115					
Silver	99	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CX
	92	(75 - 125)	6.0	(0-20)	SW846 6020	03/02-03/04/09	K6W551C0
		Dilution Factor: 0.55					
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149					
		MS Run #.....: 9061115					
Thallium	94	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CT
	91	(75 - 125)	2.5	(0-20)	SW846 6020	03/02-03/04/09	K6W551CU
		Dilution Factor: 0.55					
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149					
		MS Run #.....: 9061115					
Zinc	NC	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CV
	NC	(75 - 125)		(0-20)	SW846 6020	03/02-03/04/09	K6W551CW
		Dilution Factor: 0.55					
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149					
		MS Run #.....: 9061115					

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9043112

% Moisture.....: 45

Mercury

0.34	0.168	0.538	mg/kg	116			SW846 7471A	02/12/09	K6W551C1
0.34	0.168	0.463	N mg/kg	71	15		SW846 7471A	02/12/09	K6W551C2
Dilution Factor: 0.55									
Analysis Time...: 13:00 Instrument ID...: HGHYDRA Analyst ID.....: 403938									
MS Run #.....: 9043064									

MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9061169

% Moisture.....: 45

Antimony

0.80	50.3	28.3	N mg/kg	55			SW846 6020	03/02-03/04/09	K6W551CN
0.80	50.3	27.1	N mg/kg	52	4.4		SW846 6020	03/02-03/04/09	K6W551CP
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Arsenic

21.4	4.03	26.0	NC mg/kg				SW846 6020	03/02-03/04/09	K6W551A7
21.4	4.03	23.3	NC mg/kg				SW846 6020	03/02-03/04/09	K6W551A8
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Beryllium

0.93	5.03	5.79	mg/kg	96			SW846 6020	03/02-03/04/09	K6W551A9
0.93	5.03	5.50	mg/kg	91	5.1		SW846 6020	03/02-03/04/09	K6W551CA
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Cadmium

1.8	5.03	6.55	mg/kg	94			SW846 6020	03/02-03/04/09	K6W551CC
1.8	5.03	6.18	mg/kg	87	5.8		SW846 6020	03/02-03/04/09	K6W551CD
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Chromium									
	376	20.1	429 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CE
	376	20.1	385 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CF
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									
Copper									
	81.7	25.2	111	mg/kg	118		SW846 6020	03/02-03/04/09	K6W551CG
	81.7	25.2	100 N	mg/kg	74	10	SW846 6020	03/02-03/04/09	K6W551CH
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									
Lead									
	216	2.01	220 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CL
	216	2.01	199 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CM
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									
Nickel									
	34.9	50.3	85.5	mg/kg	101		SW846 6020	03/02-03/04/09	K6W551CJ
	34.9	50.3	81.1	mg/kg	92	5.4	SW846 6020	03/02-03/04/09	K6W551CK
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									
Selenium									
	1.9	1.01	2.73	mg/kg	85		SW846 6020	03/02-03/04/09	K6W551CQ
	1.9	1.01	2.54 N	mg/kg	66	7.2	SW846 6020	03/02-03/04/09	K6W551CR
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									
Silver									
	0.61	5.03	5.59	mg/kg	99		SW846 6020	03/02-03/04/09	K6W551CX
	0.61	5.03	5.27	mg/kg	92	6.0	SW846 6020	03/02-03/04/09	K6W551C0
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B070192

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	0.33	5.03	5.04	mg/kg	94		SW846 6020	03/02-03/04/09	K6W551CT
	0.33	5.03	4.92	mg/kg	91	2.5	SW846 6020	03/02-03/04/09	K6W551CU
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									
Zinc	838	50.3	912 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CV
	838	50.3	807 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CW
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

GENERAL CHEMISTRY SUMMARY

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: EA Engineering, Science and Technology
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9B070192

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-00	C9B070192 001	K6W501AT	ND	mg/kg	0.52	2.7	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-02-00	C9B070192 002	K6W511AU	6.4	mg/kg	0.14	0.76	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-03A-00	C9B070192 003	K6W521AU	ND	mg/kg	0.17	0.68	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-03B-00	C9B070192 004	K6W531AU	0.47 B	mg/kg	0.27	1.4	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-03C-00	C9B070192 005	K6W541AU	13.7	mg/kg	0.30	1.6	1	2/10/2009 - 2/10/2009 15:12	9041103
BH-SED-04-00	C9B070192 006	K6W551AU	3.9	mg/kg	0.18	0.91	1	2/10/2009 - 2/10/2009 15:12	9041103
BH-SED-05-00	C9B070192 007	K6W561AU	0.27 B	mg/kg	0.16	0.81	1	2/10/2009 - 2/10/2009 15:12	9041103
DUP-1	C9B070192 008	K6W571AU	1.7	mg/kg	0.27	1.4	1	2/10/2009 - 2/10/2009 15:12	9041103

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method:

SM20

2540G

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B070192

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-00	C9B070192 001	K6W501AA	18.3	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342
BH-SED-02-00	C9B070192 002	K6W511AC	66.1	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342
BH-SED-03A-00	C9B070192 003	K6W521AC	56.9	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342
BH-SED-03B-00	C9B070192 004	K6W531AC	36.1	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342
BH-SED-03C-00	C9B070192 005	K6W541AC	31.5	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342
BH-SED-04-00	C9B070192 006	K6W551AC	54.7	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342
BH-SED-05-00	C9B070192 007	K6W561AC	61.6	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342
DUP-1	C9B070192 008	K6W571AC	35.0	%	0.0	1.0	1	2/10/2009 - 2/11/2009 07:30	9041342

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B070192

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-00	C9B070192 001	K6W501AU	57600	mg/kg	1300	5640	2.06	2/12/2009 - 2/13/2009 09:11	9043316
BH-SED-02-00	C9B070192 002	K6W511AV	280000	mg/kg	322	1400	1.85	2/12/2009 - 2/13/2009 09:21	9043316
BH-SED-03A-00	C9B070192 003	K6W521AV	297000	mg/kg	352	1530	1.74	2/12/2009 - 2/13/2009 09:32	9043316
BH-SED-03B-00	C9B070192 004	K6W531AV	229000	mg/kg	625	2720	1.96	2/12/2009 - 2/13/2009 09:42	9043316
BH-SED-03C-00	C9B070192 005	K6W541AV	225000	mg/kg	811	3530	2.22	2/12/2009 - 2/13/2009 09:53	9043316
BH-SED-04-00	C9B070192 006	K6W551AV	93000	mg/kg	495	2150	2.35	2/17/2009 - 2/17/2009 16:51	9048321
BH-SED-05-00	C9B070192 007	K6W561AV	420000	mg/kg	392	1700	2.1	2/17/2009 - 2/17/2009 17:22	9048321
DUP-1	C9B070192 008	K6W571AV	79300	mg/kg	1290	5630	3.94	2/17/2009 - 2/17/2009 17:33	9048321

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Report ID: C9B070192

Matrix: SOLID

Date/Time Received: 2/7/2009 9:50:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B100000103B	103 MB	K60HV1AA	ND	mg/kg	0.50	2/10/2009 - 2/10/2009 15:37	9041103	

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Report ID: C9B070192

Matrix: SOLID

Date/Time Received: 2/5/2009 10:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K6R451AR	92.9	%	1.0	2/10/2009 - 2/11/2009 07:30	9041342	0.32 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: EA Engineering, Science and Technology
Matrix: SOLID

Method: EPA Lloyd Kahn
Report ID: C9B070192
Date/Time Received: 2/7/2009 9:50:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B120000316B	316 MB	K64PL1AA	ND	mg/kg	1250	2/12/2009 - 2/13/2009 08:39	9043316	
BLK - C9B170000321B	321 MB	K7AJ11AA	ND	mg/kg	500	2/17/2009 - 2/17/2009 16:19	9048321	

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B100000

Matrix: SOLID

Date/Time Received: 2/7/2009 9:50:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K60HV1AC	101	41 - 159	2/10/2009 - 2/10/2009 15:37	9041103	
LAB MS/MSD	MS	K6QJR1A1	85	75 - 125	2/10/2009 - 2/10/2009 15:37	9041103	0.17 / 20
BH-SED-04-00	MS	K6W551A3	90	75 - 125	2/10/2009 - 2/10/2009 15:12	9041103	2.4 / 20
LAB MS/MSD	MSD	K6QJR1A2	86	75 - 125	2/10/2009 - 2/10/2009 15:37	9041103	0.17 / 20
BH-SED-04-00	MSD	K6W551A4	94	75 - 125	2/10/2009 - 2/10/2009 15:12	9041103	2.4 / 20

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: EA Engineering, Science and Technology
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9B070192
 Date/Time Received: 2/7/2009 9:50:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-04-00	MSD	K6W551C4	168 N	75 - 125	2/17/2009 - 2/17/2009 17:12	9048321	3.0 / 20
BH-SED-04-00	MS	K6W551C3	163 N	75 - 125	2/17/2009 - 2/17/2009 17:01	9048321	3.0 / 20
CHECK SAMPLE	LCS	K64PL1AC	94	75 - 125	2/12/2009 - 2/13/2009 08:50	9043316	1.8 / 20
CHECK SAMPLE	LCS	K7AJ11AC	99	75 - 125	2/17/2009 - 2/17/2009 16:30	9048321	2.0 / 20
DUPLICATE CHECK	LCSD	K64PL1AD	96	75 - 125	2/12/2009 - 2/13/2009 09:00	9043316	1.8 / 20
DUPLICATE CHECK	LCSD	K7AJ11AD	101	75 - 125	2/17/2009 - 2/17/2009 16:40	9048321	2.0 / 20



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-03A-00

Lab Name: TestAmerica Burlington

Contract: C9B070192

SDG No.: 9B070192

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784468

Matrix: SOLID

Client: STLPAP

Date Received: 02/10/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	80.1	

Printed on: 02/24/09 10:50 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-03B-00

Lab Name: TestAmerica Burlington

Contract: C9B070192

SDG No.: 9B070192

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784469

Matrix: SOLID

Client: STLPAP

Date Received: 02/10/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	175.8	

Printed on: 02/24/09 10:50 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-04-00

Lab Name: TestAmerica Burlington

Contract: C9B070192

SDG No.: 9B070192

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784471

Matrix: SOLID

Client: STLPAP

Date Received: 02/10/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	111.1	

Printed on: 02/24/09 10:50 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-05-00

Lab Name: TestAmerica Burlington

Contract: C9B070192

SDG No.: 9B070192

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784472

Matrix: SOLID

Client: STLPAP

Date Received: 02/10/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/18/09		%	1	0.0	71.0	

Printed on: 02/24/09 10:50 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

DUP-1

Lab Name: TestAmerica Burlington

Contract: C9B070192

SDG No.: 9B070192

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784473

Matrix: SOLID

Client: STLPAP

Date Received: 02/10/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	188.2	

Printed on: 02/24/09 10:50 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130103
SDG: 9B070192

Start Date:	02/19/09
Start Time:	20:00
End Date:	02/20/09
Analyst:	TPB

[illegible]

Particle Size of Soils by ASTM D422

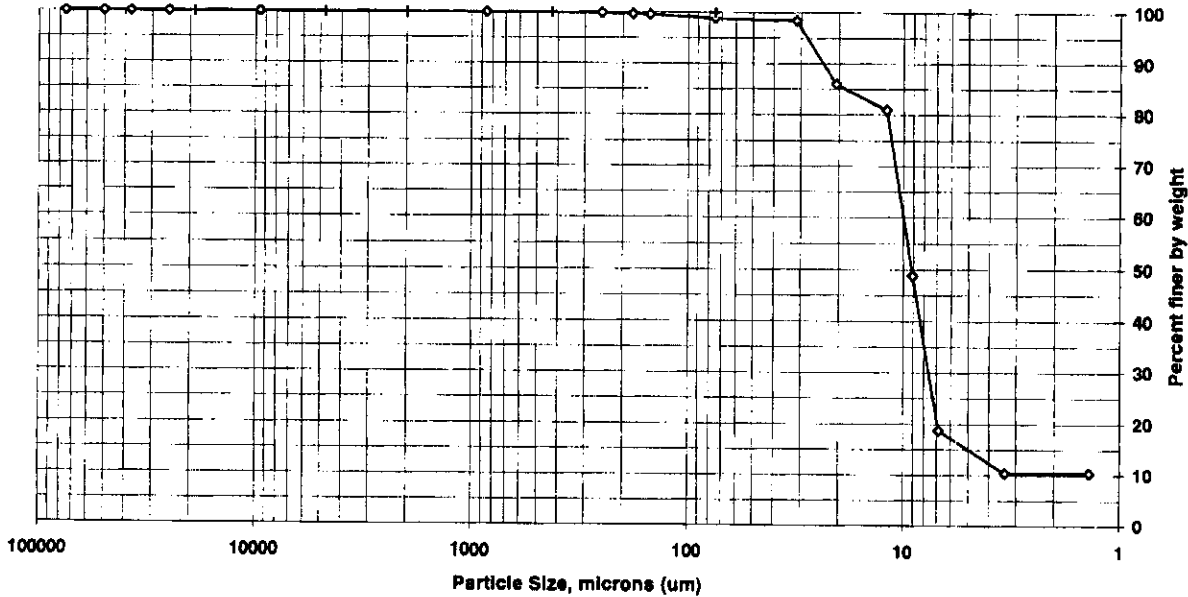
Client Code: STLPAP
 Sample ID: BH-SED-01-00
 Lab ID: 784466

SDG: 98070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 19.9%
 Specific Gravity: 2.650
 Maximum Particle Size: Med sand

Non-soil material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	100.0	0.0
#40	425	100.0	0.0
#60	250	99.9	0.1
#80	180	99.7	0.2
#100	150	99.6	0.1
#200	75	98.9	0.7
Hydrometer	31.4	98.5	0.4
	20.5	85.9	12.5
	12.0	80.9	5.0
	9.1	48.8	32.1
	6.8	18.8	30.0
	3.4	10.4	8.3
V	1.4	10.4	0.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	1.1
Coarse Sand	0.0
Medium Sand	0.0
Fine Sand	1.1
Silt	80.1
Clay	18.8

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

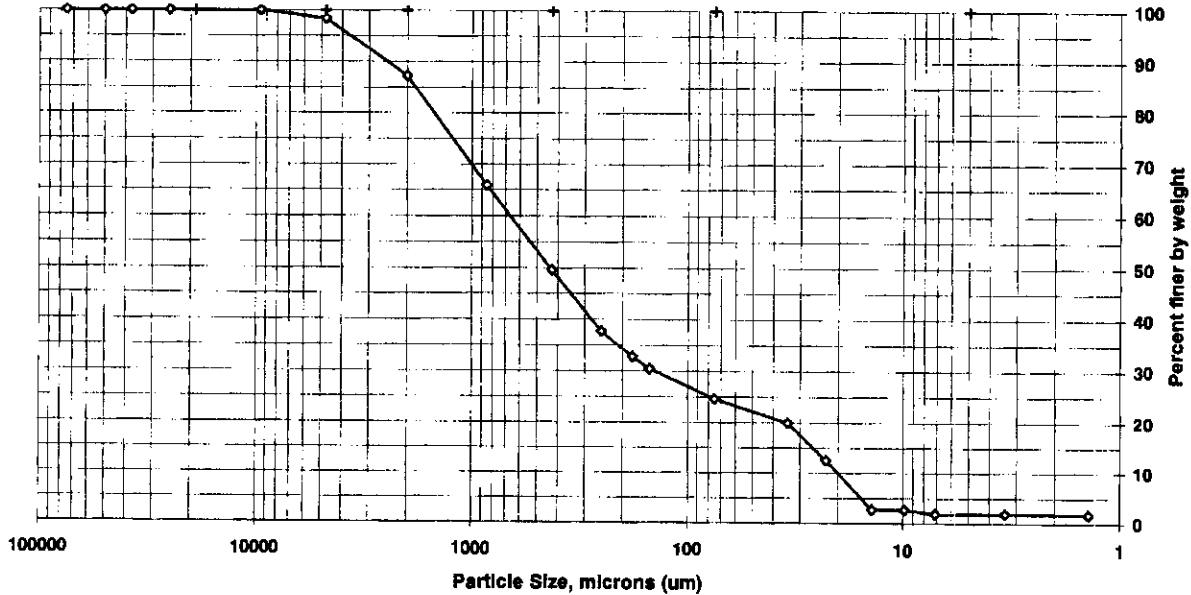
Client Code: STLPAP
 Sample ID: BH-SED-02-00
 Lab ID: 784467

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 55.4%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-solid material: shell
 Shape (> #10): subangular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	98.4	1.6
#10	2000	87.3	11.1
#20	850	65.8	21.4
#40	425	49.6	16.3
#60	250	37.6	11.9
#80	180	32.8	4.9
#100	150	30.5	2.3
#200	75	24.7	5.8
Hydrometer	34.3	20.0	4.7
	22.8	12.6	7.4
	13.9	2.7	9.8
	9.8	2.7	0.0
	7.1	1.9	0.8
	3.4	1.9	0.0
V	1.4	1.8	0.1

Soil Classification	Percent of Total Sample
Gravel	1.6
Sand	73.7
Coarse Sand	11.1
Medium Sand	37.7
Fine Sand	24.9
Silt	22.8
Clay	1.9

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

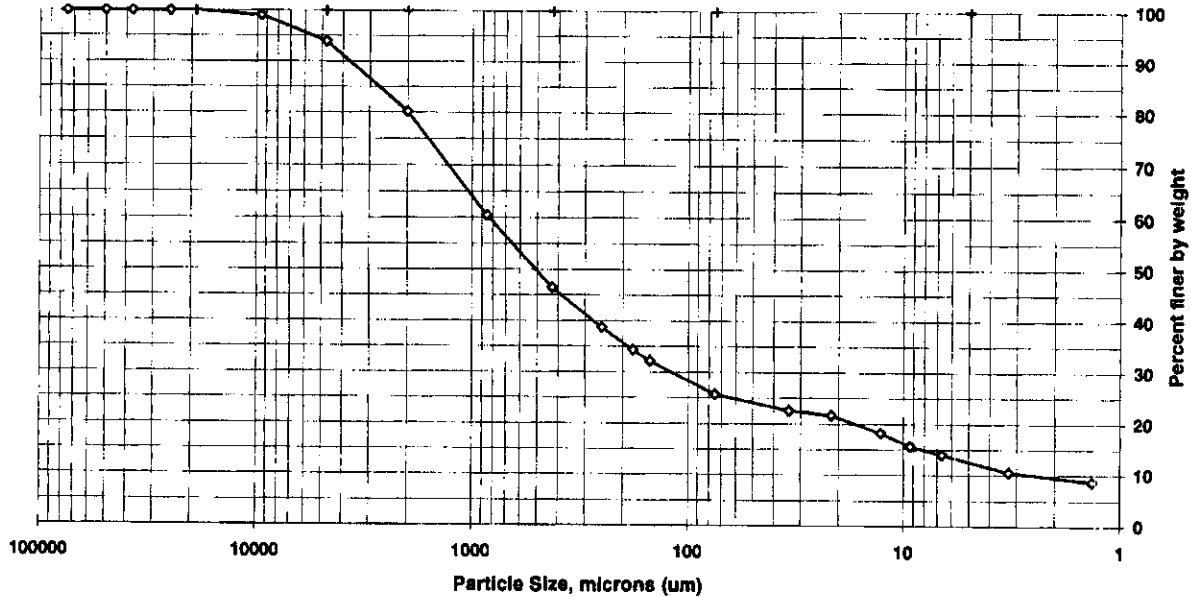
Client Code: STLPAP
 Sample ID: BH-SED-03A-00
 Lab ID: 784468

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 54.7%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.0	1.0
#4	4750	94.0	5.1
#10	2000	80.2	13.8
#20	850	60.5	19.7
#40	425	46.5	14.0
#60	250	38.7	7.8
#80	180	34.4	4.3
#100	150	32.2	2.2
#200	75	25.7	6.5
Hydrometer	34.0	22.5	3.2
	21.6	21.7	0.9
	12.7	18.2	3.4
	9.3	15.7	2.6
	6.7	14.0	1.7
	3.3	10.5	3.4
V	1.3	8.7	1.9

Soil Classification	Percent of Total Sample
Gravel	6.0
Sand	68.3
Coarse Sand	13.8
Medium Sand	33.7
Fine Sand	20.8
Silt	11.7
Clay	14.0

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

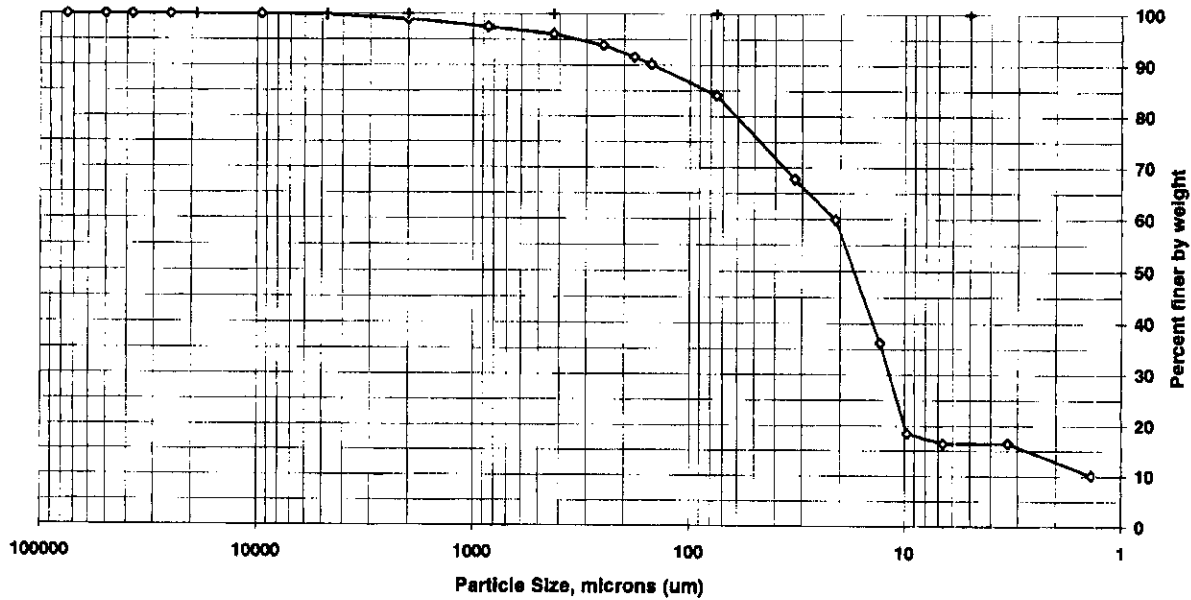
Client Code: STLPAP
 Sample ID: BH-SED-03B-00
 Lab ID: 784469

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 35.7%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.8	0.2
#10	2000	99.0	0.8
#20	850	97.4	1.5
#40	425	96.1	1.4
#60	250	93.9	2.2
#80	180	91.6	2.3
#100	150	90.1	1.5
#200	75	84.1	6.1
Hydrometer	32.4	67.8	16.3
	21.0	59.9	7.9
	12.9	36.2	23.7
	9.7	18.4	17.8
	6.6	16.5	2.0
	3.3	16.5	0.0
V	1.4	10.2	6.3

Soil Classification	Percent of Total Sample
Gravel	0.2
Sand	15.7
Coarse Sand	0.8
Medium Sand	2.9
Fine Sand	12.0
Silt	67.6
Clay	16.5

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with
 a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

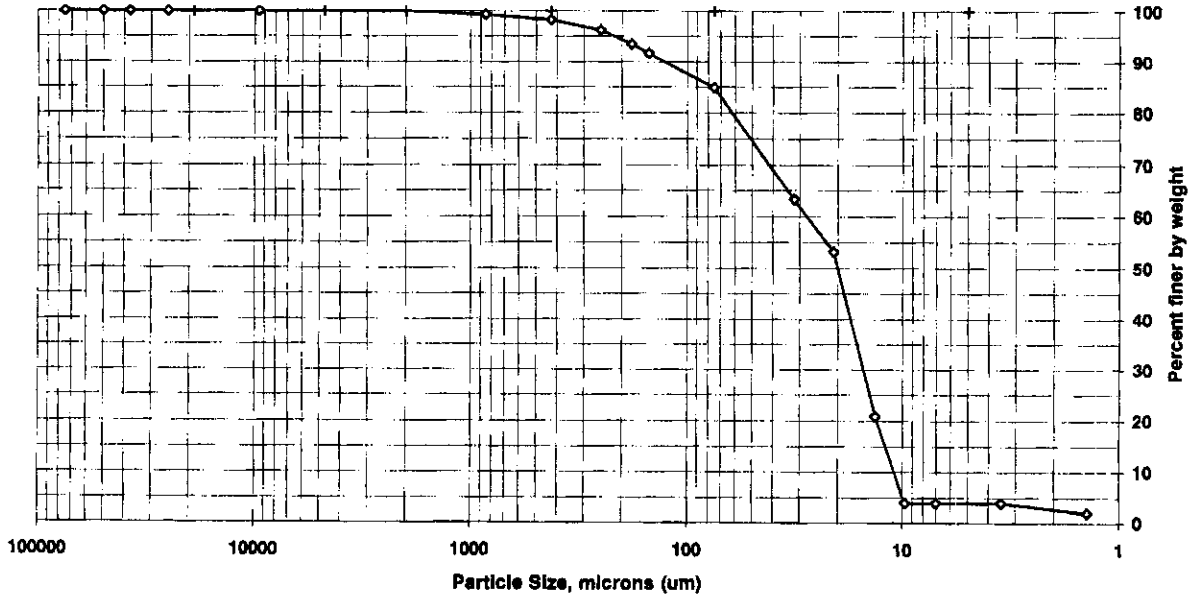
Client Code: STLPAP
 Sample ID: BH-SED-03C-00
 Lab ID: 784470

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 35.2%
 Specific Gravity: 2.650
 Maximum Particle Size: Med sand

Non-soil material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.3	0.7
#40	425	98.3	1.0
#60	250	96.2	2.0
#80	180	93.4	2.8
#100	150	91.8	1.8
#200	75	84.9	6.8
Hydrometer	31.8	63.3	21.6
	20.9	53.1	10.2
	13.3	20.9	32.2
	9.7	4.0	17.0
	7.0	4.0	0.0
	3.5	4.0	0.0
V	1.4	2.0	2.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	15.1
Coarse Sand	0.0
Medium Sand	1.7
Fine Sand	13.4
Silt	80.9
Clay	4.0

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

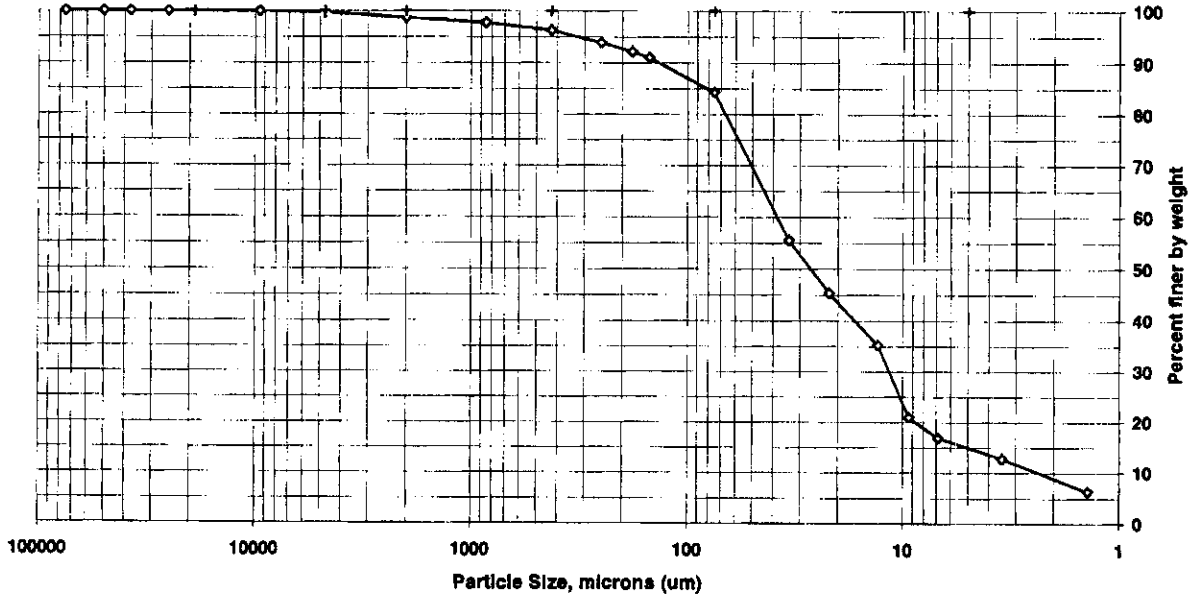
Client Code: STLPAP
 Sample ID: BH-SED-04-00
 Lab ID: 784471

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 41.3%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.7	0.3
#10	2000	98.7	1.0
#20	850	97.8	0.9
#40	425	96.3	1.4
#60	250	93.9	2.4
#80	180	92.1	1.8
#100	150	91.0	1.1
#200	75	84.3	6.7
Hydrometer	33.8	55.5	28.8
	22.0	45.4	10.2
	13.0	35.2	10.2
	9.4	21.0	14.2
	6.9	16.9	4.1
	3.5	12.9	4.1
V	1.4	6.4	6.4

Soil Classification	Percent of Total Sample
Gravel	0.3
Sand	15.4
Coarse Sand	1.0
Medium Sand	2.4
Fine Sand	12.0
Silt	67.4
Clay	16.9

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with
 a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

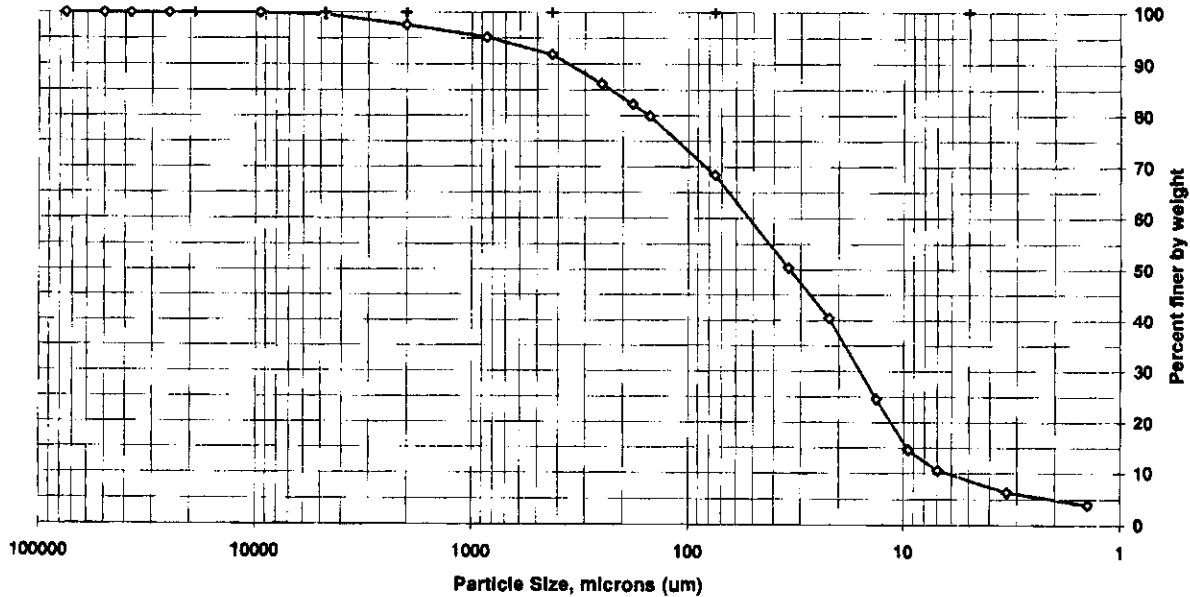
Client Code: STLPAP
 Sample ID: BH-SED-04-00REP
 Lab ID: 784471DP

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 41.0%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.6	0.4
#10	2000	97.6	2.0
#20	850	95.2	2.4
#40	425	91.9	3.3
#60	250	86.2	5.7
#80	180	82.3	3.9
#100	150	79.9	2.4
#200	75	68.4	11.5
Hydrometer	34.2	50.4	18.0
	22.2	40.5	10.0
	13.3	24.6	15.9
	9.5	14.6	10.0
	7.0	10.6	4.0
	3.3	6.3	4.3
V	1.4	4.0	2.3

Soil Classification	Percent of Total Sample
Gravel	0.4
Sand	31.2
Coarse Sand	2.0
Medium Sand	5.7
Fine Sand	23.5
Silt	57.8
Clay	10.6

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

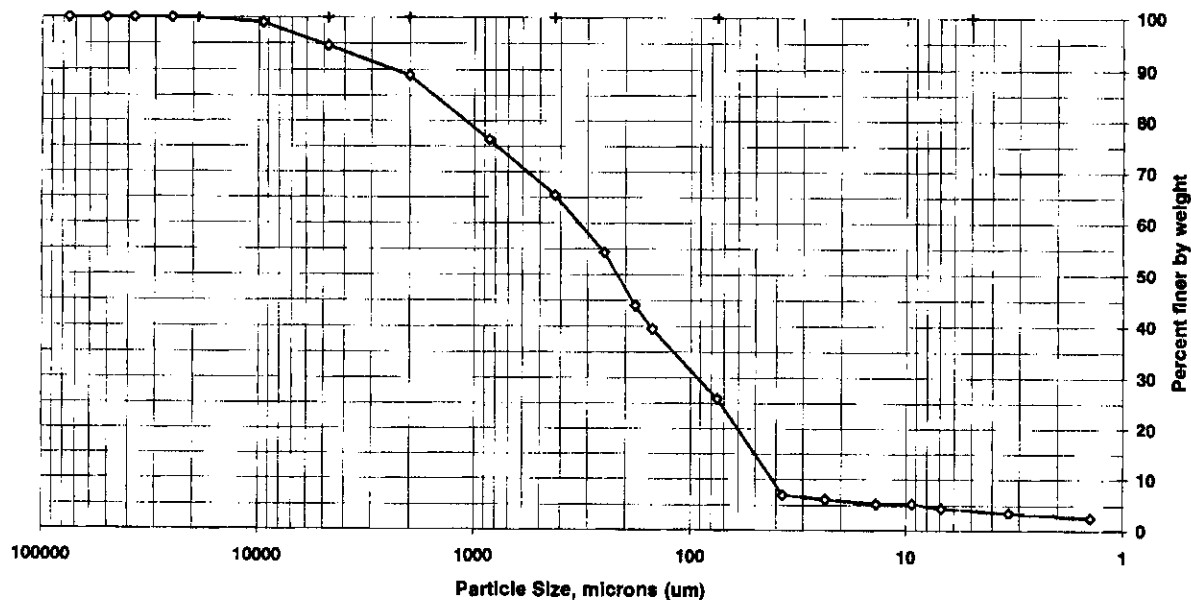
Client Code: STLPAP
 Sample ID: BH-SED-05-00
 Lab ID: 784472

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 63.2%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.0	1.0
#4	4750	94.6	4.5
#10	2000	89.0	5.6
#20	850	76.3	12.7
#40	425	65.4	10.9
#60	250	54.2	11.2
#80	180	44.0	10.3
#100	150	39.4	4.5
#200	75	25.9	13.5
Hydrometer	37.2	6.9	19.0
	23.7	6.1	0.8
	13.7	5.3	0.8
	9.4	5.3	0.0
	6.9	4.4	0.8
	3.4	3.5	1.0
V	1.4	2.5	1.0

Soil Classification	Percent of Total Sample
Gravel	5.4
Sand	68.6
Coarse Sand	5.6
Medium Sand	23.6
Fine Sand	39.5
Silt	21.5
Clay	4.4

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

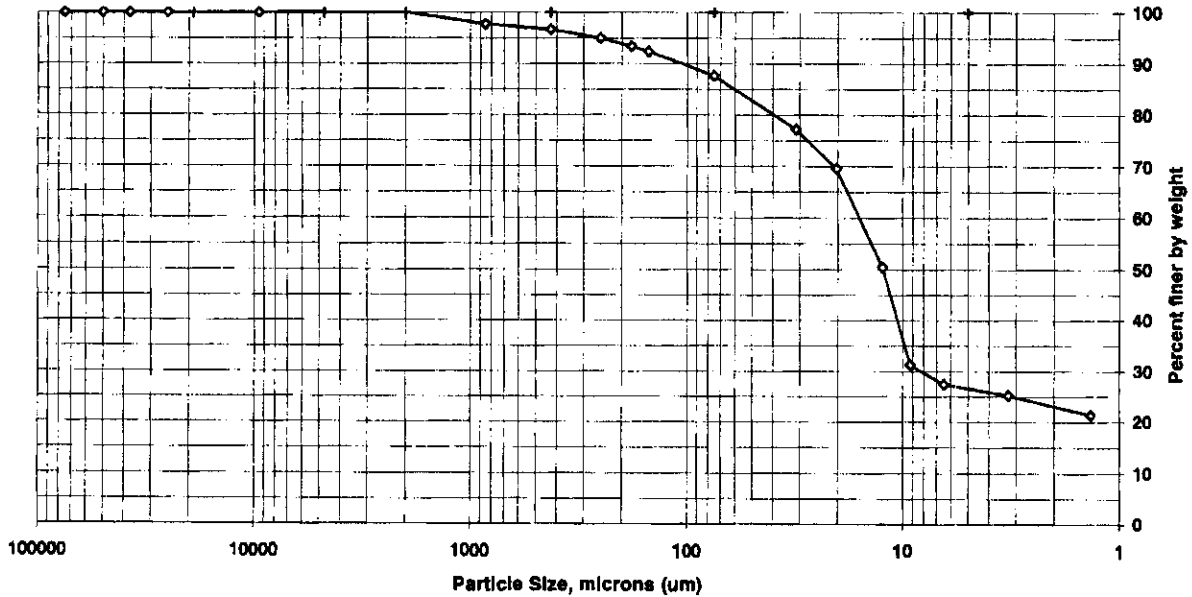
Client Code: STLPAP
 Sample ID: DUP-1
 Lab ID: 784473

SDG: 9B070192
 ETR(s): 130103

Date Received: 02/10/09
 Start Date: 02/13/09
 End Date: 02/24/09

Percent Solids: 36.8%
 Specific Gravity: 2.650
 Maximum Particle Size: Med sand

Non-soil material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	97.7	2.3
#40	425	96.7	1.0
#60	250	95.0	1.7
#80	180	93.4	1.6
#100	150	92.3	1.0
#200	75	87.6	4.7
Hydrometer	31.2	77.2	10.4
	20.2	69.6	7.7
	12.4	50.4	19.1
	9.2	31.3	19.1
	6.4	27.4	3.8
	3.3	25.2	2.2
V	1.4	21.4	3.8

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	12.4
Coarse Sand	0.0
Medium Sand	3.3
Fine Sand	9.1
Silt	60.2
Clay	27.4

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with
 a metal paddle.
 Dispersion Period: 1 minute

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B070192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-00	C9B070192-001	Soil
2	BH-SED-02-00	C9B070192-002	Soil
3	BH-SED-03A-00	C9B070192-003	Soil
4	BH-SED-03B-00	C9B070192-004	Soil
5	BH-SED-03C-00	C9B070192-005	Soil
6	BH-SED-04-00	C9B070192-006	Soil
6MS	BH-SED-04-00MS	C9B070192-006MS	Soil
6MSD	BH-SED-04-00MSD	C9B070192-006MSD	Soil
7	BH-SED-05-00	C9B070192-007	Soil
8	DUP-1	C9B070192-008	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
6	TOC	163%/168%/Ok	K - All samples

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03B-00 mg/kg	DUP-1 mg/kg	RPD	Qualifier
Cyanide, Total	0.47	1.7	113%	None
TOC	229000	79300	97%	None

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method:

SW846

9012A

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B070192

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-00	C9B070192 001	K6W501AT	ND	mg/kg	0.52	2.7	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-02-00	C9B070192 002	K6W511AU	6.4	mg/kg	0.14	0.76	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-03A-00	C9B070192 003	K6W521AU	ND	mg/kg	0.17	0.88	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-03B-00	C9B070192 004	K6W531AU	0.47	mg/kg	0.27	1.4	1	2/10/2009 - 2/10/2009 15:06	9041103
BH-SED-03C-00	C9B070192 005	K6W541AU	13.7	mg/kg	0.30	1.6	1	2/10/2009 - 2/10/2009 15:12	9041103
BH-SED-04-00	C9B070192 006	K6W551AU	3.9	mg/kg	0.18	0.91	1	2/10/2009 - 2/10/2009 15:12	9041103
BH-SED-05-00	C9B070192 007	K6W561AU	0.27	mg/kg	0.16	0.81	1	2/10/2009 - 2/10/2009 15:12	9041103
DUP-1	C9B070192 008	K6W571AU	1.7	mg/kg	0.27	1.4	1	2/10/2009 - 2/10/2009 15:12	9041103

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B070192

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-00	C9B070192 001	K6W501AU	57600	K mg/kg	1300	5640	2.06	2/12/2009 - 2/13/2009 09:11	9043316
BH-SED-02-00	C9B070192 002	K6W511AV	280000	K mg/kg	322	1400	1.85	2/12/2009 - 2/13/2009 09:21	9043316
BH-SED-03A-00	C9B070192 003	K6W521AV	297000	K mg/kg	352	1530	1.74	2/12/2009 - 2/13/2009 09:32	9043316
BH-SED-03B-00	C9B070192 004	K6W531AV	229000	K mg/kg	625	2720	1.96	2/12/2009 - 2/13/2009 09:42	9043316
BH-SED-03C-00	C9B070192 005	K6W541AV	225000	K mg/kg	811	3530	2.22	2/12/2009 - 2/13/2009 09:53	9043316
BH-SED-04-00	C9B070192 006	K6W551AV	93000	K mg/kg	495	2150	2.35	2/17/2009 - 2/17/2009 16:51	9048321
BH-SED-05-00	C9B070192 007	K6W561AV	420000	K mg/kg	392	1700	2.1	2/17/2009 - 2/17/2009 17:22	9048321
DUP-1	C9B070192 008	K6W571AV	79300	K mg/kg	1290	5630	3.94	2/17/2009 - 2/17/2009 17:33	9048321

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B070192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-00	C9B070192-001	Soil
2	BH-SED-02-00	C9B070192-002	Soil
3	BH-SED-03A-00	C9B070192-003	Soil
4	BH-SED-03B-00	C9B070192-004	Soil
5	BH-SED-03C-00	C9B070192-005	Soil
6	BH-SED-04-00	C9B070192-006	Soil
6MS	BH-SED-04-00MS	C9B070192-006MS	Soil
6MSD	BH-SED-04-00MSD	C9B070192-006MSD	Soil
7	BH-SED-05-00	C9B070192-007	Soil
8	DUP-1	C9B070192-008	Soil
9	SRM	C9B070192-009	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
6	Antimony	55%/52%/Ok	None - See ICP SD
	Mercury	Ok/71%/Ok	L/UL - All Samples
	Copper	Ok/74%/Ok	L/UL - All Samples
	Selenium	Ok/66%/Ok	L/UL - All Samples

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample exhibited acceptable %D values except the following.

ICP Sample ID	Compound	%D	Qualifier	Affected Samples
6	Antimony	24.8%	J	All samples

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03B-00 mg/kg	DUP-1 mg/kg	RPD	Qualifier
Mercury	0.70	0.96	31%	None
Silver	1.8	1.9	5%	None
Arsenic	25.2	26.1	4%	None
Beryllium	1.3	1.4	7%	None
Cadmium	3.4	3.2	6%	None
Chromium	296	263	12%	None
Copper	177	178	1%	None
Nickel	37.9	37.3	2%	None
Lead	373	376	1%	None
Antimony	1.1	1.1	0%	None
Selenium	3.5	4.0	13%	None
Thallium	0.71	0.74	4%	None
Zinc	1070	1070	0%	None

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

TOTAL Metals

Lot-Sample #....: C9B070192-001

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 82

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.47 L	0.090	mg/kg	SW846 7471A	02/12/09	K6W501AR
		Dilution Factor: 0.5		Analysis Time...: 13:08	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0068	
Prep Batch #....: 9061169						
Silver	1.4	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AQ
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9051115	MDL.....: 0.0066	
Arsenic	17.2	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AD
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9051115	MDL.....: 0.045	
Beryllium	1.9	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AE
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.010	
Cadmium	2.1	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AF
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.025	
Chromium	249	0.55	mg/kg	SW846 6020	03/02-03/04/09	K6W501AG
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.022	
Copper	139 L	0.55	mg/kg	SW846 6020	03/02-03/04/09	K6W501AH
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.023	
Nickel	56.2	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AJ
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.019	
Lead	175	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AK
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0093	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

TOTAL Metals

Lot-Sample #....: C9B070192-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.6 J	0.55	mg/kg	SW846 6020	03/02-03/04/09	K6W501AL
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0090	
Selenium	2.8 L	1.4	mg/kg	SW846 6020	03/02-03/04/09	K6W501AM
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.11	
Thallium	0.49	0.27	mg/kg	SW846 6020	03/02-03/04/09	K6W501AN
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0055	
Zinc	861 J	1.4	mg/kg	SW846 6020	03/02-03/04/09	K6W501AP
		Dilution Factor: 0.5		Analysis Time...: 21:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.032	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

TOTAL Metals

Lot-Sample #....: C9B070192-002

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 34

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.33 L	0.032	mg/kg	SW846 7471A	02/12/09	K6W511AT
		Dilution Factor: 0.65		Analysis Time...: 13:10	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0025	
Prep Batch #....: 9061169						
Silver	0.34	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AR
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	
Arsenic	4.5	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AE
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.50	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AF
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0036	
Cadmium	0.93	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AG
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0090	
Chromium	105 /	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W511AH
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0079	
Copper	50.1 L	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W511AJ
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0084	
Nickel	17.7	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AK
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0067	
Lead	68.4	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AL
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

TOTAL Metals

Lot-Sample #....: C9B070192-002

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.39 J	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W511AM
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Selenium	0.48 PL	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W511AN
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.040	
Thallium	0.53	0.098	mg/kg	SW846 6020	03/02-03/04/09	K6W511AP
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	
Zinc	373 /	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W511AQ
		Dilution Factor: 0.65		Analysis Time...: 21:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

EA Engineering, Science and Technology

3

Client Sample ID: BH-SED-03A-00

TOTAL Metals

Lot-Sample #....: C9B070192-003

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 43

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.24 L	0.032	mg/kg	SW846 7471A	02/12/09	K6W521AT
		Dilution Factor: 0.55		Analysis Time...: 13:12	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0024	
Prep Batch #....: 9061169						
Silver	0.30	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AR
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0023	
Arsenic	9.8	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AE
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.98	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AF
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0036	
Cadmium	0.80	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AG
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0088	
Chromium	120 /	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W521AH
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0077	
Copper	44.5 L	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W521AJ
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0082	
Nickel	24.0	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AK
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0066	
Lead	65.8	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AL
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	

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EA Engineering, Science and Technology

3

Client Sample ID: BH-SED-03A-00

TOTAL Metals

Lot-Sample #....: C9B070192-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.47 J	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W521AM
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Selenium	1.4 L	0.48	mg/kg	SW846 6020	03/02-03/04/09	K6W521AN
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.039	
Thallium	0.23	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W521AP
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0019	
Zinc	279 J	0.48	mg/kg	SW846 6020	03/02-03/04/09	K6W521AQ
		Dilution Factor: 0.55		Analysis Time...: 21:20	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

LW
5/11/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

TOTAL Metals

Lot-Sample #....: C9B070192-004

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 64

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.70 L	0.046	mg/kg	SW846 7471A	02/12/09	K6W531AT
		Dilution Factor: 0.5		Analysis Time...: 13:17	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0035	
Prep Batch #....: 9061169						
Silver	1.8	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AR
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	
Arsenic	25.2	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AR
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.023	
Beryllium	1.3	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AF
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0051	
Cadmium	3.4	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AG
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Chromium	296 ✓	0.28	mg/kg	SW846 6020	03/02-03/04/09	K6W531AH
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Copper	177 L	0.28	mg/kg	SW846 6020	03/02-03/04/09	K6W531AJ
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	
Nickel	37.9	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AK
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0094	
Lead	373	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AL
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0047	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

TOTAL Metals

Lot-Sample #...: C9B070192-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.1 J	0.28	mg/kg	SW846 6020	03/02-03/04/09	K6W531AM
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0046	
Selenium	3.5 L	0.69	mg/kg	SW846 6020	03/02-03/04/09	K6W531AN
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.056	
Thallium	0.71	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W531AP
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0028	
Zinc	1070 J	0.69	mg/kg	SW846 6020	03/02-03/04/09	K6W531AQ
		Dilution Factor: 0.5		Analysis Time...: 21:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

TOTAL Metals

Lot-Sample #....: C9B070192-005

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 69

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	1.1 L	0.052	mg/kg	SW846 7471A	02/12/09	K6W541AT
		Dilution Factor: 0.5		Analysis Time...: 13:19	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0040	
Prep Batch #....: 9061169						
Silver	2.8	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AR
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0038	
Arsenic	50.1	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AR
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.026	
Beryllium	1.4	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AF
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0059	
Cadmium	4.9	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AG
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Chromium	450 /	0.32	mg/kg	SW846 6020	03/02-03/04/09	K6W541AH
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Copper	595 L	0.32	mg/kg	SW846 6020	03/02-03/04/09	K6W541AJ
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Nickel	51.6	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AK
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Lead	602	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AL
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0054	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

TOTAL Metals

Lot-Sample #...: C9B070192-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	2.3 J	0.32	mg/kg	SW846 6020	03/02-03/04/09	K6W541AM
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0052	
Selenium	7.7 L	0.79	mg/kg	SW846 6020	03/02-03/04/09	K6W541AN
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.065	
Thallium	0.95	0.16	mg/kg	SW846 6020	03/02-03/04/09	K6W541AP
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Zinc	1790 /	0.79	mg/kg	SW846 6020	03/02-03/04/09	K6W541AQ
		Dilution Factor: 0.5		Analysis Time...: 21:29	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.019	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

TOTAL Metals

Lot-Sample #....: C9B070192-006

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.34 L	0.033	mg/kg	SW846 7471A	02/12/09	K6W551AT
		Dilution Factor: 0.55		Analysis Time...: 12:58	Analyst ID.....: 4003938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0025	
Prep Batch #....: 9061169						
Silver	0.61	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AR
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	
Arsenic	21.4	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AE
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.017	
Beryllium	0.93	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AF
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0037	
Cadmium	1.8	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AG
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0092	
Chromium	376 f	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W551AH
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0081	
Copper	81.7 L	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W551AJ
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0086	
Nickel	34.9	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AK
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0068	
Lead	216	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AL
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

TOTAL Metals

Lot-Sample #...: C9B070192-006

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.80 <i>J</i>	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W551AM
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	
Selenium	1.9 <i>L</i>	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W551AN
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.041	
Thallium	0.33	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W551AP
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9051115	MDL.....: 0.0020	
Zinc	838 <i>J</i>	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W551AQ
		Dilution Factor: 0.55		Analysis Time...: 21:33	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9051115	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

E Matrix interference.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

TOTAL Metals

Lot-Sample #....: C9B070192-007

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 38

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.24 L	0.032	mg/kg	SW846 7471A	02/12/09	K6W561AT
		Dilution Factor: 0.6		Analysis Time...: 13:03	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0024	
Prep Batch #....: 9061169						
Silver	0.30	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AR
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0023	
Arsenic	9.4	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AE
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.96	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AF
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0036	
Cadmium	1.0	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AG
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0089	
Chromium	138 f	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W561AH
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0078	
Copper	51.7 L	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W561AJ
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0083	
Nickel	28.7	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AK
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0066	
Lead	70.6	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AL
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

TOTAL Metals

Lot-Sample #....: C9B070192-007

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.58 J	0.19	mg/kg	SW846 6020	03/02-03/04/09	K6W561AM
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0032	
Selenium	1.5 L	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W561AN
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.040	
Thallium	0.22	0.097	mg/kg	SW846 6020	03/02-03/04/09	K6W561AP
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0019	
Zinc	418 J	0.49	mg/kg	SW846 6020	03/02-03/04/09	K6W561AQ
		Dilution Factor: 0.6		Analysis Time...: 22:05	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

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Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #....: C9B070192-008

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....: 65

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.96 L	0.047	mg/kg	SW846 7471A	02/12/09	K6W571AT
		Dilution Factor: 0.5		Analysis Time...: 13:05	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0036	
Prep Batch #....: 9061169						
Silver	1.9	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AR
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	
Arsenic	26.1	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AE
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.024	
Beryllium	1.4	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AF
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0053	
Cadmium	3.2	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AG
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Chromium	263 p	0.29	mg/kg	SW846 6020	03/02-03/04/09	K6W571AH
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Copper	178 L	0.29	mg/kg	SW846 6020	03/02-03/04/09	K6W571AJ
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	
Nickel	37.3	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AK
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0097	
Lead	376	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AL
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0049	

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EA Engineering, Science and Technology

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #...: C9B070192-008

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.1 J	0.29	mg/kg	SW846 6020	03/02-03/04/09	K6W571AM
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0047	
Selenium	4.0 L	0.71	mg/kg	SW846 6020	03/02-03/04/09	K6W571AN
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.058	
Thallium	0.74	0.14	mg/kg	SW846 6020	03/02-03/04/09	K6W571AP
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0029	
Zinc	1070 J	0.71	mg/kg	SW846 6020	03/02-03/04/09	K6W571AQ
		Dilution Factor: 0.5		Analysis Time...: 22:09	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.017	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #....: C9B070192-009

Matrix.....: SOLID

Date Sampled....: 02/06/09

Date Received...: 02/07/09

% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9043112						
Mercury	0.025 B/L	0.033	mg/kg	SW846 7471A	02/12/09	K6W9K1AQ
		Dilution Factor: 1		Analysis Time...: 13:07	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9043064	MDL.....: 0.0025	
Prep Batch #....: 9061169						
Silver	0.048 J	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AP
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	
Arsenic	4.5	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AC
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.016	
Beryllium	0.31	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AD
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0037	
Cadmium	0.19	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AE
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0091	
Chromium	21.1 J	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AF
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0080	
Copper	9.3 L	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AG
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0085	
Nickel	19.6	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AH
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0068	
Lead	7.6	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AJ
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	

(Continued on next page)

EA Engineering, Science and Technology

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Client Sample ID: SRM

TOTAL Metals

Lot-Sample #....: C9B070192-009

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.090 <i>B J</i>	0.20	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AK
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0033	
Selenium	0.46 <i>B L</i>	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AL
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.041	
Thallium	0.084 <i>B J</i>	0.10	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AM
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	
Zinc	31.6 <i>J</i>	0.50	mg/kg	SW846 6020	03/02-03/04/09	K6W9K1AN
		Dilution Factor: 1		Analysis Time...: 22:13	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	

NOTE(S):

B Estimated result. Result is less than RL.

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

*luc
5/1/09*

POLYNUCLEAR AROMATIC HYDRCARBONS

USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B070192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-00	C9B070192-001	Soil
2	BH-SED-02-00	C9B070192-002	Soil
2DL	BH-SED-02-00DL	C9B070192-002DL	Soil
3	BH-SED-03A-00	C9B070192-003	Soil
3DL	BH-SED-03A-00DL	C9B070192-003DL	Soil
4	BH-SED-03B-00	C9B070192-004	Soil
4DL	BH-SED-03B-00DL	C9B070192-004DL	Soil
5	BH-SED-03C-00	C9B070192-005	Soil
5DL	BH-SED-03C-00DL	C9B070192-005DL	Soil
6	BH-SED-04-00	C9B070192-006	Soil
6MS	BH-SED-04-00MS	C9B070192-006MS	Soil
6MSD	BH-SED-04-00MSD	C9B070192-006MSD	Soil
6DL	BH-SED-04-00DL	C9B070192-006DL	Soil
7	BH-SED-05-00	C9B070192-007	Soil
7DL	BH-SED-05-00DL	C9B070192-007DL	Soil
8	DUP-1	C9B070192-008	Soil
8DL	DUP-1DL	C9B070192-008DL	Soil
9	SRM	C9B070192-009	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria except the following.

Sample ID	Internal Standard	Area Count	Qualifier
4	IS6-Perylene-d12	High	J - Associated compounds
7	IS6-Perylene-d12	High	J - Associated compounds

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03B-00 ug/kg	DUP-1 ug/kg	RPD	Qualifier
1-Methylnaphthalene	2800	2800	0%	None
2-Methylnaphthalene	6500	5600	15%	None
Naphthalene	7200000	4000000	57%	None
Acenaphthylene	1400	1900	30%	None
Acenaphthene	5900	6900	16%	None
Fluorene	3500	3900	11%	None
Phenanthrene	20000	30000	40%	None
Anthracene	8200	13000	45%	None
Fluoranthene	32000	140000	126%	None
Pyrene	21000	31000	38%	None
Benzo (a) anthracene	11000	18000	48%	None
Chrysene	8100	16000	66%	None
Benzo (b) fluoranthene	10000	21000	71%	None
Benzo (k) fluoranthene	190 U	6300	NC	None
Benzo (a) pyrene	9900	21000	72%	None
Indeno (1,2,3-cd) pyrene	6000	13000	74%	None
Dibenzo (a,h) anthracene	900	190 U	NC	None
Benzo (g,h,i) perylene	7000	15000	73%	None

Compound Quantitation - Several samples exhibited high concentrations of target compounds and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-001 Work Order #....: K6W501AC Matrix.....: SOLID
 Date Sampled....: 02/06/09 10:15 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 01:12
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 82 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	170 J	180	ug/kg	28
2-Methylnaphthalene	340	180	ug/kg	36
Naphthalene	3700	180	ug/kg	27
Acenaphthylene	230	180	ug/kg	36
Acenaphthene	73 J	180	ug/kg	29
Fluorene	200	180	ug/kg	28
Phenanthrene	610	180	ug/kg	22
Anthracene	310 J	900	ug/kg	32
Fluoranthene	1300	180	ug/kg	15
Pyrene	1200	180	ug/kg	49
Benzo (a) anthracene	680	180	ug/kg	29
Chrysene	680	180	ug/kg	32
Benzo (b) fluoranthene	1300	180	ug/kg	37
Benzo (k) fluoranthene	440	180	ug/kg	38
Benzo (a) pyrene	1100	180	ug/kg	51
Indeno (1,2,3-cd) pyrene	740	180	ug/kg	10
Dibenzo (a,h) anthracene	190	180	ug/kg	40
Benzo (ghi) perylene	950	180	ug/kg	13

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(27 - 110)
Terphenyl-d14	65	(21 - 130)
2-Fluorobiphenyl	67	(28 - 108)
2-Fluorophenol	57	(28 - 107)
Phenol-d5	56	(30 - 112)
2,4,6-Tribromophenol	78	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-002 Work Order #....: K6W511AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 11:15 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 09:28
 Dilution Factor: 12.98 Initial Wgt/Vol: 23.1 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 34 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1800	130	ug/kg	20
2-Methylnaphthalene	3200	130	ug/kg	26
Naphthalene	85000 43000 E	130	ug/kg	19
Acenaphthylene	4300	130	ug/kg	26
Acenaphthene	1000	130	ug/kg	21
Fluorene	3000	130	ug/kg	20
Phenanthrene	14000	130	ug/kg	16
Anthracene	5000	650	ug/kg	23
Fluoranthene	25000	130	ug/kg	11
Pyrene	16000	130	ug/kg	35
Benzo (a) anthracene	7600	130	ug/kg	21
Chrysene	6500	130	ug/kg	23
Benzo (b) fluoranthene	9300	130	ug/kg	27
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	9300	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	5300	130	ug/kg	7.2
Dibenzo (a,h) anthracene	1300	130	ug/kg	29
Benzo (ghi) perylene	6300	130	ug/kg	9.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Semivolatiles

Use
original

Lot-Sample #....: C9B070192-002 Work Order #....: K6W512AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 11:15 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 01:34
 Dilution Factor: 129.8 Initial Wgt/Vol: 23.1 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 34 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2600	1300	ug/kg	200
2-Methylnaphthalene	5000	1300	ug/kg	260
Naphthalene	85000	1300	ug/kg	190
Acenaphthylene	5500	1300	ug/kg	260
Acenaphthene	1500	1300	ug/kg	210
Fluorene	4400	1300	ug/kg	200
Phenanthrene	20000	1300	ug/kg	160
Anthracene	7300	6500	ug/kg	230
Fluoranthene	33000	1300	ug/kg	110
Pyrene	28000	1300	ug/kg	350
Benzo (a) anthracene	12000	1300	ug/kg	210
Chrysene	11000	1300	ug/kg	230
Benzo (b) fluoranthene	19000	1300	ug/kg	270
Benzo (k) fluoranthene	ND	1300	ug/kg	270
Benzo (a) pyrene	13000	1300	ug/kg	370
Indeno (1,2,3-cd) pyrene	7100	1300	ug/kg	72
Dibenzo (a,h) anthracene	1700	1300	ug/kg	290
Benzo (ghi) perylene	8100	1300	ug/kg	96

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

lw
5/11/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-003 Work Order #....: K6W521AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 12:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 09:50
 Dilution Factor: 10.98 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 43 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1300	130	ug/kg	19
2-Methylnaphthalene	1800	130	ug/kg	25
Naphthalene	90000 43000 E	130	ug/kg	19
Acenaphthylene	1700	130	ug/kg	26
Acenaphthene	830	130	ug/kg	21
Fluorene	690	130	ug/kg	19
Phenanthrene	3200	130	ug/kg	15
Anthracene	1700	640	ug/kg	23
Fluoranthene	8400	130	ug/kg	11
Pyrene	5600	130	ug/kg	34
Benzo (a) anthracene	4400	130	ug/kg	21
Chrysene	3900	130	ug/kg	22
Benzo (b) fluoranthene	5500	130	ug/kg	26
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	5300	130	ug/kg	36
Indeno (1,2,3-cd) pyrene	3500	130	ug/kg	7.1
Dibenzo (a,h) anthracene	ND	130	ug/kg	28
Benzo (ghi) perylene	3900	130	ug/kg	9.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

lw
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

GC/MS Semivolatiles

Use
original

Lot-Sample #....: C9B070192-003 Work Order #....: K6W522AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 12:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 01:56
 Dilution Factor: 109.9 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 43 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2100	1300	ug/kg	190
2-Methylnaphthalene	3000	1300	ug/kg	250
Naphthalene	90000	1300	ug/kg	190
Acenaphthylene	2300	1300	ug/kg	260
Acenaphthene	1300	1300	ug/kg	210
Fluorene	1000 J	1300	ug/kg	190
Phenanthrene	4800	1300	ug/kg	150
Anthracene	2300 J	6400	ug/kg	230
Fluoranthene	12000	1300	ug/kg	110
Pyrene	9800	1300	ug/kg	340
Benzo (a) anthracene	6700	1300	ug/kg	210
Chrysene	5500	1300	ug/kg	230
Benzo (b) fluoranthene	11000	1300	ug/kg	260
Benzo (k) fluoranthene	ND	1300	ug/kg	270
Benzo (a) pyrene	7600	1300	ug/kg	360
Indeno (1,2,3-cd) pyrene	5100	1300	ug/kg	71
Dibenzo (a,h) anthracene	1100 J	1300	ug/kg	280
Benzo (ghi) perylene	5300	1300	ug/kg	95
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Nitrobenzene-d5	NC, DIL	(27 - 110)		
Terphenyl-d14	NC, DIL	(21 - 130)		
2-Fluorobiphenyl	NC, DIL	(28 - 108)		
2-Fluorophenol	NC, DIL	(28 - 107)		
Phenol-d5	NC, DIL	(30 - 112)		
2,4,6-Tribromophenol	NC, DIL	(21 - 116)		

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

hw
5/11/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-004 Work Order #....: K6W531AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 13:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 10:12
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 64 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2800	190	ug/kg	28
2-Methylnaphthalene	6500	190	ug/kg	36
Naphthalene	7200000 240000-E	190	ug/kg	27
Acenaphthylene	1400	190	ug/kg	37
Acenaphthene	5900	190	ug/kg	30
Fluorene	3500	190	ug/kg	28
Phenanthrene	20000	190	ug/kg	22
Anthracene	8200	920	ug/kg	32
Fluoranthene	32000	190	ug/kg	16
Pyrene	21000	190	ug/kg	49
Benzo (a) anthracene	11000	190	ug/kg	30
Chrysene	8100	190	ug/kg	32
Benzo (b) fluoranthene	10000 J	190	ug/kg	37
Benzo (k) fluoranthene	ND	190	ug/kg	39
Benzo (a) pyrene	9900 J	190	ug/kg	52
Indeno (1,2,3-cd) pyrene	6000 ↓	190	ug/kg	10
Dibenzo (a,h) anthracene	900	190	ug/kg	41
Benzo (ghi) perylene	7000 ↓	190	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-004 Work Order #....: K6W532AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 13:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 04:27
 Dilution Factor: 6000 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 64 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	110000	ug/kg	17000
2-Methylnaphthalene	ND	110000	ug/kg	22000
Naphthalene	7200000	110000	ug/kg	16000
Acenaphthylene	ND	110000	ug/kg	22000
Acenaphthene	ND	110000	ug/kg	18000
Fluorene	ND	110000	ug/kg	17000
Phenanthrene	88000 J	110000	ug/kg	13000
Anthracene	36000 J	550000	ug/kg	19000
Fluoranthene	140000	110000	ug/kg	9400
Pyrene	110000	110000	ug/kg	29000
Benzo(a)anthracene	57000 J	110000	ug/kg	18000
Chrysene	54000 J	110000	ug/kg	19000
Benzo(b)fluoranthene	57000 J	110000	ug/kg	22000
Benzo(k)fluoranthene	30000 J	110000	ug/kg	23000
Benzo(a)pyrene	ND	110000	ug/kg	31000
Indeno(1,2,3-cd)pyrene	ND	110000	ug/kg	6100
Dibenzo(a,h)anthracene	ND	110000	ug/kg	24000
Benzo(ghi)perylene	ND	110000	ug/kg	8200

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-005 Work Order #....: K6W541AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 13:30 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 10:34
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 69 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2500	210	ug/kg	32
2-Methylnaphthalene	4200	210	ug/kg	42
Naphthalene	19000 82000 E	210	ug/kg	31
Acenaphthylene	1700	210	ug/kg	42
Acenaphthene	3000	210	ug/kg	34
Fluorene	1900	210	ug/kg	32
Phenanthrene	5600	210	ug/kg	25
Anthracene	3800	1000	ug/kg	37
Fluoranthene	25000	210	ug/kg	18
Pyrene	15000	210	ug/kg	56
Benzo (a) anthracene	9300	210	ug/kg	34
Chrysene	8500	210	ug/kg	37
Benzo (b) fluoranthene	11000	210	ug/kg	43
Benzo (k) fluoranthene	ND	210	ug/kg	44
Benzo (a) pyrene	10000	210	ug/kg	59
Indeno (1,2,3-cd) pyrene	6100	210	ug/kg	12
Dibenzo (a,h) anthracene	1900	210	ug/kg	47
Benzo (ghi) perylene	7200	210	ug/kg	16

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-005 Work Order #....: K6W542AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 13:30 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 02:39
 Dilution Factor: 100 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 69 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	4100	2100	ug/kg	320
2-Methylnaphthalene	5900	2100	ug/kg	420
Naphthalene	190000	2100	ug/kg	310
Acenaphthylene	2000 J	2100	ug/kg	420
Acenaphthene	4200	2100	ug/kg	340
Fluorene	2800	2100	ug/kg	320
Phenanthrene	6900	2100	ug/kg	250
Anthracene	5000 J	10000	ug/kg	370
Fluoranthene	30000	2100	ug/kg	180
Pyrene	23000	2100	ug/kg	560
Benzo (a) anthracene	13000	2100	ug/kg	340
Chrysene	10000	2100	ug/kg	370
Benzo (b) fluoranthene	21000	2100	ug/kg	430
Benzo (k) fluoranthene	ND	2100	ug/kg	440
Benzo (a) pyrene	15000	2100	ug/kg	590
Indeno (1,2,3-cd) pyrene	7800	2100	ug/kg	120
Dibenzo (a,h) anthracene	2000 J	2100	ug/kg	470
Benzo (ghi) perylene	8000	2100	ug/kg	160

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-006 Work Order #....: K6W551AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 14:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 08:02
 Dilution Factor: 10.98 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 45 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1600	130	ug/kg	20
2-Methylnaphthalene	3800	130	ug/kg	26
Naphthalene	97000 48000-E	130	ug/kg	19
Acenaphthylene	1700	130	ug/kg	27
Acenaphthene	580	130	ug/kg	22
Fluorene	1300	130	ug/kg	20
Phenanthrene	5200	130	ug/kg	16
Anthracene	2400	660	ug/kg	23
Fluoranthene	9000	130	ug/kg	11
Pyrene	5500	130	ug/kg	36
Benzo (a) anthracene	4800	130	ug/kg	21
Chrysene	4300	130	ug/kg	23
Benzo (b) fluoranthene	6000	130	ug/kg	27
Benzo (k) fluoranthene	ND	130	ug/kg	28
Benzo (a) pyrene	6000	130	ug/kg	38
Indeno (1,2,3-cd) pyrene	3700	130	ug/kg	7.4
Dibenzo (a,h) anthracene	890	130	ug/kg	29
Benzo (ghi) perylene	4200	130	ug/kg	9.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-006 Work Order #....: K6W552AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 14:00 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 00:51
 Dilution Factor: 109.9 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 45 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2500	1300	ug/kg	200
2-Methylnaphthalene	5900	1300	ug/kg	260
Naphthalene	97000	1300	ug/kg	190
Acenaphthylene	2200	1300	ug/kg	270
Acenaphthene	830 J	1300	ug/kg	220
Fluorene	1800	1300	ug/kg	200
Phenanthrene	7400	1300	ug/kg	160
Anthracene	3100 J	6600	ug/kg	240
Fluoranthene	12000	1300	ug/kg	110
Pyrene	8700	1300	ug/kg	360
Benzo (a) anthracene	6900	1300	ug/kg	210
Chrysene	5400	1300	ug/kg	230
Benzo (b) fluoranthene	12000 J	1300	ug/kg	270
Benzo (k) fluoranthene	ND	1300	ug/kg	280
Benzo (a) pyrene	8500 J	1300	ug/kg	380
Indeno (1,2,3-cd) pyrene	4300	1300	ug/kg	74
Dibenzo (a,h) anthracene	910 J	1300	ug/kg	300
Benzo (ghi) perylene	5000	1300	ug/kg	99

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-007 Work Order #....: K6W561AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 14:30 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 10:56
 Dilution Factor: 12 Initial Wgt/Vol: 25 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 38 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1100	130	ug/kg	20
2-Methylnaphthalene	2300	130	ug/kg	26
Naphthalene	50000 27000 E	130	ug/kg	19
Acenaphthylene	9100	130	ug/kg	26
Acenaphthene	3300	130	ug/kg	21
Fluorene	2500	130	ug/kg	20
Phenanthrene	17000	130	ug/kg	16
Anthracene	17000	640	ug/kg	23
Fluoranthene	88000 64000 E	130	ug/kg	11
Pyrene	59000 32000 E	130	ug/kg	35
Benzo (a) anthracene	48000 33000 E	130	ug/kg	21
Chrysene	40000 29000 E	130	ug/kg	23
Benzo (b) fluoranthene	53000 45000 E	130	ug/kg	26
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	26000	130	ug/kg	36
Indeno (1,2,3-cd) pyrene	25000	130	ug/kg	7.1
Dibenzo (a,h) anthracene	ND	130	ug/kg	29
Benzo (ghi) perylene	16000	130	ug/kg	9.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

lw
 5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-007 Work Order #....: K6W562AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 14:30 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 03:00
 Dilution Factor: 120 Initial Wgt/Vol: 25 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 38 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1700	1300	ug/kg	200
2-Methylnaphthalene	3400	1300	ug/kg	260
Naphthalene	50000	1300	ug/kg	190
Acenaphthylene	9000	1300	ug/kg	260
Acenaphthene	4500	1300	ug/kg	210
Fluorene	3500	1300	ug/kg	200
Phenanthrene	23000	1300	ug/kg	160
Anthracene	22000	6400	ug/kg	230
Fluoranthene	88000	1300	ug/kg	110
Pyrene	59000	1300	ug/kg	350
Benzo (a) anthracene	48000	1300	ug/kg	210
Chrysene	40000	1300	ug/kg	230
Benzo (b) fluoranthene	53000	1300	ug/kg	260
Benzo (k) fluoranthene	19000	1300	ug/kg	270
Benzo (a) pyrene	48000	1300	ug/kg	360
Indeno (1,2,3-cd) pyrene	31000	1300	ug/kg	71
Dibenzo (a,h) anthracene	9200	1300	ug/kg	290
Benzo (ghi) perylene	31000	1300	ug/kg	95

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-008 Work Order #....: K6W571AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/13/09
 Prep Batch #....: 9043011 Analysis Time...: 11:17
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 65 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2800	190	ug/kg	29
2-Methylnaphthalene	5600	190	ug/kg	37
Naphthalene	4000000 190000 E	190	ug/kg	28
Acenaphthylene	1900	190	ug/kg	38
Acenaphthene	6900	190	ug/kg	31
Fluorene	3900	190	ug/kg	29
Phenanthrene	30000	190	ug/kg	23
Anthracene	13000	940	ug/kg	33
Fluoranthene	140000 56000 E	190	ug/kg	16
Pyrene	31000	190	ug/kg	51
Benzo(a)anthracene	18000	190	ug/kg	30
Chrysene	16000	190	ug/kg	33
Benzo(b)fluoranthene	21000	190	ug/kg	39
Benzo(k)fluoranthene	6300	190	ug/kg	40
Benzo(a)pyrene	21000	190	ug/kg	53
Indeno(1,2,3-cd)pyrene	13000	190	ug/kg	10
Dibenzo(a,h)anthracene	ND	190	ug/kg	42
Benzo(ghi)perylene	15000	190	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: DUP-1

GC/MS Semivolatiles

Use original

Lot-Sample #....: C9B070192-008 Work Order #....: K6W572AD Matrix.....: SOLID
 Date Sampled....: 02/06/09 Date Received...: 02/07/09 09:50 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 04:49
 Dilution Factor: 3000 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 65 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	57000	ug/kg	8600
2-Methylnaphthalene	20000 J	57000	ug/kg	11000
Naphthalene	4000000	57000	ug/kg	8300
Acenaphthylene	ND	57000	ug/kg	11000
Acenaphthene	20000 J	57000	ug/kg	9200
Fluorene	ND	57000	ug/kg	8600
Phenanthrene	77000	57000	ug/kg	6800
Anthracene	37000 J	280000	ug/kg	10000
Fluoranthene	140000	57000	ug/kg	4800
Pyrene	120000	57000	ug/kg	15000
Benzo (a) anthracene	58000	57000	ug/kg	9100
Chrysene	52000 J	57000	ug/kg	10000
Benzo (b) fluoranthene	74000	57000	ug/kg	12000
Benzo (k) fluoranthene	ND	57000	ug/kg	12000
Benzo (a) pyrene	61000	57000	ug/kg	16000
Indeno (1,2,3-cd) pyrene	34000 J	57000	ug/kg	3100
Dibenzo (a,h) anthracene	ND	57000	ug/kg	13000
Benzo (ghi) perylene	45000 J	57000	ug/kg	4200

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ms
5/10/09

Client Sample ID: SRM

GC/MS Semivolatiles

Lot-Sample #....: C9B070192-009 Work Order #....: K6W9K1AA Matrix.....: SOLID
 Date Sampled....: 02/06/09 Date Received...: 02/07/09 MS Run #.....: 9043002
 Prep Date.....: 02/12/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9043011 Analysis Time...: 03:44
 Dilution Factor: 30 Initial Wgt/Vol: 5 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	260	200	ug/kg	30
2-Methylnaphthalene	300	200	ug/kg	39
Naphthalene	2500	200	ug/kg	29
Acenaphthylene	760	200	ug/kg	40
Acenaphthene	220	200	ug/kg	32
Fluorene	260	200	ug/kg	30
Phenanthrene	3400	200	ug/kg	24
Anthracene	860 J	990	ug/kg	35
Fluoranthene	5800	200	ug/kg	17
Pyrene	5000	200	ug/kg	53
Benzo (a) anthracene	2800	200	ug/kg	32
Chrysene	3600	200	ug/kg	35
Benzo (b) fluoranthene	2300	200	ug/kg	41
Benzo (k) fluoranthene	2200	200	ug/kg	42
Benzo (a) pyrene	2400	200	ug/kg	56
Indeno (1,2,3-cd) pyrene	1700	200	ug/kg	11
Dibenzo (a,h) anthracene	440	200	ug/kg	44
Benzo (ghi) perylene	2200	200	ug/kg	15

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(27 - 110)
Terphenyl-d14	68	(21 - 130)
2-Fluorobiphenyl	64	(28 - 108)
2-Fluorophenol	55	(28 - 107)
Phenol-d5	56	(30 - 112)
2,4,6-Tribromophenol	82	(21 - 116)

NOTE (S) :

J Estimated result. Result is less than RL.

lew
 5/11/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B070192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-00	C9B070192-001	Soil
2	BH-SED-02-00	C9B070192-002	Soil
3	BH-SED-03A-00	C9B070192-003	Soil
4	BH-SED-03B-00	C9B070192-004	Soil
5	BH-SED-03C-00	C9B070192-005	Soil
6	BH-SED-04-00	C9B070192-006	Soil
6MS	BH-SED-04-00MS	C9B070192-006MS	Soil
6MSD	BH-SED-04-00MSD	C9B070192-006MSD	Soil
7	BH-SED-05-00	C9B070192-007	Soil
8	DUP-1	C9B070192-008	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.043 RRF	L/R	All samples

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
02/10/09	Acrolein	0.036 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03B-00 ug/kg	DUP-1 ug/kg	RPD	Qualifier
None	ND	ND	-	-

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-001	Work Order #....: K6W501A0	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 08:40	
Dilution Factor: 1.05	Initial Wgt/Vol: 4.74 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 82	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MEL
Acrolein	ND <i>R</i>	580	ug/kg	41
Acrylonitrile	ND	580	ug/kg	60
Benzene	ND	29	ug/kg	3.9
Bromodichloromethane	ND	29	ug/kg	3.2
Bromoform	ND	29	ug/kg	2.5
Bromomethane	ND	29	ug/kg	4.3
2-Butanone (MEK)	ND	29	ug/kg	5.1
Carbon tetrachloride	ND	29	ug/kg	2.6
Chloroethane	ND	29	ug/kg	8.9
2-Chloroethyl vinyl ether	ND	58	ug/kg	4.5
Chloroform	ND	29	ug/kg	3.4
Chloromethane	ND	29	ug/kg	4.9
Dibromochloromethane	ND	29	ug/kg	4.1
1,2-Dichlorobenzene	ND	29	ug/kg	4.6
1,3-Dichlorobenzene	ND	29	ug/kg	3.8
1,4-Dichlorobenzene	ND	29	ug/kg	3.7
trans-1,2-Dichloroethene	ND	29	ug/kg	3.4
Dichlorodifluoromethane	ND	29	ug/kg	3.8
1,1-Dichloroethane	ND	29	ug/kg	3.3
1,2-Dichloroethane	ND	29	ug/kg	3.5
1,1-Dichloroethene	ND	29	ug/kg	4.9
1,2-Dichloropropane	ND	29	ug/kg	3.1
cis-1,3-Dichloropropene	ND	29	ug/kg	3.9
trans-1,3-Dichloropropene	ND	29	ug/kg	3.4
Ethylbenzene	ND	29	ug/kg	3.7
Methylene chloride	ND	29	ug/kg	3.9
1,1,2,2-Tetrachloroethane	ND	29	ug/kg	4.1
Tetrachloroethene	ND	29	ug/kg	3.9
Toluene	ND	29	ug/kg	4.2
1,1,1-Trichloroethane	ND	29	ug/kg	2.8
1,1,2-Trichloroethane	ND	29	ug/kg	4.8
Trichloroethene	ND	29	ug/kg	3.8
Trichlorofluoromethane	ND	29	ug/kg	5.3
Vinyl chloride	ND	29	ug/kg	2.7

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KA Engineering, Science and Technology

Client Sample ID: BH-SED-01-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-001 Work Order #....: K6W501A0 Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	82	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	93	(63 - 120)
Dibromofluoromethane	103	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-002	Work Order #....: K6W511AA	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 09:05	
Dilution Factor: 1.08	Initial Wgt/Vol: 4.65 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 34	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	160	ug/kg	12
Acrylonitrile	ND	160	ug/kg	17
Benzene	4.0 J	8.2	ug/kg	1.1
Bromodichloromethane	ND	8.2	ug/kg	0.92
Bromoform	ND	8.2	ug/kg	0.72
Bromomethane	ND	8.2	ug/kg	1.2
2-Butanone (MEK)	ND	8.2	ug/kg	1.4
Carbon tetrachloride	ND	8.2	ug/kg	0.73
Chloroethane	ND	8.2	ug/kg	2.5
2-Chloroethyl vinyl ether	ND	16	ug/kg	1.3
Chloroform	ND	8.2	ug/kg	0.96
Chloromethane	ND	8.2	ug/kg	1.4
Dibromochloromethane	ND	8.2	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.2	ug/kg	1.3
1,3-Dichlorobenzene	ND	8.2	ug/kg	1.1
1,4-Dichlorobenzene	ND	8.2	ug/kg	1.0
trans-1,2-Dichloroethene	ND	8.2	ug/kg	0.97
Dichlorodifluoromethane	ND	8.2	ug/kg	1.1
1,1-Dichloroethane	ND	8.2	ug/kg	0.94
1,2-Dichloroethane	ND	8.2	ug/kg	1.0
1,1-Dichloroethene	ND	8.2	ug/kg	1.4
1,2-Dichloropropane	ND	8.2	ug/kg	0.89
cis-1,3-Dichloropropene	ND	8.2	ug/kg	1.1
trans-1,3-Dichloropropene	ND	8.2	ug/kg	0.98
Ethylbenzene	ND	8.2	ug/kg	1.1
Methylene chloride	ND	8.2	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg	1.2
Tetrachloroethene	ND	8.2	ug/kg	1.1
Toluene	ND	8.2	ug/kg	1.2
1,1,1-Trichloroethane	ND	8.2	ug/kg	0.80
1,1,2-Trichloroethane	ND	8.2	ug/kg	1.4
Trichloroethene	ND	8.2	ug/kg	1.1
Trichlorofluoromethane	ND	8.2	ug/kg	1.5
Vinyl chloride	ND	8.2	ug/kg	0.77

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-002 Work Order #....: K6W511AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(52 - 124)
Toluene-d8	96	(72 - 127)
4-Bromofluorobenzene	96	(63 - 120)
Dibromofluoromethane	111	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-03A-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-003	Work Order #....: K6W521AA	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 09:29	
Dilution Factor: 0.89	Initial Wgt/Vol: 5.62 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 43	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	160	ug/kg	11
Acrylonitrile	ND	160	ug/kg	16
Benzene	ND	7.8	ug/kg	1.1
Bromodichloromethane	ND	7.8	ug/kg	0.88
Bromoform	ND	7.8	ug/kg	0.69
Bromomethane	ND	7.8	ug/kg	1.2
2-Butanone (MEK)	ND	7.8	ug/kg	1.4
Carbon tetrachloride	ND	7.8	ug/kg	0.70
Chloroethane	ND	7.8	ug/kg	2.4
2-Chloroethyl vinyl ether	ND	16	ug/kg	1.2
Chloroform	ND	7.8	ug/kg	0.91
Chloromethane	ND	7.8	ug/kg	1.3
Dibromochloromethane	ND	7.8	ug/kg	1.1
1,2-Dichlorobenzene	ND	7.8	ug/kg	1.2
1,3-Dichlorobenzene	ND	7.8	ug/kg	1.0
1,4-Dichlorobenzene	ND	7.8	ug/kg	1.0
trans-1,2-Dichloroethene	ND	7.8	ug/kg	0.93
Dichlorodifluoromethane	ND	7.8	ug/kg	1.0
1,1-Dichloroethane	ND	7.8	ug/kg	0.90
1,2-Dichloroethane	ND	7.8	ug/kg	0.96
1,1-Dichloroethene	ND	7.8	ug/kg	1.3
1,2-Dichloropropane	ND	7.8	ug/kg	0.85
cis-1,3-Dichloropropene	ND	7.8	ug/kg	1.1
trans-1,3-Dichloropropene	ND	7.8	ug/kg	0.93
Ethylbenzene	ND	7.8	ug/kg	1.0
Methylene chloride	ND	7.8	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	7.8	ug/kg	1.1
Tetrachloroethene	ND	7.8	ug/kg	1.1
Toluene	ND	7.8	ug/kg	1.1
1,1,1-Trichloroethane	ND	7.8	ug/kg	0.76
1,1,2-Trichloroethane	ND	7.8	ug/kg	1.3
Trichloroethene	ND	7.8	ug/kg	1.0
Trichlorofluoromethane	ND	7.8	ug/kg	1.4
Vinyl chloride	ND	7.8	ug/kg	0.73

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03A-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-003 Work Order #....: K6W521AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	88	(52 - 124)
Toluene-d8	94	(72 - 127)
4-Bromofluorobenzene	90	(63 - 120)
Dibromofluoromethane	107	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-004 Work Order #....: K6W531AA Matrix.....: SOLID
 Date Sampled....: 02/06/09 Date Received...: 02/07/09 MS Run #.....: 9041024
 Prep Date.....: 02/10/09 Analysis Date...: 02/10/09
 Prep Batch #....: 9041036 Analysis Time...: 10:19
 Dilution Factor: 0.95 Initial Wgt/Vol: 5.27 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 64 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	260	ug/kg	19
Acrylonitrile	ND	260	ug/kg	27
Benzene	ND	13	ug/kg	1.8
Bromodichloromethane	ND	13	ug/kg	1.5
Bromoform	ND	13	ug/kg	1.2
Bromomethane	ND	13	ug/kg	1.9
2-Butanone (MEK)	ND	13	ug/kg	2.3
Carbon tetrachloride	ND	13	ug/kg	1.2
Chloroethane	ND	13	ug/kg	4.1
2-Chloroethyl vinyl ether	ND	26	ug/kg	2.0
Chloroform	ND	13	ug/kg	1.5
Chloromethane	ND	13	ug/kg	2.2
Dibromochloromethane	ND	13	ug/kg	1.9
1,2-Dichlorobenzene	ND	13	ug/kg	2.1
1,3-Dichlorobenzene	ND	13	ug/kg	1.7
1,4-Dichlorobenzene	ND	13	ug/kg	1.7
trans-1,2-Dichloroethene	ND	13	ug/kg	1.6
Dichlorodifluoromethane	ND	13	ug/kg	1.8
1,1-Dichloroethane	ND	13	ug/kg	1.5
1,2-Dichloroethane	ND	13	ug/kg	1.6
1,1-Dichloroethene	ND	13	ug/kg	2.2
1,2-Dichloropropane	ND	13	ug/kg	1.4
cis-1,3-Dichloropropene	ND	13	ug/kg	1.8
trans-1,3-Dichloropropene	ND	13	ug/kg	1.6
Ethylbenzene	ND	13	ug/kg	1.7
Methylene chloride	ND	13	ug/kg	1.8
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.9
Tetrachloroethene	ND	13	ug/kg	1.8
Toluene	ND	13	ug/kg	1.9
1,1,1-Trichloroethane	ND	13	ug/kg	1.3
1,1,2-Trichloroethane	ND	13	ug/kg	2.2
Trichloroethene	ND	13	ug/kg	1.7
Trichlorofluoromethane	ND	13	ug/kg	2.4
Vinyl chloride	ND	13	ug/kg	1.2

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-03B-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-004 Work Order #....: K6W531AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	89	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	93	(63 - 120)
Dibromofluoromethane	108	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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KA Engineering, Science and Technology

Client Sample ID: BH-SKD-03C-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-005 Work Order #....: K6W541AA Matrix.....: SOLID
 Date Sampled....: 02/06/09 Date Received...: 02/07/09 MS Run #.....: 9041024
 Prep Date.....: 02/10/09 Analysis Date...: 02/10/09
 Prep Batch #....: 9041036 Analysis Time...: 09:54
 Dilution Factor: 1 Initial Wgt/Vol: 4.99 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 69 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	320	ug/kg	22
Acrylonitrile	ND	320	ug/kg	33
Benzene	ND	16	ug/kg	2.1
Bromodichloromethane	ND	16	ug/kg	1.8
Bromoform	ND	16	ug/kg	1.4
Bromomethane	ND	16	ug/kg	2.3
2-Butanone (MEK)	ND	16	ug/kg	2.8
Carbon tetrachloride	ND	16	ug/kg	1.4
Chloroethane	ND	16	ug/kg	4.9
2-Chloroethyl vinyl ether	ND	32	ug/kg	2.5
Chloroform	ND	16	ug/kg	1.9
Chloromethane	ND	16	ug/kg	2.7
Dibromochloromethane	ND	16	ug/kg	2.3
1,2-Dichlorobenzene	ND	16	ug/kg	2.5
1,3-Dichlorobenzene	ND	16	ug/kg	2.1
1,4-Dichlorobenzene	ND	16	ug/kg	2.0
trans-1,2-Dichloroethene	ND	16	ug/kg	1.9
Dichlorodifluoromethane	ND	16	ug/kg	2.1
1,1-Dichloroethane	ND	16	ug/kg	1.8
1,2-Dichloroethane	ND	16	ug/kg	1.9
1,1-Dichloroethene	ND	16	ug/kg	2.7
1,2-Dichloropropane	ND	16	ug/kg	1.7
cis-1,3-Dichloropropene	ND	16	ug/kg	2.2
trans-1,3-Dichloropropene	ND	16	ug/kg	1.9
Ethylbenzene	ND	16	ug/kg	2.0
Methylene chloride	ND	16	ug/kg	2.1
1,1,2,2-Tetrachloroethane	ND	16	ug/kg	2.3
Tetrachloroethene	ND	16	ug/kg	2.2
Toluene	ND	16	ug/kg	2.3
1,1,1-Trichloroethane	ND	16	ug/kg	1.5
1,1,2-Trichloroethane	ND	16	ug/kg	2.6
Trichloroethene	ND	16	ug/kg	2.1
Trichlorofluoromethane	ND	16	ug/kg	2.9
Vinyl chloride	ND	16	ug/kg	1.5

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-005 Work Order #....: K6W541AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	96	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-04-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-006 Work Order #....: K6W551AA Matrix.....: SOLID
 Date Sampled....: 02/06/09 Date Received...: 02/07/09 MS Run #.....: 9041024
 Prep Date.....: 02/10/09 Analysis Date...: 02/10/09
 Prep Batch #....: 9041036 Analysis Time...: 06:14
 Dilution Factor: 0.96 Initial Wgt/Vol: 5.19 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 45 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MEL
Acrolein	ND R	180	ug/kg	12
Acrylonitrile	ND	180	ug/kg	18
Benzene	ND	8.8	ug/kg	1.2
Bromodichloromethane	ND	8.8	ug/kg	0.99
Bromoform	ND	8.8	ug/kg	0.78
Bromomethane	ND	8.8	ug/kg	1.3
2-Butanone (MEK)	ND	8.8	ug/kg	1.5
Carbon tetrachloride	ND	8.8	ug/kg	0.78
Chloroethane	ND	8.8	ug/kg	2.7
2-Chloroethyl vinyl ether	ND	18	ug/kg	1.4
Chloroform	ND	8.8	ug/kg	1.0
Chloromethane	ND	8.8	ug/kg	1.5
Dibromochloromethane	ND	8.8	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.8	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.8	ug/kg	1.2
1,4-Dichlorobenzene	ND	8.8	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.8	ug/kg	1.0
Dichlorodifluoromethane	ND	8.8	ug/kg	1.2
1,1-Dichloroethane	ND	8.8	ug/kg	1.0
1,2-Dichloroethane	ND	8.8	ug/kg	1.1
1,1-Dichloroethene	ND	8.8	ug/kg	1.5
1,2-Dichloropropane	ND	8.8	ug/kg	0.95
cis-1,3-Dichloropropene	ND	8.8	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.8	ug/kg	1.0
Ethylbenzene	ND	8.8	ug/kg	1.1
Methylene chloride	ND	8.8	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.8	ug/kg	1.3
Tetrachloroethene	ND	8.8	ug/kg	1.2
Toluene	ND	8.8	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.8	ug/kg	0.85
1,1,2-Trichloroethane	ND	8.8	ug/kg	1.5
Trichloroethene	ND	8.8	ug/kg	1.2
Trichlorofluoromethane	ND	8.8	ug/kg	1.6
Vinyl chloride	ND	8.8	ug/kg	0.82

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-04-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-006 Work Order #....: K6W551AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	97	(72 - 127)
4-Bromofluorobenzene	98	(63 - 120)
Dibromofluoromethane	107	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-05-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-007	Work Order #....: K6W561AA	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 10:43	
Dilution Factor: 0.93	Initial Wgt/Vol: 5.39 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 38	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	150	ug/kg	11
Acrylonitrile	ND	150	ug/kg	16
Benzene	11	7.5	ug/kg	1.0
Bromodichloromethane	ND	7.5	ug/kg	0.85
Bromoform	ND	7.5	ug/kg	0.67
Bromomethane	ND	7.5	ug/kg	1.1
2-Butanone (MEK)	ND	7.5	ug/kg	1.3
Carbon tetrachloride	ND	7.5	ug/kg	0.67
Chloroethane	ND	7.5	ug/kg	2.3
2-Chloroethyl vinyl ether	ND	15	ug/kg	1.2
Chloroform	ND	7.5	ug/kg	0.88
Chloromethane	ND	7.5	ug/kg	1.3
Dibromochloromethane	ND	7.5	ug/kg	1.1
1,2-Dichlorobenzene	ND	7.5	ug/kg	1.2
1,3-Dichlorobenzene	ND	7.5	ug/kg	0.99
1,4-Dichlorobenzene	ND	7.5	ug/kg	0.96
trans-1,2-Dichloroethene	ND	7.5	ug/kg	0.90
Dichlorodifluoromethane	ND	7.5	ug/kg	1.0
1,1-Dichloroethane	ND	7.5	ug/kg	0.87
1,2-Dichloroethane	ND	7.5	ug/kg	0.93
1,1-Dichloroethene	ND	7.5	ug/kg	1.3
1,2-Dichloropropane	ND	7.5	ug/kg	0.82
cis-1,3-Dichloropropene	ND	7.5	ug/kg	1.0
trans-1,3-Dichloropropene	ND	7.5	ug/kg	0.90
Ethylbenzene	ND	7.5	ug/kg	0.97
Methylene chloride	ND	7.5	ug/kg	1.0
1,1,2,2-Tetrachloroethane	ND	7.5	ug/kg	1.1
Tetrachloroethene	ND	7.5	ug/kg	1.0
Toluene	2.4 <i>J</i>	7.5	ug/kg	1.1
1,1,1-Trichloroethane	ND	7.5	ug/kg	0.73
1,1,2-Trichloroethane	ND	7.5	ug/kg	1.3
Trichloroethene	ND	7.5	ug/kg	0.99
Trichlorofluoromethane	ND	7.5	ug/kg	1.4
Vinyl chloride	ND	7.5	ug/kg	0.71

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-05-00

GC/MS Volatiles

Lot-Sample #....: C9B070192-007 Work Order #....: K6W561AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	89	(52 - 124)
Toluene-d8	98	(72 - 127)
4-Bromofluorobenzene	89	(63 - 120)
Dibromofluoromethane	110	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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EA Engineering, Science and Technology

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9B070192-008	Work Order #....: K6W571AA	Matrix.....: SOLID
Date Sampled....: 02/06/09	Date Received...: 02/07/09	MS Run #.....: 9041024
Prep Date.....: 02/10/09	Analysis Date...: 02/10/09	
Prep Batch #....: 9041036	Analysis Time...: 11:07	
Dilution Factor: 1.02	Initial Wgt/Vol.: 4.92 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 65	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	290	ug/kg	21
Acrylonitrile	ND	290	ug/kg	30
Benzene	ND	15	ug/kg	2.0
Bromodichloromethane	ND	15	ug/kg	1.6
Bromoform	ND	15	ug/kg	1.3
Bromomethane	ND	15	ug/kg	2.2
2-Butanone (MEK)	ND	15	ug/kg	2.6
Carbon tetrachloride	ND	15	ug/kg	1.3
Chloroethane	ND	15	ug/kg	4.5
2-Chloroethyl vinyl ether	ND	29	ug/kg	2.3
Chloroform	ND	15	ug/kg	1.7
Chloromethane	ND	15	ug/kg	2.5
Dibromochloromethane	ND	15	ug/kg	2.1
1,2-Dichlorobenzene	ND	15	ug/kg	2.3
1,3-Dichlorobenzene	ND	15	ug/kg	1.9
1,4-Dichlorobenzene	ND	15	ug/kg	1.9
trans-1,2-Dichloroethene	ND	15	ug/kg	1.7
Dichlorodifluoromethane	ND	15	ug/kg	1.9
1,1-Dichloroethane	ND	15	ug/kg	1.7
1,2-Dichloroethane	ND	15	ug/kg	1.8
1,1-Dichloroethene	ND	15	ug/kg	2.5
1,2-Dichloropropane	ND	15	ug/kg	1.6
cis-1,3-Dichloropropene	ND	15	ug/kg	2.0
trans-1,3-Dichloropropene	ND	15	ug/kg	1.7
Ethylbenzene	ND	15	ug/kg	1.9
Methylene chloride	ND	15	ug/kg	2.0
1,1,2,2-Tetrachloroethane	ND	15	ug/kg	2.1
Tetrachloroethene	ND	15	ug/kg	2.0
Toluene	ND	15	ug/kg	2.1
1,1,1-Trichloroethane	ND	15	ug/kg	1.4
1,1,2-Trichloroethane	ND	15	ug/kg	2.4
Trichloroethene	ND	15	ug/kg	1.9
Trichlorofluoromethane	ND	15	ug/kg	2.7
Vinyl chloride	ND	15	ug/kg	1.4

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9B070192-008 Work Order #....: K6W571AA Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

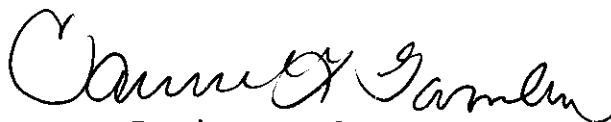
EA/MES Sparrows Point 18001868

Lot #: C9B100188

Megan Simon

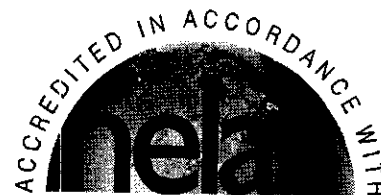
Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 18, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE

EA Engineering Sparrows Point

LOT # C9B100188

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 10, 2009. The coolers were received within the proper temperature range.

The methanol vial from sample BH-SED-08-00 was received with the septa top pushed into the vial. This vial was not needed for analysis.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard 2C30217K; but were within expected performance range for these compounds: 1,2,4-trichlorobenzene 26.8%, 1,2-dibromo-3-chloropropane 32.2%, methylene chloride 27.3%, and naphthalene 29.8%.

The following compound had the %D > 25% in the calibration verification standard 1C30217K; but was within expected performance range for the compound: acrolein 29.4%.

GC/MS Semivolatiles:

Due to the concentration of target compounds detected, the samples were analyzed at a dilution. The samples had the surrogates diluted out.

The matrix spike and matrix spike duplicate had the surrogates and the spikes diluted out.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

CASE NARRATIVE
EA Engineering
Sparrows Point

LOT # C9B100188

Metals:

Sample BH-SED-10-00 was analyzed at a dilution for zinc.

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

General Chemistry:

The samples were analyzed at a dilution for TOC.

For TOC, the CCB recovered above the control limit due to carry-over from the previous sample. The method blank and samples immediately following are treated the same as the CCB samples and were within the acceptable limits. Therefore all results are reported.

The matrix spike duplicate recovered below the control limit for total cyanide. The RPD was outside the control limit.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.

TestAmerica Laboratories, Inc.

February 25, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9B100188

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on February 11th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/11/09 ETR No: 130106			
784480	BH-SED-06-00	02/09/09	SOLID
784481	BH-SED-07-00	02/09/09	SOLID
784482	BH-SED-08-00	02/09/09	SOLID
784483	BH-SED-09-00	02/09/09	SOLID
784484	BH-SED-10-00	02/09/09	SOLID
784485	BH-SED-11-00	02/09/09	SOLID
784486	BH-SED-12-00	02/09/09	SOLID
784487	BH-SED-13A-00	02/09/09	SOLID
784488	BH-SED-13B-00	02/09/09	SOLID
784489	BH-SED-13C-00	02/09/09	SOLID
784490	BH-SED-14-00	02/09/09	SOLID
784491	DUP-2	02/09/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

ASTM Methods D2216 (Moisture Content) and D422 (Particle Size):

There were no exceptions to the method quality control criteria during the analyses of these samples.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Pentkowski". The signature is fluid and cursive, with the first name "Ron" being more prominent than the last name "Pentkowski".

Ron Pentkowski
Project Manager

Enclosure

METHODS SUMMARY

C9B100188

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B100188

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K607K	001	BH-SED-06-00	02/09/09	10:15
K607W	002	BH-SED-07-00	02/09/09	10:45
K607X	003	BH-SED-08-00	02/09/09	11:10
K6071	004	BH-SED-09-00	02/09/09	11:55
K6072	005	BH-SED-10-00	02/09/09	12:15
K6074	006	BH-SED-11-00	02/09/09	12:40
K6077	007	BH-SED-12-00	02/09/09	13:05
K608A	008	BH-SED-13A-00	02/09/09	13:55
K608C	009	BH-SED-13B-00	02/09/09	14:40
K608F	010	BH-SED-13C-00	02/09/09	15:05
K608H	011	BH-SED-14-00	02/09/09	15:25
K608J	012	DUP-2	02/09/09	

NOTE(S) :

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

Client: EA Engineering Science, and Technology, Inc. 15 Loveton Circle Sparks, MD 21152				Project Manager: Frank Barranco Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250				Parameters/Method Numbers for Analysis												Chain of Custody Record									
Project Name: Sparrows Point Offshore Areas Project#: 14534.06								Laboratory: TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber																					
Page 1 of 1				Sediment Samples																									
Date	Time	Water	Sediment	Sample Identification												No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids					Remarks
2/9/09	1015		X	BH-SED-06-00	6	X	X	X	X	X	X	X	X	X	X									SEE PROJECT SPECIFIC ANALYTE LIST					
	1045			BH-SED-07-00	6																								
	1110			BH-SED-08-00																									
	1155			BH-SED-09-00																									
	1215			BH-SED-10-00																									
	1240			BH-SED-11-00																									
	1305			BH-SED-12-00																									
	1355			BH-SED-13A-00																									
	1440			BH-SED-13B-00																									
	1505			BH-SED-13C-00																									
	1525			BH-SED-14-00																									
				DUP-2																									
Sampled by: (Signature) Todd Ward				Date/Time 2/9/09 1525				Relinquished by: (Signature) Todd Ward				Date/Time 2/9/09 1800				SEDIMENT													
Relinquished by: (Signature) Patrick R. Baur				Date/Time 2/10/09 0930																									

Cooler Receipt Form
TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013
Cooler Rec'd & Opened for Temp. Check on: 2/10/09
Coolers Opened and Unpacked on: 2/10/09 By: PLF
TestAmerica Pittsburgh Lot Number: C9B100188 (Signature)

- | | Yes | No | NA |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Were custody seals on the outside of the cooler? _____ | | | <input checked="" type="checkbox"/> |
| If YES, how many and where? Quantity ____ Location _____ | | | |
| Were signatures and date correct? _____ | | | |
| 2. Were custody papers included inside the cooler? _____ | <input checked="" type="checkbox"/> | | |
| 3. Were custody papers properly filled out (ink, signed, match labels)? _____ | <input checked="" type="checkbox"/> | | |
| 4. Did you sign the custody papers in the appropriate place? _____ | <input checked="" type="checkbox"/> | | |
| 5. Was shippers packing slip attached to this form? _____ | <input checked="" type="checkbox"/> | | |
| 6. Were packing materials used? _____ | <input checked="" type="checkbox"/> | | |
| If YES, what type? <u>Bubble Wrap</u> | | | |
| 7. Were the samples received within the acceptable temperature range? _____ | <input checked="" type="checkbox"/> | | |
| 8. Were the samples appropriately preserved? _____ | | | <input checked="" type="checkbox"/> |
| 9. Were all bottles sealed in separate plastic bags? _____ | | <input checked="" type="checkbox"/> | |
| 10. Did all bottles arrive in good condition (unbroken)? _____ | | <input checked="" type="checkbox"/> | |
| 11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____ | <input checked="" type="checkbox"/> | | |
| 12. Did all bottle labels and/or tags agree with custody papers? _____ | <input checked="" type="checkbox"/> | | |
| 13. Were correct bottles used for tests indicated? _____ | <input checked="" type="checkbox"/> | | |
| 14. Were all VOA vials checked for the presence of air bubbles? _____ | | | <input checked="" type="checkbox"/> |
| 15. Was a sufficient amount of sample sent in each bottle? _____ | <input checked="" type="checkbox"/> | | |
| 16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO | | | |

Explain any discrepancies: _____

Level 2 Review _____
Was contacted on _____ by _____ to resolve discrepancies.

C9B100188

10

(1 - 150)

FedEx *US Airbill*
Express

FedEx Tracking Number **8565 6932 6570**

NA AGCA

15238
PA-US
PIT

RECIPIENT: PEEL HERE

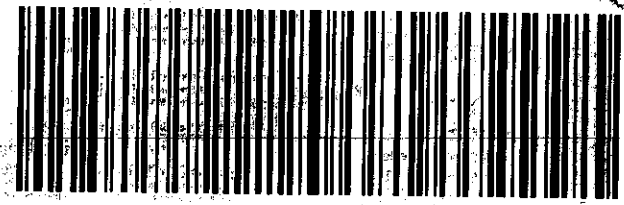
1 From This portion can be removed for Recipient's records.
Date **2/9/09** FedEx Tracking Number **856569326570**
Sender's Name **TODD WARD** Phone **410 746-1250**
Company **E A ENGINEERING SCIENCE & TECH**
Address **15 LOVETON CIR**
City **SPARKS GLENCOE** State **MD** ZIP **21152**
2 Your Internal Billing Reference **1453406**
3 To
Recipient's Name **SAMPLE MANAGEMENT** Phone **412 963-2468**
Company **TEST AMERICA - PITTSBURGH**
Recipient's Address **301 ALPHA DRIVE**
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Address **RIDC PARK**
To request a package be held at a specific FedEx location, print FedEx address here.
City **PITTSBURGH** State **PA** ZIP **15238**



8565 6932 6570

0326961324

- 4a Exp
☒ FedE Next business day unless:
☐ FedE Second business day unless:
4b Exp
☐ FedE Next business day unless:
5 Pac
☐ FedE Envelope
6 Spe
☐ SATI Not even FedEx Service, if:
☒ No
7 Pay
☒ Sendi Acct. No. I will be
8 NEV
☐ No Sig. Required Package may be left without obtaining a signature for delivery.
☐ Anyone at recipient's address may sign for delivery. Fee applies.
☐ If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.



emp# 361599 09FEB09 17:54

02:10 0759
182 A
RT

519

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-10
Analytical Due Date: 2009-03-09
Report Due Date: 2009-03-10

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-06-00 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K607K1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K607K1AV METAL: XX

SMP#: 2 CLIENT ID: BH-SED-07-00 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K607W1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K607W1AV METAL: XX

SMP#: 3 CLIENT ID: BH-SED-08-00 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K607X1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K607X1AV METAL: XX

SMP#: 4 CLIENT ID: BH-SED-09-00 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K60711AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K60711AV METAL: XX

SMP#: 5 CLIENT ID: BH-SED-10-00 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EAMES SPARROW EAMES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-10
Analytical Due Date: 2009-03-09
Report Due Date: 2009-03-10

WORKORDER K60721AW

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K60721AV

METAL: XX

SMP#: 6 CLIENT ID: BH-SED-11-00 DATE SAMPLED: 20090209 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K60741AW

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K60741AV

METAL: XX

SMP#: 7 CLIENT ID: BH-SED-12-00 DATE SAMPLED: 20090209 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K60771AW

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K60771AV

METAL: XX

SMP#: 8 CLIENT ID: BH-SED-13A-00 DATE SAMPLED: 20090209 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K608A1AW

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K608A1AV

METAL: XX

SMP#: 9 CLIENT ID: BH-SED-13B-00 DATE SAMPLED: 20090209 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K608C1AW

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K608C1AV

METAL: XX

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-10
Analytical Due Date: 2009-03-09
Report Due Date: 2009-03-10

SMP#: 10 CLIENT ID: BH-SED-13C-00 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K608F1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K608F1AV METAL: XX

SMP#: 11 CLIENT ID: BH-SED-14-00 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K608H1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K608H1AV METAL: XX

SMP#: 12 CLIENT ID: DUP-2 DATE SAMPLED: 20090209 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K608J1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K608J1AV METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: Patricia B. Gant DATE: 2/10/09 1200

RECEIVED FOR LAB BY: [Signature] DATE: 2/10/09 1030

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-001	Work Order #....: K607K1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 11:44	
Dilution Factor: 0.99	Initial Wgt/Vol: 5.03 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 59	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	240	ug/kg	17
Acrylonitrile	ND	240	ug/kg	25
Benzene	ND	12	ug/kg	1.6
Bromodichloromethane	ND	12	ug/kg	1.3
Bromoform	ND	12	ug/kg	1.1
Bromomethane	ND	12	ug/kg	1.8
2-Butanone (MEK)	ND	12	ug/kg	2.1
Carbon tetrachloride	ND	12	ug/kg	1.1
Chloroethane	ND	12	ug/kg	3.7
2-Chloroethyl vinyl ether	ND	24	ug/kg	1.9
Chloroform	ND	12	ug/kg	1.4
Chloromethane	ND	12	ug/kg	2.0
Dibromochloromethane	ND	12	ug/kg	1.7
1,2-Dichlorobenzene	ND	12	ug/kg	1.9
1,3-Dichlorobenzene	ND	12	ug/kg	1.6
1,4-Dichlorobenzene	ND	12	ug/kg	1.5
trans-1,2-Dichloroethene	ND	12	ug/kg	1.4
Dichlorodifluoromethane	ND	12	ug/kg	1.6
1,1-Dichloroethane	ND	12	ug/kg	1.4
1,2-Dichloroethane	ND	12	ug/kg	1.5
1,1-Dichloroethene	ND	12	ug/kg	2.0
1,2-Dichloropropane	ND	12	ug/kg	1.3
cis-1,3-Dichloropropene	ND	12	ug/kg	1.6
trans-1,3-Dichloropropene	ND	12	ug/kg	1.4
Ethylbenzene	ND	12	ug/kg	1.5
Methylene chloride	ND	12	ug/kg	1.6
1,1,2,2-Tetrachloroethane	ND	12	ug/kg	1.7
Tetrachloroethene	ND	12	ug/kg	1.6
Toluene	ND	12	ug/kg	1.7
1,1,1-Trichloroethane	ND	12	ug/kg	1.2
1,1,2-Trichloroethane	ND	12	ug/kg	2.0
Trichloroethene	ND	12	ug/kg	1.6
Trichlorofluoromethane	ND	12	ug/kg	2.2
Vinyl chloride	ND	12	ug/kg	1.1

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-06-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-001 Work Order #...: K607K1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	98	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-002	Work Order #....: K607W1AX	Matrix.....: SOLID
Date Sampled...: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 12:09	
Dilution Factor: 0.82	Initial Wgt/Vol: 6.07 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 51	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	170	ug/kg	12
Acrylonitrile	ND	170	ug/kg	17
Benzene	ND	8.3	ug/kg	1.1
Bromodichloromethane	ND	8.3	ug/kg	0.93
Bromoform	ND	8.3	ug/kg	0.73
Bromomethane	ND	8.3	ug/kg	1.2
2-Butanone (MEK)	ND	8.3	ug/kg	1.5
Carbon tetrachloride	ND	8.3	ug/kg	0.74
Chloroethane	ND	8.3	ug/kg	2.6
2-Chloroethyl vinyl ether	ND	17	ug/kg	1.3
Chloroform	ND	8.3	ug/kg	0.97
Chloromethane	ND	8.3	ug/kg	1.4
Dibromochloromethane	ND	8.3	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.3	ug/kg	1.3
1,3-Dichlorobenzene	ND	8.3	ug/kg	1.1
1,4-Dichlorobenzene	ND	8.3	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.3	ug/kg	0.99
Dichlorodifluoromethane	ND	8.3	ug/kg	1.1
1,1-Dichloroethane	ND	8.3	ug/kg	0.95
1,2-Dichloroethane	ND	8.3	ug/kg	1.0
1,1-Dichloroethene	ND	8.3	ug/kg	1.4
1,2-Dichloropropane	ND	8.3	ug/kg	0.90
cis-1,3-Dichloropropene	ND	8.3	ug/kg	1.1
trans-1,3-Dichloropropene	ND	8.3	ug/kg	0.99
Ethylbenzene	ND	8.3	ug/kg	1.1
Methylene chloride	ND	8.3	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	8.3	ug/kg	1.2
Tetrachloroethene	ND	8.3	ug/kg	1.1
Toluene	ND	8.3	ug/kg	1.2
1,1,1-Trichloroethane	ND	8.3	ug/kg	0.81
1,1,2-Trichloroethane	ND	8.3	ug/kg	1.4
Trichloroethene	ND	8.3	ug/kg	1.1
Trichlorofluoromethane	ND	8.3	ug/kg	1.5
Vinyl chloride	ND	8.3	ug/kg	0.78

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-002 Work Order #...: K607W1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	88	(52 - 124)
Toluene-d8	97	(72 - 127)
4-Bromofluorobenzene	94	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-003	Work Order #....: K607X1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 12:33	
Dilution Factor: 0.93	Initial Wgt/Vol: 5.39 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 64	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	260	ug/kg	18
Acrylonitrile	ND	260	ug/kg	27
Benzene	ND	13	ug/kg	1.7
Bromodichloromethane	ND	13	ug/kg	1.4
Bromoform	ND	13	ug/kg	1.1
Bromomethane	ND	13	ug/kg	1.9
2-Butanone (MEK)	ND	13	ug/kg	2.3
Carbon tetrachloride	ND	13	ug/kg	1.2
Chloroethane	ND	13	ug/kg	4.0
2-Chloroethyl vinyl ether	ND	26	ug/kg	2.0
Chloroform	ND	13	ug/kg	1.5
Chloromethane	ND	13	ug/kg	2.2
Dibromochloromethane	ND	13	ug/kg	1.8
1,2-Dichlorobenzene	ND	13	ug/kg	2.1
1,3-Dichlorobenzene	ND	13	ug/kg	1.7
1,4-Dichlorobenzene	ND	13	ug/kg	1.6
trans-1,2-Dichloroethene	ND	13	ug/kg	1.5
Dichlorodifluoromethane	ND	13	ug/kg	1.7
1,1-Dichloroethane	ND	13	ug/kg	1.5
1,2-Dichloroethane	ND	13	ug/kg	1.6
1,1-Dichloroethene	ND	13	ug/kg	2.2
1,2-Dichloropropane	ND	13	ug/kg	1.4
cis-1,3-Dichloropropene	ND	13	ug/kg	1.8
trans-1,3-Dichloropropene	ND	13	ug/kg	1.5
Ethylbenzene	ND	13	ug/kg	1.7
Methylene chloride	ND	13	ug/kg	1.7
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.9
Tetrachloroethene	ND	13	ug/kg	1.8
Toluene	ND	13	ug/kg	1.9
1,1,1-Trichloroethane	ND	13	ug/kg	1.3
1,1,2-Trichloroethane	ND	13	ug/kg	2.1
Trichloroethene	ND	13	ug/kg	1.7
Trichlorofluoromethane	ND	13	ug/kg	2.4
Vinyl chloride	ND	13	ug/kg	1.2

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-003 Work Order #...: K607X1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	104	(72 - 127)
4-Bromofluorobenzene	101	(63 - 120)
Dibromofluoromethane	108	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-004	Work Order #....: K60711AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 12:58	
Dilution Factor: 0.97	Initial Wgt/Vol: 5.18 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 49	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	190	ug/kg	13
Acrylonitrile	ND	190	ug/kg	20
Benzene	ND	9.5	ug/kg	1.3
Bromodichloromethane	ND	9.5	ug/kg	1.1
Bromoform	ND	9.5	ug/kg	0.84
Bromomethane	ND	9.5	ug/kg	1.4
2-Butanone (MEK)	ND	9.5	ug/kg	1.7
Carbon tetrachloride	ND	9.5	ug/kg	0.85
Chloroethane	ND	9.5	ug/kg	2.9
2-Chloroethyl vinyl ether	ND	19	ug/kg	1.5
Chloroform	ND	9.5	ug/kg	1.1
Chloromethane	ND	9.5	ug/kg	1.6
Dibromochloromethane	ND	9.5	ug/kg	1.3
1,2-Dichlorobenzene	ND	9.5	ug/kg	1.5
1,3-Dichlorobenzene	ND	9.5	ug/kg	1.2
1,4-Dichlorobenzene	ND	9.5	ug/kg	1.2
trans-1,2-Dichloroethene	ND	9.5	ug/kg	1.1
Dichlorodifluoromethane	ND	9.5	ug/kg	1.3
1,1-Dichloroethane	ND	9.5	ug/kg	1.1
1,2-Dichloroethane	ND	9.5	ug/kg	1.2
1,1-Dichloroethene	ND	9.5	ug/kg	1.6
1,2-Dichloropropane	ND	9.5	ug/kg	1.0
cis-1,3-Dichloropropene	ND	9.5	ug/kg	1.3
trans-1,3-Dichloropropene	ND	9.5	ug/kg	1.1
Ethylbenzene	ND	9.5	ug/kg	1.2
Methylene chloride	ND	9.5	ug/kg	1.3
1,1,2,2-Tetrachloroethane	ND	9.5	ug/kg	1.4
Tetrachloroethene	ND	9.5	ug/kg	1.3
Toluene	ND	9.5	ug/kg	1.4
1,1,1-Trichloroethane	ND	9.5	ug/kg	0.92
1,1,2-Trichloroethane	ND	9.5	ug/kg	1.6
Trichloroethene	ND	9.5	ug/kg	1.3
Trichlorofluoromethane	ND	9.5	ug/kg	1.7
Vinyl chloride	ND	9.5	ug/kg	0.89

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-004 Work Order #...: K60711AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	97	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-005	Work Order #....: K60721AX	Matrix.....: SOLID
Date Sampled...: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 13:23	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.85 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 59	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	250	ug/kg	18
Acrylonitrile	ND	250	ug/kg	26
Benzene	ND	13	ug/kg	1.7
Bromodichloromethane	ND	13	ug/kg	1.4
Bromoform	ND	13	ug/kg	1.1
Bromomethane	ND	13	ug/kg	1.9
2-Butanone (MEK)	ND	13	ug/kg	2.2
Carbon tetrachloride	ND	13	ug/kg	1.1
Chloroethane	ND	13	ug/kg	3.9
2-Chloroethyl vinyl ether	ND	25	ug/kg	2.0
Chloroform	ND	13	ug/kg	1.5
Chloromethane	ND	13	ug/kg	2.2
Dibromochloromethane	ND	13	ug/kg	1.8
1,2-Dichlorobenzene	ND	13	ug/kg	2.0
1,3-Dichlorobenzene	ND	13	ug/kg	1.7
1,4-Dichlorobenzene	ND	13	ug/kg	1.6
trans-1,2-Dichloroethene	ND	13	ug/kg	1.5
Dichlorodifluoromethane	ND	13	ug/kg	1.7
1,1-Dichloroethane	ND	13	ug/kg	1.5
1,2-Dichloroethane	ND	13	ug/kg	1.6
1,1-Dichloroethene	ND	13	ug/kg	2.2
1,2-Dichloropropane	ND	13	ug/kg	1.4
cis-1,3-Dichloropropene	ND	13	ug/kg	1.7
trans-1,3-Dichloropropene	ND	13	ug/kg	1.5
Ethylbenzene	ND	13	ug/kg	1.6
Methylene chloride	ND	13	ug/kg	1.7
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.8
Tetrachloroethene	ND	13	ug/kg	1.7
Toluene	ND	13	ug/kg	1.9
1,1,1-Trichloroethane	ND	13	ug/kg	1.2
1,1,2-Trichloroethane	ND	13	ug/kg	2.1
Trichloroethene	ND	13	ug/kg	1.7
Trichlorofluoromethane	ND	13	ug/kg	2.3
Vinyl chloride	ND	13	ug/kg	1.2

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-005 Work Order #....: K60721AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	94	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-006	Work Order #....: K60741AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 13:47	
Dilution Factor: 0.88	Initial Wgt/Vol: 5.71 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 58	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	10	ug/kg	1.4
Bromodichloromethane	ND	10	ug/kg	1.2
Bromoform	ND	10	ug/kg	0.92
Bromomethane	ND	10	ug/kg	1.5
2-Butanone (MEK)	ND	10	ug/kg	1.8
Carbon tetrachloride	ND	10	ug/kg	0.93
Chloroethane	ND	10	ug/kg	3.2
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.6
Chloroform	ND	10	ug/kg	1.2
Chloromethane	ND	10	ug/kg	1.8
Dibromochloromethane	ND	10	ug/kg	1.5
1,2-Dichlorobenzene	ND	10	ug/kg	1.7
1,3-Dichlorobenzene	ND	10	ug/kg	1.4
1,4-Dichlorobenzene	ND	10	ug/kg	1.3
trans-1,2-Dichloroethene	ND	10	ug/kg	1.2
Dichlorodifluoromethane	ND	10	ug/kg	1.4
1,1-Dichloroethane	ND	10	ug/kg	1.2
1,2-Dichloroethane	ND	10	ug/kg	1.3
1,1-Dichloroethene	ND	10	ug/kg	1.8
1,2-Dichloropropane	ND	10	ug/kg	1.1
cis-1,3-Dichloropropene	ND	10	ug/kg	1.4
trans-1,3-Dichloropropene	ND	10	ug/kg	1.2
Ethylbenzene	ND	10	ug/kg	1.3
Methylene chloride	ND	10	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	10	ug/kg	1.5
Tetrachloroethene	ND	10	ug/kg	1.4
Toluene	ND	10	ug/kg	1.5
1,1,1-Trichloroethane	ND	10	ug/kg	1.0
1,1,2-Trichloroethane	ND	10	ug/kg	1.7
Trichloroethene	ND	10	ug/kg	1.4
Trichlorofluoromethane	ND	10	ug/kg	1.9
Vinyl chloride	ND	10	ug/kg	0.98

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-006 Work Order #...: K60741AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	102	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-007	Work Order #....: K60771AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 14:12	
Dilution Factor: 0.97	Initial Wgt/Vol: 5.16 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 50	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	190	ug/kg	14
Acrylonitrile	ND	190	ug/kg	20
Benzene	ND	9.7	ug/kg	1.3
Bromodichloromethane	ND	9.7	ug/kg	1.1
Bromoform	ND	9.7	ug/kg	0.86
Bromomethane	ND	9.7	ug/kg	1.4
2-Butanone (MEK)	ND	9.7	ug/kg	1.7
Carbon tetrachloride	ND	9.7	ug/kg	0.86
Chloroethane	ND	9.7	ug/kg	3.0
2-Chloroethyl vinyl ether	ND	19	ug/kg	1.5
Chloroform	ND	9.7	ug/kg	1.1
Chloromethane	ND	9.7	ug/kg	1.6
Dibromochloromethane	ND	9.7	ug/kg	1.4
1,2-Dichlorobenzene	ND	9.7	ug/kg	1.5
1,3-Dichlorobenzene	ND	9.7	ug/kg	1.3
1,4-Dichlorobenzene	ND	9.7	ug/kg	1.2
trans-1,2-Dichloroethene	ND	9.7	ug/kg	1.2
Dichlorodifluoromethane	ND	9.7	ug/kg	1.3
1,1-Dichloroethane	ND	9.7	ug/kg	1.1
1,2-Dichloroethane	ND	9.7	ug/kg	1.2
1,1-Dichloroethene	ND	9.7	ug/kg	1.6
1,2-Dichloropropane	ND	9.7	ug/kg	1.1
cis-1,3-Dichloropropene	ND	9.7	ug/kg	1.3
trans-1,3-Dichloropropene	ND	9.7	ug/kg	1.2
Ethylbenzene	ND	9.7	ug/kg	1.2
Methylene chloride	ND	9.7	ug/kg	1.3
1,1,2,2-Tetrachloroethane	ND	9.7	ug/kg	1.4
Tetrachloroethene	ND	9.7	ug/kg	1.3
Toluene	ND	9.7	ug/kg	1.4
1,1,1-Trichloroethane	ND	9.7	ug/kg	0.94
1,1,2-Trichloroethane	ND	9.7	ug/kg	1.6
Trichloroethene	ND	9.7	ug/kg	1.3
Trichlorofluoromethane	ND	9.7	ug/kg	1.8
Vinyl chloride	ND	9.7	ug/kg	0.91

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-007 Work Order #...: K60771AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	97	(63 - 120)
Dibromofluoromethane	102	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-13A-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-008	Work Order #....: K608A1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 14:36	
Dilution Factor: 1.01	Initial Wgt/Vol: 4.95 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 24	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	130	ug/kg	9.3
Acrylonitrile	ND	130	ug/kg	14
Benzene	79	6.6	ug/kg	0.89
Bromodichloromethane	ND	6.6	ug/kg	0.74
Bromoform	ND	6.6	ug/kg	0.59
Bromomethane	ND	6.6	ug/kg	0.98
2-Butanone (MEK)	ND	6.6	ug/kg	1.2
Carbon tetrachloride	ND	6.6	ug/kg	0.59
Chloroethane	ND	6.6	ug/kg	2.1
2-Chloroethyl vinyl ether	ND	13	ug/kg	1.0
Chloroform	ND	6.6	ug/kg	0.77
Chloromethane	ND	6.6	ug/kg	1.1
Dibromochloromethane	ND	6.6	ug/kg	0.94
1,2-Dichlorobenzene	ND	6.6	ug/kg	1.1
1,3-Dichlorobenzene	ND	6.6	ug/kg	0.87
1,4-Dichlorobenzene	ND	6.6	ug/kg	0.84
trans-1,2-Dichloroethene	ND	6.6	ug/kg	0.79
Dichlorodifluoromethane	ND	6.6	ug/kg	0.88
1,1-Dichloroethane	ND	6.6	ug/kg	0.76
1,2-Dichloroethane	ND	6.6	ug/kg	0.81
1,1-Dichloroethene	ND	6.6	ug/kg	1.1
1,2-Dichloropropane	ND	6.6	ug/kg	0.72
cis-1,3-Dichloropropene	ND	6.6	ug/kg	0.90
trans-1,3-Dichloropropene	ND	6.6	ug/kg	0.79
Ethylbenzene	4.9 J	6.6	ug/kg	0.85
Methylene chloride	ND	6.6	ug/kg	0.89
1,1,2,2-Tetrachloroethane	ND	6.6	ug/kg	0.95
Tetrachloroethene	ND	6.6	ug/kg	0.90
Toluene	57	6.6	ug/kg	0.97
1,1,1-Trichloroethane	ND	6.6	ug/kg	0.64
1,1,2-Trichloroethane	ND	6.6	ug/kg	1.1
Trichloroethene	ND	6.6	ug/kg	0.87
Trichlorofluoromethane	ND	6.6	ug/kg	1.2
Vinyl chloride	ND	6.6	ug/kg	0.62

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-13A-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-008 Work Order #...: K608A1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	110	(63 - 120)
Dibromofluoromethane	98	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-009	Work Order #....: K608C1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 15:01	
Dilution Factor: 0.98	Initial Wgt/Vol: 5.1 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 73	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	370	ug/kg	26
Acrylonitrile	ND	370	ug/kg	38
Benzene	ND	18	ug/kg	2.5
Bromodichloromethane	ND	18	ug/kg	2.1
Bromoform	ND	18	ug/kg	1.6
Bromomethane	ND	18	ug/kg	2.7
2-Butanone (MEK)	ND	18	ug/kg	3.2
Carbon tetrachloride	ND	18	ug/kg	1.6
Chloroethane	ND	18	ug/kg	5.7
2-Chloroethyl vinyl ether	ND	37	ug/kg	2.8
Chloroform	ND	18	ug/kg	2.1
Chloromethane	ND	18	ug/kg	3.1
Dibromochloromethane	ND	18	ug/kg	2.6
1,2-Dichlorobenzene	ND	18	ug/kg	2.9
1,3-Dichlorobenzene	ND	18	ug/kg	2.4
1,4-Dichlorobenzene	ND	18	ug/kg	2.3
trans-1,2-Dichloroethene	ND	18	ug/kg	2.2
Dichlorodifluoromethane	ND	18	ug/kg	2.4
1,1-Dichloroethane	ND	18	ug/kg	2.1
1,2-Dichloroethane	ND	18	ug/kg	2.2
1,1-Dichloroethene	ND	18	ug/kg	3.1
1,2-Dichloropropane	ND	18	ug/kg	2.0
cis-1,3-Dichloropropene	ND	18	ug/kg	2.5
trans-1,3-Dichloropropene	ND	18	ug/kg	2.2
Ethylbenzene	ND	18	ug/kg	2.4
Methylene chloride	ND	18	ug/kg	2.5
1,1,2,2-Tetrachloroethane	ND	18	ug/kg	2.6
Tetrachloroethene	ND	18	ug/kg	2.5
Toluene	ND	18	ug/kg	2.7
1,1,1-Trichloroethane	ND	18	ug/kg	1.8
1,1,2-Trichloroethane	ND	18	ug/kg	3.0
Trichloroethene	ND	18	ug/kg	2.4
Trichlorofluoromethane	ND	18	ug/kg	3.4
Vinyl chloride	ND	18	ug/kg	1.7

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-009 Work Order #...: K608ClAX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	104	(72 - 127)
4-Bromofluorobenzene	90	(63 - 120)
Dibromofluoromethane	101	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13C-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-010	Work Order #....: K608F1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 15:25	
Dilution Factor: 0.94	Initial Wgt/Vol: 5.33 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 78	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	420	ug/kg	30
Acrylonitrile	ND	420	ug/kg	44
Benzene	ND	21	ug/kg	2.8
Bromodichloromethane	ND	21	ug/kg	2.4
Bromoform	ND	21	ug/kg	1.9
Bromomethane	ND	21	ug/kg	3.1
2-Butanone (MEK)	ND	21	ug/kg	3.7
Carbon tetrachloride	ND	21	ug/kg	1.9
Chloroethane	ND	21	ug/kg	6.5
2-Chloroethyl vinyl ether	ND	42	ug/kg	3.3
Chloroform	ND	21	ug/kg	2.5
Chloromethane	ND	21	ug/kg	3.6
Dibromochloromethane	ND	21	ug/kg	3.0
1,2-Dichlorobenzene	ND	21	ug/kg	3.4
1,3-Dichlorobenzene	ND	21	ug/kg	2.8
1,4-Dichlorobenzene	ND	21	ug/kg	2.7
trans-1,2-Dichloroethene	ND	21	ug/kg	2.5
Dichlorodifluoromethane	ND	21	ug/kg	2.8
1,1-Dichloroethane	ND	21	ug/kg	2.4
1,2-Dichloroethane	ND	21	ug/kg	2.6
1,1-Dichloroethene	ND	21	ug/kg	3.6
1,2-Dichloropropane	ND	21	ug/kg	2.3
cis-1,3-Dichloropropene	ND	21	ug/kg	2.9
trans-1,3-Dichloropropene	ND	21	ug/kg	2.5
Ethylbenzene	ND	21	ug/kg	2.7
Methylene chloride	ND	21	ug/kg	2.8
1,1,2,2-Tetrachloroethane	ND	21	ug/kg	3.0
Tetrachloroethene	ND	21	ug/kg	2.9
Toluene	ND	21	ug/kg	3.1
1,1,1-Trichloroethane	ND	21	ug/kg	2.0
1,1,2-Trichloroethane	ND	21	ug/kg	3.5
Trichloroethene	ND	21	ug/kg	2.8
Trichlorofluoromethane	ND	21	ug/kg	3.9
Vinyl chloride	ND	21	ug/kg	2.0

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-13C-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-010 Work Order #...: K608F1AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	87	(52 - 124)
Toluene-d8	103	(72 - 127)
4-Bromofluorobenzene	92	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-14-00

GC/MS Volatiles

Lot-Sample #... : C9B100188-011	Work Order #... : K608H1AX	Matrix..... : SOLID
Date Sampled... : 02/09/09	Date Received... : 02/10/09	MS Run #..... :
Prep Date..... : 02/17/09	Analysis Date... : 02/17/09	
Prep Batch #... : 9048090	Analysis Time... : 15:49	
Dilution Factor: 1.01	Initial Wgt/Vol: 4.97 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 76	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	420	ug/kg	30
Acrylonitrile	ND	420	ug/kg	44
Benzene	ND	21	ug/kg	2.9
Bromodichloromethane	ND	21	ug/kg	2.4
Bromoform	ND	21	ug/kg	1.9
Bromomethane	ND	21	ug/kg	3.1
2-Butanone (MEK)	ND	21	ug/kg	3.7
Carbon tetrachloride	ND	21	ug/kg	1.9
Chloroethane	ND	21	ug/kg	6.6
2-Chloroethyl vinyl ether	ND	42	ug/kg	3.3
Chloroform	ND	21	ug/kg	2.5
Chloromethane	ND	21	ug/kg	3.6
Dibromochloromethane	ND	21	ug/kg	3.0
1,2-Dichlorobenzene	ND	21	ug/kg	3.4
1,3-Dichlorobenzene	ND	21	ug/kg	2.8
1,4-Dichlorobenzene	ND	21	ug/kg	2.7
trans-1,2-Dichloroethene	ND	21	ug/kg	2.5
Dichlorodifluoromethane	ND	21	ug/kg	2.8
1,1-Dichloroethane	ND	21	ug/kg	2.4
1,2-Dichloroethane	ND	21	ug/kg	2.6
1,1-Dichloroethene	ND	21	ug/kg	3.6
1,2-Dichloropropane	ND	21	ug/kg	2.3
cis-1,3-Dichloropropene	ND	21	ug/kg	2.9
trans-1,3-Dichloropropene	ND	21	ug/kg	2.5
Ethylbenzene	ND	21	ug/kg	2.7
Methylene chloride	ND	21	ug/kg	2.9
1,1,2,2-Tetrachloroethane	ND	21	ug/kg	3.1
Tetrachloroethene	ND	21	ug/kg	2.9
Toluene	ND	21	ug/kg	3.1
1,1,1-Trichloroethane	ND	21	ug/kg	2.1
1,1,2-Trichloroethane	ND	21	ug/kg	3.5
Trichloroethene	ND	21	ug/kg	2.8
Trichlorofluoromethane	ND	21	ug/kg	3.9
Vinyl chloride	ND	21	ug/kg	2.0

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-14-00

GC/MS Volatiles

Lot-Sample #...: C9B100188-011 Work Order #...: K608H1AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	87	(52 - 124)
Toluene-d8	107	(72 - 127)
4-Bromofluorobenzene	90	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #....: C9B100188-012	Work Order #....: K608J1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 16:13	
Dilution Factor: 0.97	Initial Wgt/Vol: 5.17 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 75	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	390	ug/kg	28
Acrylonitrile	ND	390	ug/kg	40
Benzene	ND	20	ug/kg	2.6
Bromodichloromethane	ND	20	ug/kg	2.2
Bromoform	ND	20	ug/kg	1.7
Bromomethane	ND	20	ug/kg	2.9
2-Butanone (MEK)	ND	20	ug/kg	3.4
Carbon tetrachloride	ND	20	ug/kg	1.7
Chloroethane	ND	20	ug/kg	6.0
2-Chloroethyl vinyl ether	ND	39	ug/kg	3.0
Chloroform	ND	20	ug/kg	2.3
Chloromethane	ND	20	ug/kg	3.3
Dibromochloromethane	ND	20	ug/kg	2.8
1,2-Dichlorobenzene	ND	20	ug/kg	3.1
1,3-Dichlorobenzene	ND	20	ug/kg	2.6
1,4-Dichlorobenzene	ND	20	ug/kg	2.5
trans-1,2-Dichloroethene	ND	20	ug/kg	2.3
Dichlorodifluoromethane	ND	20	ug/kg	2.6
1,1-Dichloroethane	ND	20	ug/kg	2.2
1,2-Dichloroethane	ND	20	ug/kg	2.4
1,1-Dichloroethene	ND	20	ug/kg	3.3
1,2-Dichloropropane	ND	20	ug/kg	2.1
cis-1,3-Dichloropropene	ND	20	ug/kg	2.6
trans-1,3-Dichloropropene	ND	20	ug/kg	2.3
Ethylbenzene	ND	20	ug/kg	2.5
Methylene chloride	ND	20	ug/kg	2.6
1,1,2,2-Tetrachloroethane	ND	20	ug/kg	2.8
Tetrachloroethene	ND	20	ug/kg	2.7
Toluene	ND	20	ug/kg	2.8
1,1,1-Trichloroethane	ND	20	ug/kg	1.9
1,1,2-Trichloroethane	ND	20	ug/kg	3.2
Trichloroethene	ND	20	ug/kg	2.6
Trichlorofluoromethane	ND	20	ug/kg	3.6
Vinyl chloride	ND	20	ug/kg	1.8

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #...: C9B100188-012 Work Order #...: K608J1AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	84	(63 - 120)
Dibromofluoromethane	103	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B100188

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-06-00	86	99	91	98	00
02	BH-SED-07-00	88	97	94	100	00
03	BH-SED-08-00	91	104	101	108	00
04	BH-SED-09-00	90	97	91	106	00
05	BH-SED-10-00	90	99	94	106	00
06	BH-SED-11-00	91	100	103	102	00
07	BH-SED-12-00	90	95	97	102	00
08	BH-SED-13A-00	90	105	110	98	00
09	BH-SED-13B-00	85	104	90	101	00
10	BH-SED-13C-00	87	103	92	100	00
11	BH-SED-14-00	87	107	90	104	00
12	DUP-2	90	100	84	103	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT SDG No:

Lot #: C9B100188

Extraction: XXA4EQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	METHOD BLK. K69QN1AA	97	97	91	94	00
02	LCS K69QN1AC	99	104	111	101	00
03	LCSD K69QN1AD	100	105	108	96	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170000

WO #: K69QN1AC

BATCH: 9048090

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	48.1	120	59 - 129	
Trichloroethene	40.0	37.5	94	76 - 119	
Benzene	40.0	42.1	105	77 - 120	
Toluene	40.0	42.5	106	78 - 124	
Chlorobenzene	40.0	41.2	103	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170000

WO #: K69QN1AD

BATCH: 9048090

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	46.4	116	59 - 129	
Trichloroethene	40.0	39.1	98	76 - 119	
Benzene	40.0	43.6	109	77 - 120	
Toluene	40.0	44.9	112	78 - 124	
Chlorobenzene	40.0	41.6	104	79 - 120	

NOTES (S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K69QN1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3021701.D

Lot Number: C9B100188

Date Analyzed: 02/17/09

Time Analyzed: 08:28

Matrix: SOLID

Date Extracted: 02/17/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	BH-SED-06-00	K607K1AX	3021709.D	02/17/09	11:44
02	BH-SED-07-00	K607W1AX	3021710.D	02/17/09	12:09
03	BH-SED-08-00	K607X1AX	3021711.D	02/17/09	12:33
04	BH-SED-09-00	K60711AX	3021712.D	02/17/09	12:58
05	BH-SED-10-00	K60721AX	3021713.D	02/17/09	13:23
06	BH-SED-11-00	K60741AX	3021714.D	02/17/09	13:47
07	BH-SED-12-00	K60771AX	3021715.D	02/17/09	14:12
08	BH-SED-13A-00	K608A1AX	3021716.D	02/17/09	14:36
09	BH-SED-13B-00	K608C1AX	3021717.D	02/17/09	15:01
10	BH-SED-13C-00	K608F1AX	3021718.D	02/17/09	15:25
11	BH-SED-14-00	K608H1AX	3021719.D	02/17/09	15:49
12	DUP-2	K608J1AX	3021720.D	02/17/09	16:13
13	CHECK SAMPLE	K69QN1AC C	3021703.D	02/17/09	09:17
14	DUPLICATE CHECK	K69QN1AD L	3021704.D	02/17/09	09:41
15					
16					
17					
18					
19					
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24					
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26					
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28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: C9B100188
MB Lot-Sample #: C9B170000-090

Work Order #....: K69QN1AA

Matrix.....: SOLID

Analysis Date...: 02/17/09
Dilution Factor: 1

Prep Date.....: 02/17/09

Prep Batch #....: 9048090

Initial Wgt/Vol: 5 g

Analyst ID.....: 010099

Analysis Time...: 08:28

Final Wgt/Vol...: 5 mL

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	97	(52 - 124)
Toluene-d8	97	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B100188

Work Order #...: K69QN1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	94	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B100188
 Lab File ID (Standard): 2C30217K Date Analyzed: 02/17/09
 Instrument ID: HP3 Time Analyzed: 0748
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3(DCB) AREA #	RT #
12 HOUR STD	450701	7.40	103279	10.49	227105	12.81
UPPER LIMIT	901402	7.60	206558	10.69	454210	13.01
LOWER LIMIT	225351	7.20	51640	10.29	113553	12.61
EPA SAMPLE NO.						
01 INTRA-LAB BL	601876	7.42	140539	10.49	208672	12.81
02 INTRA-LAB CH	381280	7.41	98308	10.49	220361	12.81
03 INTRA-LAB CH	398585	7.40	99951	10.49	217599	12.81
04 BH-SED-06-00	587863	7.41	139217	10.49	209070	12.82
05 BH-SED-07-00	583858	7.41	128019	10.49	212946	12.81
06 BH-SED-08-00	569638	7.41	121723	10.49	199916	12.81
07 BH-SED-09-00	581082	7.41	130806	10.49	208563	12.82
08 BH-SED-10-00	570537	7.41	130205	10.49	219113	12.81
09 BH-SED-11-00	733641	7.41	162811	10.49	266971	12.81
10 BH-SED-12-00	637939	7.41	142125	10.49	239183	12.81
11 BH-SED-13A-0	604767	7.41	126150	10.49	257343	12.81
12 BH-SED-13B-0	619815	7.41	127209	10.49	181544	12.81
13 BH-SED-13C-0	632527	7.41	135988	10.49	220271	12.81
14 BH-SED-14-00	553772	7.41	113807	10.49	161637	12.82
15 DUP-2	482839	7.41	102663	10.49	141516	12.82
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-001	Work Order #....: K607K1AC	Matrix.....: SOLID
Date Sampled...: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 19:50	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 59	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	760	160	ug/kg	24
2-Methylnaphthalene	1400	160	ug/kg	32
Naphthalene	20000	160	ug/kg	23
Acenaphthylene	8400	160	ug/kg	32
Acenaphthene	4200	160	ug/kg	26
Fluorene	2500	160	ug/kg	24
Phenanthrene	16000	160	ug/kg	19
Anthracene	18000	800	ug/kg	28
Fluoranthene	43000 E	160	ug/kg	14
Pyrene	32000	160	ug/kg	43
Benzo (a) anthracene	32000	160	ug/kg	26
Chrysene	31000	160	ug/kg	28
Benzo (b) fluoranthene	31000	160	ug/kg	33
Benzo (k) fluoranthene	17000	160	ug/kg	34
Benzo (a) pyrene	37000 E	160	ug/kg	45
Indeno (1,2,3-cd) pyrene	19000	160	ug/kg	8.9
Dibenzo (a,h) anthracene	6300	160	ug/kg	36
Benzo (ghi) perylene	20000	160	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-001	Work Order #....: K607K2AC	Matrix.....: SOLID
Date Sampled...: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/19/09	
Prep Batch #....: 9048010	Analysis Time...: 16:06	
Dilution Factor: 15	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 59	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	560	240	ug/kg	37
2-Methylnaphthalene	1000	240	ug/kg	48
Naphthalene	16000	240	ug/kg	35
Acenaphthylene	6400	240	ug/kg	48
Acenaphthene	3000	240	ug/kg	39
Fluorene	1900	240	ug/kg	36
Phenanthrene	11000	240	ug/kg	29
Anthracene	13000	1200	ug/kg	42
Fluoranthene	44000	240	ug/kg	20
Pyrene	28000	240	ug/kg	64
Benzo (a) anthracene	24000	240	ug/kg	39
Chrysene	23000	240	ug/kg	42
Benzo (b) fluoranthene	23000	240	ug/kg	49
Benzo (k) fluoranthene	12000	240	ug/kg	50
Benzo (a) pyrene	26000	240	ug/kg	68
Indeno (1, 2, 3-cd) pyrene	12000	240	ug/kg	13
Dibenzo (a, h) anthracene	3800	240	ug/kg	53
Benzo (ghi) perylene	13000	240	ug/kg	18

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-002	Work Order #....: K607W1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 20:29	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 51	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	630	140	ug/kg	20
2-Methylnaphthalene	990	140	ug/kg	27
Naphthalene	14000	140	ug/kg	20
Acenaphthylene	8100	140	ug/kg	27
Acenaphthene	4600	140	ug/kg	22
Fluorene	2400	140	ug/kg	20
Phenanthrene	15000	140	ug/kg	16
Anthracene	21000	670	ug/kg	24
Fluoranthene	36000 E	140	ug/kg	11
Pyrene	27000	140	ug/kg	36
Benzo (a) anthracene	28000 E	140	ug/kg	22
Chrysene	29000 E	140	ug/kg	24
Benzo (b) fluoranthene	24000	140	ug/kg	27
Benzo (k) fluoranthene	18000	140	ug/kg	28
Benzo (a) pyrene	31000 E	140	ug/kg	38
Indeno (1,2,3-cd) pyrene	17000	140	ug/kg	7.4
Dibenzo (a,h) anthracene	4300	140	ug/kg	30
Benzo (ghi) perylene	18000	140	ug/kg	9.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Semivolatiles

Lot-Sample #... : C9B100188-002	Work Order #... : K607W2AC	Matrix..... : SOLID
Date Sampled... : 02/09/09	Date Received... : 02/10/09	MS Run #..... : 9048002
Prep Date..... : 02/17/09	Analysis Date... : 02/24/09	
Prep Batch #... : 9048010	Analysis Time... : 03:12	
Dilution Factor : 200	Initial Wgt/Vol : 30 g	Final Wgt/Vol... : 0.5 mL
% Moisture..... : 51	Analyst ID..... : 007062	Instrument ID... : 722
	Method..... : SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1200 J	2700	ug/kg	410
2-Methylnaphthalene	1800 J	2700	ug/kg	530
Naphthalene	28000	2700	ug/kg	390
Acenaphthylene	16000	2700	ug/kg	540
Acenaphthene	8400	2700	ug/kg	430
Fluorene	4700	2700	ug/kg	410
Phenanthrene	28000	2700	ug/kg	320
Anthracene	40000	13000	ug/kg	470
Fluoranthene	140000	2700	ug/kg	230
Pyrene	75000	2700	ug/kg	720
Benzo (a) anthracene	61000	2700	ug/kg	430
Chrysene	63000	2700	ug/kg	470
Benzo (b) fluoranthene	59000	2700	ug/kg	550
Benzo (k) fluoranthene	31000	2700	ug/kg	560
Benzo (a) pyrene	56000	2700	ug/kg	760
Indeno (1,2,3-cd) pyrene	31000	2700	ug/kg	150
Dibenzo (a,h) anthracene	5100	2700	ug/kg	590
Benzo (ghi) perylene	31000	2700	ug/kg	200

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

GC/MS Semivolatiles

Lot-Sample #... : C9B100188-003	Work Order #... : K607X1AC	Matrix..... : SOLID
Date Sampled... : 02/09/09	Date Received... : 02/10/09	MS Run #..... : 9048002
Prep Date..... : 02/17/09	Analysis Date... : 02/18/09	
Prep Batch #... : 9048010	Analysis Time... : 20:48	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol... : 0.5 mL
% Moisture..... : 64	Analyst ID..... : 403801	Instrument ID... : 732
	Method..... : SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	300	190	ug/kg	28
2-Methylnaphthalene	670	190	ug/kg	36
Naphthalene	12000	190	ug/kg	27
Acenaphthylene	2000	190	ug/kg	37
Acenaphthene	760	190	ug/kg	30
Fluorene	610	190	ug/kg	28
Phenanthrene	3600	190	ug/kg	22
Anthracene	3700	920	ug/kg	32
Fluoranthene	14000	190	ug/kg	16
Pyrene	9100	190	ug/kg	49
Benzo (a) anthracene	8100	190	ug/kg	30
Chrysene	7600	190	ug/kg	32
Benzo (b) fluoranthene	8800	190	ug/kg	37
Benzo (k) fluoranthene	3600	190	ug/kg	39
Benzo (a) pyrene	8800	190	ug/kg	52
Indeno (1,2,3-cd) pyrene	4900	190	ug/kg	10
Dibenzo (a,h) anthracene	1500	190	ug/kg	41
Benzo (ghi) perylene	5400	190	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-004	Work Order #....: K60711AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 21:08	
Dilution Factor: 9.9	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 49	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	350	130	ug/kg	20
2-Methylnaphthalene	610	130	ug/kg	25
Naphthalene	13000	130	ug/kg	19
Acenaphthylene	3500	130	ug/kg	26
Acenaphthene	1100	130	ug/kg	21
Fluorene	1000	130	ug/kg	20
Phenanthrene	8100	130	ug/kg	15
Anthracene	6500	640	ug/kg	23
Fluoranthene	28000 E	130	ug/kg	11
Pyrene	17000	130	ug/kg	34
Benzo (a) anthracene	19000	130	ug/kg	21
Chrysene	18000	130	ug/kg	23
Benzo (b) fluoranthene	20000	130	ug/kg	26
Benzo (k) fluoranthene	11000	130	ug/kg	27
Benzo (a) pyrene	25000	130	ug/kg	36
Indeno (1,2,3-cd) pyrene	14000	130	ug/kg	7.1
Dibenzo (a,h) anthracene	4900	130	ug/kg	28
Benzo (ghi) perylene	15000	130	ug/kg	9.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

GC/MS Semivolatiles

Lot-Sample #... : C9B100188-004	Work Order #... : K60712AC	Matrix..... : SOLID
Date Sampled... : 02/09/09	Date Received.. : 02/10/09	MS Run #..... : 9048002
Prep Date..... : 02/17/09	Analysis Date.. : 02/19/09	
Prep Batch #... : 9048010	Analysis Time.. : 16:25	
Dilution Factor : 14.9	Initial Wgt/Vol : 30.2 g	Final Wgt/Vol... : 0.5 mL
% Moisture..... : 49	Analyst ID..... : 403801	Instrument ID... : 732
	Method..... : SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	290	200	ug/kg	29
2-Methylnaphthalene	490	200	ug/kg	38
Naphthalene	10000	200	ug/kg	28
Acenaphthylene	2600	200	ug/kg	39
Acenaphthene	850	200	ug/kg	31
Fluorene	860	200	ug/kg	29
Phenanthrene	6300	200	ug/kg	23
Anthracene	4900	960	ug/kg	34
Fluoranthene	29000	200	ug/kg	16
Pyrene	17000	200	ug/kg	52
Benzo (a) anthracene	17000	200	ug/kg	31
Chrysene	16000	200	ug/kg	34
Benzo (b) fluoranthene	16000	200	ug/kg	39
Benzo (k) fluoranthene	8600	200	ug/kg	41
Benzo (a) pyrene	18000	200	ug/kg	55
Indeno (1,2,3-cd) pyrene	8900	200	ug/kg	11
Dibenzo (a,h) anthracene	2800	200	ug/kg	43
Benzo (ghi) perylene	9700	200	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-005	Work Order #....: K60721AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 21:27	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 59	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	590	170	ug/kg	25
2-Methylnaphthalene	680	170	ug/kg	32
Naphthalene	9900	170	ug/kg	24
Acenaphthylene	3000	170	ug/kg	33
Acenaphthene	1800	170	ug/kg	26
Fluorene	1700	170	ug/kg	25
Phenanthrene	6400	170	ug/kg	20
Anthracene	4900	810	ug/kg	29
Fluoranthene	31000	170	ug/kg	14
Pyrene	21000	170	ug/kg	44
Benzo (a) anthracene	15000	170	ug/kg	26
Chrysene	14000	170	ug/kg	29
Benzo (b) fluoranthene	13000	170	ug/kg	33
Benzo (k) fluoranthene	8100	170	ug/kg	34
Benzo (a) pyrene	15000	170	ug/kg	46
Indeno (1,2,3-cd) pyrene	7400	170	ug/kg	9.1
Dibenzo (a,h) anthracene	2600	170	ug/kg	36
Benzo (ghi) perylene	7900	170	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-006	Work Order #....: K60741AC	Matrix.....: SOLID
Date Sampled...: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 21:46	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 58	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	760	160	ug/kg	24
2-Methylnaphthalene	1600	160	ug/kg	31
Naphthalene	32000 E	160	ug/kg	23
Acenaphthylene	1600	160	ug/kg	31
Acenaphthene	1200	160	ug/kg	25
Fluorene	1600	160	ug/kg	24
Phenanthrene	5600	160	ug/kg	19
Anthracene	4300	780	ug/kg	28
Fluoranthene	26000	160	ug/kg	13
Pyrene	17000	160	ug/kg	42
Benzo (a) anthracene	13000	160	ug/kg	25
Chrysene	11000	160	ug/kg	28
Benzo (b) fluoranthene	10000	160	ug/kg	32
Benzo (k) fluoranthene	5900	160	ug/kg	33
Benzo (a) pyrene	12000	160	ug/kg	44
Indeno (1, 2, 3-cd) pyrene	5400	160	ug/kg	8.7
Dibenzo (a, h) anthracene	1900	160	ug/kg	35
Benzo (ghi) perylene	6000	160	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-006	Work Order #....: K60742AC	Matrix.....: SOLID
Date Sampled...: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/19/09	
Prep Batch #....: 9048010	Analysis Time...: 16:46	
Dilution Factor: 12.5	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 58	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	850	200	ug/kg	30
2-Methylnaphthalene	1700	200	ug/kg	39
Naphthalene	37000	200	ug/kg	29
Acenaphthylene	1800	200	ug/kg	39
Acenaphthene	1300	200	ug/kg	32
Fluorene	1800	200	ug/kg	30
Phenanthrene	5700	200	ug/kg	24
Anthracene	4400	980	ug/kg	35
Fluoranthene	28000	200	ug/kg	17
Pyrene	19000	200	ug/kg	52
Benzo (a) anthracene	14000	200	ug/kg	32
Chrysene	13000	200	ug/kg	34
Benzo (b) fluoranthene	12000	200	ug/kg	40
Benzo (k) fluoranthene	4600	200	ug/kg	41
Benzo (a) pyrene	12000	200	ug/kg	55
Indeno (1,2,3-cd) pyrene	5000	200	ug/kg	11
Dibenzo (a,h) anthracene	1700	200	ug/kg	43
Benzo (ghi) perylene	5400	200	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-00

GC/MS Semivolatiles

Lot-Sample #... : C9B100188-007	Work Order #... : K60771AC	Matrix..... : SOLID
Date Sampled... : 02/09/09	Date Received... : 02/10/09	MS Run #..... : 9048002
Prep Date..... : 02/17/09	Analysis Date... : 02/18/09	
Prep Batch #... : 9048010	Analysis Time... : 22:06	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol... : 0.5 mL
% Moisture..... : 50	Analyst ID..... : 403801	Instrument ID... : 732
	Method..... : SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	180	130	ug/kg	20
2-Methylnaphthalene	370	130	ug/kg	26
Naphthalene	5300	130	ug/kg	19
Acenaphthylene	950	130	ug/kg	26
Acenaphthene	240	130	ug/kg	21
Fluorene	350	130	ug/kg	20
Phenanthrene	1700	130	ug/kg	16
Anthracene	1200	660	ug/kg	23
Fluoranthene	7500	130	ug/kg	11
Pyrene	5000	130	ug/kg	35
Benzo (a) anthracene	4800	130	ug/kg	21
Chrysene	4800	130	ug/kg	23
Benzo (b) fluoranthene	4900	130	ug/kg	27
Benzo (k) fluoranthene	3000	130	ug/kg	28
Benzo (a) pyrene	5500	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	3100	130	ug/kg	7.3
Dibenzo (a,h) anthracene	1000	130	ug/kg	29
Benzo (ghi) perylene	3500	130	ug/kg	9.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13A-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-008	Work Order #....: K608A1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 18:52	
Dilution Factor: 15	Initial Wgt/Vol: 20 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 24	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	830	130	ug/kg	20
2-Methylnaphthalene	1600	130	ug/kg	26
Naphthalene	16000	130	ug/kg	19
Acenaphthylene	1500	130	ug/kg	26
Acenaphthene	910	130	ug/kg	21
Fluorene	1800	130	ug/kg	20
Phenanthrene	7900	130	ug/kg	16
Anthracene	2200	650	ug/kg	23
Fluoranthene	8900	130	ug/kg	11
Pyrene	6000	130	ug/kg	35
Benzo (a) anthracene	4000	130	ug/kg	21
Chrysene	3300	130	ug/kg	23
Benzo (b) fluoranthene	3600	130	ug/kg	27
Benzo (k) fluoranthene	1800	130	ug/kg	27
Benzo (a) pyrene	3600	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	1700	130	ug/kg	7.2
Dibenzo (a,h) anthracene	530	130	ug/kg	29
Benzo (ghi) perylene	1800	130	ug/kg	9.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-009	Work Order #....: K608C1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 22:25	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 73	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	140 J	250	ug/kg	38
2-Methylnaphthalene	280	250	ug/kg	49
Naphthalene	1700	250	ug/kg	36
Acenaphthylene	200 J	250	ug/kg	50
Acenaphthene	98 J	250	ug/kg	40
Fluorene	150 J	250	ug/kg	38
Phenanthrene	530	250	ug/kg	30
Anthracene	280 J	1200	ug/kg	44
Fluoranthene	1100	250	ug/kg	21
Pyrene	790	250	ug/kg	66
Benzo (a) anthracene	580	250	ug/kg	40
Chrysene	640	250	ug/kg	44
Benzo (b) fluoranthene	1500	250	ug/kg	50
Benzo (k) fluoranthene	350	250	ug/kg	52
Benzo (a) pyrene	630	250	ug/kg	70
Indeno (1,2,3-cd) pyrene	400	250	ug/kg	14
Dibenzo (a,h) anthracene	86 J	250	ug/kg	55
Benzo (ghi) perylene	460	250	ug/kg	18

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13C-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-010	Work Order #....: K608F1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 22:44	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 78	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	70 J	300	ug/kg	45
2-Methylnaphthalene	140 J	300	ug/kg	59
Naphthalene	770	300	ug/kg	43
Acenaphthylene	110 J	300	ug/kg	59
Acenaphthene	59 J	300	ug/kg	48
Fluorene	100 J	300	ug/kg	45
Phenanthrene	310	300	ug/kg	36
Anthracene	160 J	1500	ug/kg	52
Fluoranthene	590	300	ug/kg	25
Pyrene	430	300	ug/kg	79
Benzo (a) anthracene	310	300	ug/kg	48
Chrysene	310	300	ug/kg	52
Benzo (b) fluoranthene	1400	300	ug/kg	60
Benzo (k) fluoranthene	190 J	300	ug/kg	62
Benzo (a) pyrene	320	300	ug/kg	84
Indeno (1,2,3-cd) pyrene	180 J	300	ug/kg	16
Dibenzo (a,h) anthracene	ND	300	ug/kg	66
Benzo (ghi) perylene	220 J	300	ug/kg	22

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-14-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-011	Work Order #....: K608H1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 23:04	
Dilution Factor: 9.9	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 76	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	170 J	280	ug/kg	42
2-Methylnaphthalene	320	280	ug/kg	55
Naphthalene	1500	280	ug/kg	40
Acenaphthylene	200 J	280	ug/kg	55
Acenaphthene	240 J	280	ug/kg	45
Fluorene	320	280	ug/kg	42
Phenanthrene	860	280	ug/kg	33
Anthracene	390 J	1400	ug/kg	49
Fluoranthene	1700	280	ug/kg	23
Pyrene	1200	280	ug/kg	74
Benzo (a) anthracene	770	280	ug/kg	44
Chrysene	880	280	ug/kg	49
Benzo (b) fluoranthene	1700	280	ug/kg	56
Benzo (k) fluoranthene	290	280	ug/kg	58
Benzo (a) pyrene	730	280	ug/kg	78
Indeno (1,2,3-cd) pyrene	400	280	ug/kg	15
Dibenzo (a,h) anthracene	120 J	280	ug/kg	61
Benzo (ghi) perylene	510	280	ug/kg	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: DUP-2

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-012	Work Order #....: K608J1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 23:23	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 75	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	150 J	270	ug/kg	41
2-Methylnaphthalene	320	270	ug/kg	53
Naphthalene	2000	270	ug/kg	39
Acenaphthylene	210 J	270	ug/kg	53
Acenaphthene	94 J	270	ug/kg	43
Fluorene	220 J	270	ug/kg	40
Phenanthrene	640	270	ug/kg	32
Anthracene	330 J	1300	ug/kg	47
Fluoranthene	1200	270	ug/kg	23
Pyrene	910	270	ug/kg	71
Benzo (a) anthracene	650	270	ug/kg	43
Chrysene	750	270	ug/kg	47
Benzo (b) fluoranthene	1600	270	ug/kg	54
Benzo (k) fluoranthene	420	270	ug/kg	56
Benzo (a) pyrene	730	270	ug/kg	75
Indeno (1,2,3-cd) pyrene	440	270	ug/kg	15
Dibenzo (a,h) anthracene	130 J	270	ug/kg	59
Benzo (ghi) perylene	550	270	ug/kg	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B100188

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-06-00	0 D	0 D	0 D	0 D	0 D	0 D	06
02	BH-SED-06-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
03	BH-SED-07-00	0 D	0 D	0 D	0 D	0 D	0 D	06
04	BH-SED-07-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
05	BH-SED-08-00	0 D	0 D	0 D	0 D	0 D	0 D	06
06	BH-SED-09-00	0 D	0 D	0 D	0 D	0 D	0 D	06
07	BH-SED-09-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
08	BH-SED-10-00	0 D	0 D	0 D	0 D	0 D	0 D	06
09	BH-SED-11-00	0 D	0 D	0 D	0 D	0 D	0 D	06
10	BH-SED-11-00 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
11	BH-SED-12-00	0 D	0 D	0 D	0 D	0 D	0 D	06
12	BH-SED-13A-00	0 D	0 D	0 D	0 D	0 D	0 D	06
13	BH-SED-13B-00	0 D	0 D	0 D	0 D	0 D	0 D	06
14	BH-SED-13C-00	0 D	0 D	0 D	0 D	0 D	0 D	06
15	BH-SED-14-00	0 D	0 D	0 D	0 D	0 D	0 D	06
16	DUP-2	0 D	0 D	0 D	0 D	0 D	0 D	06
17	METHOD BLK. K69LH1AA	46	61	45	44	53	48	00
18	LCS K69LH1AC	51	63	54	49	57	64	00
19	BH-SED-13A-00 D	0 D	0 D	0 D	0 D	0 D	0 D	06
20	BH-SED-13A-00 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170000

WO #: K69LH1AC

BATCH: 9048010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	181	54	39- 105	
2-Chlorophenol	333	181	54	40- 105	
1,4-Dichlorobenzene	333	166	50	41- 101	
N-Nitrosodi-n-propylamine	333	174	52	42- 108	
1,2,4-Trichlorobenzene	333	168	51	41- 105	
4-Chloro-3-methylphenol	333	189	57	43- 110	
Acenaphthene	333	183	55	42- 104	
4-Nitrophenol	333	216	65	27- 131	
2,4-Dinitrotoluene	333	205	62	43- 118	
Pentachlorophenol	333	188	57	13- 125	
Pyrene	333	198	60	39- 113	
4-Methylphenol	667	357	54	43- 107	
Hexachloroethane	333	165	49	40- 102	
Naphthalene	333	171	51	42- 104	
4-Bromophenyl phenyl ethe	333	187	56	43- 111	
Butyl benzyl phthalate	333	184	55	40- 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-13A-00

Level: (low/med) LOW

Lot #: C9B100188

WO #: K608A1A0

BATCH: 9048010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
4-Methylphenol	1310	37		0*	43 - 107	NC DIL
Hexachloroethane	656	ND		0*	40 - 102	NC DIL
Naphthalene	656	16000		0*	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	656	ND		0*	43 - 111	NC DIL
Butyl benzyl phthalate	656	ND		0*	40 - 117	NC DIL
Phenol	656	ND		0*	39 - 105	NC DIL
2-Chlorophenol	656	ND		0*	40 - 105	NC DIL
1,4-Dichlorobenzene	656	ND		0*	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	656	ND		0*	42 - 108	NC DIL
1,2,4-Trichlorobenzene	656	ND		0*	41 - 105	NC DIL
4-Chloro-3-methylphenol	656	ND		0*	43 - 110	NC DIL
Acenaphthene	656	910		0*	42 - 104	NC DIL
4-Nitrophenol	656	ND		0*	27 - 131	NC DIL
2,4-Dinitrotoluene	656	ND		0*	48 - 118	NC DIL
Pentachlorophenol	656	ND		0*	18 - 125	NC DIL
Pyrene	656	6000		0*	39 - 113	NC DIL

NOTES(S) :

NC The recovery and/or RPD were not calculated.

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

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

RPD: 0 out of 0 outside limits
 Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-13A-00

Level: (low/med) LOW

Lot #: C9B100188

WO #: K608A1A1

BATCH: 9048010

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	656		0*		40	39 - 105	NC DIL
2-Chlorophenol	656		0*		37	40 - 105	NC DIL
1,4-Dichlorobenzene	656		0*		32	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	656		0*		32	42 - 108	NC DIL
1,2,4-Trichlorobenzene	656		0*		36	41 - 105	NC DIL
4-Chloro-3-methylphenol	656		0*		31	43 - 110	NC DIL
Acenaphthene	656		0*		34	42 - 104	NC DIL
4-Nitrophenol	656		0*		33	27 - 131	NC DIL
2,4-Dinitrotoluene	656		0*		33	48 - 118	NC DIL
Pentachlorophenol	656		0*		34	18 - 125	NC DIL
Pyrene	656		0*		28	39 - 113	NC DIL
4-Methylphenol	656		0*		36	43 - 107	NC DIL
Hexachloroethane	656		0*		34	40 - 102	NC DIL
Naphthalene	656		0*		25	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	656		0*		20	43 - 111	NC DIL
Butyl benzyl phthalate	656		0*		34	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

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

RPD: 0 out of 16 outside limits
 Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

K69LH1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: D0218017.

Lot Number: C9B100138

Date Analyzed: 02/18/09

Time Analyzed: 20:10

Matrix: SOLID

Date Extracted: 02/17/09

GC Column: DB5

ID: .32

Extraction Method:

Instrument ID: 732

Level: (low/med) LOW

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

CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
=====	=====	=====	=====	=====
01 BH-SED-06-00	K607K1AC	D0218006.	02/18/09	19:50
02 BH-SED-06-00	K607K2AC	D0219001.	02/19/09	16:06
03 BH-SED-07-00	K607W1AC	D0218007.	02/18/09	20:29
04 BH-SED-07-00	K607W2AC	F0223037.	02/24/09	03:12
05 BH-SED-08-00	K607X1AC	D0218008.	02/18/09	20:48
06 BH-SED-09-00	K60711AC	D0218009.	02/18/09	21:08
07 BH-SED-09-00	K60712AC	D0219002.	02/19/09	16:25
08 BH-SED-10-00	K60721AC	D0218010.	02/18/09	21:27
09 BH-SED-11-00	K60741AC	D0218011.	02/18/09	21:46
10 BH-SED-11-00	K60742AC	D0219004.	02/19/09	16:46
11 BH-SED-12-00	K60771AC	D0218012.	02/18/09	22:06
12 BH-SED-13A-00	K608A1AC	D0218003.	02/18/09	18:52
13 BH-SED-13A-00	K608A1A0 S	D0218004.	02/18/09	19:11
14 BH-SED-13A-00	K608A1A1 D	D0218005.	02/18/09	19:31
15 BH-SED-13B-00	K608C1AC	D0218013.	02/18/09	22:25
16 BH-SED-13C-00	K608F1AC	D0218014.	02/18/09	22:44
17 BH-SED-14-00	K608H1AC	D0218015.	02/18/09	23:04
18 DUP-2	K608J1AC	D0218016.	02/18/09	23:23
19 CHECK SAMPLE	K69LH1AC C	D0218002.	02/18/09	18:32
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B100188
MB Lot-Sample #: C9B170000-010

Work Order #...: K69LH1AA

Matrix.....: SOLID

Analysis Date...: 02/18/09
Dilution Factor: 0.5

Prep Date.....: 02/17/09
Prep Batch #...: 9048010
Initial Wgt/Vol: 30 g
Analyst ID.....: 403801

Analysis Time...: 20:10
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 732

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a,h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	46	(27 - 110)
Terphenyl-d14	61	(21 - 130)
2-Fluorobiphenyl	45	(28 - 108)
2-Fluorophenol	44	(28 - 107)
Phenol-d5	53	(30 - 112)
2,4,6-Tribromophenol	48	(21 - 116)

NOTE(S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9B100188
 Lab File ID (Standard): D0218IC3 Date Analyzed: 02/18/09
 Instrument ID: 732 Time Analyzed: 1507

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	171163	4.28	773289	5.27	535669	6.63
UPPER LIMIT	342326	4.78	1546578	5.77	1071338	7.13
LOWER LIMIT	85582	3.78	386645	4.77	267835	6.13
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	190741	4.28	846411	5.27	560098	6.63
02 BH-SED-13A-0	167244	4.28	716402	5.27	506070	6.63
03 BH-SED-13A-0	189654	4.29	808076	5.27	566112	6.63
04 BH-SED-13A-0	179277	4.28	766775	5.27	542772	6.63
05 BH-SED-06-00	151846	4.29	654169	5.27	459368	6.63
06 INTRALAB BLA	177115	4.29	731829	5.27	503839	6.63
07 BH-SED-07-00	158558	4.29	689763	5.27	481189	6.63
08 BH-SED-08-00	171676	4.28	723861	5.27	506498	6.63
09 BH-SED-09-00	159397	4.29	678780	5.27	489690	6.63
10 BH-SED-10-00	156003	4.28	677333	5.27	492467	6.63
11 BH-SED-11-00	170864	4.28	729813	5.27	532388	6.63
12 BH-SED-12-00	151184	4.28	645368	5.27	449513	6.63
13 BH-SED-13B-0	156141	4.28	661072	5.27	453706	6.63
14 BH-SED-13C-0	162022	4.28	695883	5.27	476904	6.63
15 BH-SED-14-00	153538	4.28	645920	5.27	441797	6.63
16 DUP-2	167018	4.28	702402	5.27	488279	6.63
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9B100188
 Lab File ID (Standard): D0218IC3 Date Analyzed: 02/18/09
 Instrument ID: 732 Time Analyzed: 1507

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	896523	7.77	727325	9.80	566991	11.06
UPPER LIMIT	1793046	8.27	1454650	10.30	1133982	11.56
LOWER LIMIT	448262	7.27	363663	9.30	283496	10.56
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	938208	7.77	803318	9.81	498124	11.07
02 BH-SED-13A-0	837162	7.77	702694	9.80	535324	11.06
03 BH-SED-13A-0	961599	7.77	774725	9.80	598184	11.07
04 BH-SED-13A-0	967427	7.77	900867	9.81	774017	11.07
05 BH-SED-06-00	807811	7.77	794748	9.81	621960	11.08
06 INTRALAB BLA	864558	7.77	772105	9.81	694482	11.07
07 BH-SED-07-00	875888	7.77	859564	9.81	734197	11.08
08 BH-SED-08-00	902048	7.77	854383	9.81	750412	11.07
09 BH-SED-09-00	888372	7.77	1019417	10.24	779310	11.08
10 BH-SED-10-00	887457	7.78	906686	9.82	792161	11.10
11 BH-SED-11-00	915838	7.78	907887	9.82	736040	11.10
12 BH-SED-12-00	825851	7.78	781815	9.82	743456	11.09
13 BH-SED-13B-0	845151	7.77	795480	9.81	714557	11.09
14 BH-SED-13C-0	875069	7.77	824039	9.81	764600	11.08
15 BH-SED-14-00	805041	7.78	770628	9.82	709758	11.09
16 DUP-2	881567	7.78	822269	9.82	749815	11.09
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9B100188
 Lab File ID (Standard): D0219CC3 Date Analyzed: 02/19/09
 Instrument ID: 732 Time Analyzed: 1506

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	116825	4.28	539910	5.27	415730	6.62
UPPER LIMIT	233650	4.78	1079820	5.77	831460	7.12
LOWER LIMIT	58413	3.78	269955	4.77	207865	6.12
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-06-00	131490	4.28	606818	5.27	476342	6.61
02 BH-SED-09-00	129655	4.28	598762	5.27	475292	6.61
03 BH-SED-11-00	131943	4.28	615947	5.27	504429	6.62
04						
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20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9B100188
 Lab File ID (Standard): D0219CC3 Date Analyzed: 02/19/09
 Instrument ID: 732 Time Analyzed: 1506

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	783893	7.76	729486	9.80	570398	11.05
UPPER LIMIT	1567786	8.26	1458972	10.30	1140796	11.55
LOWER LIMIT	391947	7.26	364743	9.30	285199	10.55
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-06-00	928452	7.76	973968	9.80	740973	11.06
02 BH-SED-09-00	930049	7.76	1002517	9.80	798854	11.06
03 BH-SED-11-00	965941	7.76	961753	9.80	840790	11.06
04						
05						
06						
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17						
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19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9B100188
 Lab File ID (Standard): F02230C2 Date Analyzed: 02/24/09
 Instrument ID: 722 Time Analyzed: 0118

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	55462	4.28	199104	5.27	115113	6.62
UPPER LIMIT	110924	4.78	398208	5.77	230226	7.12
LOWER LIMIT	27731	3.78	99552	4.77	57557	6.12
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-07-00	38568	4.28	141263	5.27	90719	6.62
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
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16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9B100188
 Lab File ID (Standard): F02230C2 Date Analyzed: 02/24/09
 Instrument ID: 722 Time Analyzed: 0118

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	195174	7.78	176718	10.10	151231	11.68
UPPER LIMIT	390348	8.28	353436	10.60	302462	12.18
LOWER LIMIT	97587	7.28	88359	9.60	75616	11.18
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-07-00	169566	7.78	137854	10.12	139965	11.70
02						
03						
04						
05						
06						
07						
08						
09						
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17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

METALS SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

TOTAL Metals

Lot-Sample #...: C9B100188-001

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 59

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9048181						
Mercury	0.50	0.040	mg/kg	SW846 7471A	02/17/09	K607K1AR
		Dilution Factor: 0.5		Analysis Time...: 14:10	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0030	
Prep Batch #...: 9063430						
Silver	0.86	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AQ
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0029	
Arsenic	19.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AD
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AE
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Cadmium	1.7	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AF
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	180 J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K607K1AG
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0097	
Copper	97.3	0.24	mg/kg	SW846 6020	03/04-03/05/09	K607K1AH
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	36.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AJ
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0082	
Lead	166 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AK
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

TOTAL Metals

Lot-Sample #....: C9B100188-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.1	0.24	mg/kg	SW846 6020	03/04-03/05/09	K607K1AL
		Dilution Factor: 0.5		Analysis Time..: 18:32	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Selenium	2.3	0.60	mg/kg	SW846 6020	03/04-03/05/09	K607K1AM
		Dilution Factor: 0.5		Analysis Time..: 18:32	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.049	
Thallium	0.29	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AN
		Dilution Factor: 0.5		Analysis Time..: 18:32	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Zinc	498	0.60	mg/kg	SW846 6020	03/04-03/05/09	K607K1AP
		Dilution Factor: 0.5		Analysis Time..: 18:32	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

TOTAL Metals

Lot-Sample #....: C9B100188-002

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 51

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 9048181						
Mercury	0.43	0.033	mg/kg	SW846 7471A	02/17/09	K607W1AR
		Dilution Factor: 0.5		Analysis Time...: 14:14	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0025	
Prep Batch #....: 9063430						
Silver	0.71	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AQ
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	22.9	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AD
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Beryllium	1.6	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AE
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Cadmium	1.8	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AF
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0092	
Chromium	261 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K607W1AG
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0081	
Copper	87.7	0.20	mg/kg	SW846 6020	03/04-03/05/09	K607W1AH
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0086	
Nickel	35.0	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AJ
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0069	
Lead	208 J	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AK
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0034	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

TOTAL Metals

Lot-Sample #...: C9B100188-002

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.96	0.20	mg/kg	SW846 6020	03/04-03/05/09	K607W1AL
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	2.8	0.51	mg/kg	SW846 6020	03/04-03/05/09	K607W1AM
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	
Thallium	0.37	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AN
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	617	0.51	mg/kg	SW846 6020	03/04-03/05/09	K607W1AP
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

TOTAL Metals

Lot-Sample #....: C9B100188-003

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 64

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.44	0.046	mg/kg	SW846 7471A	02/17/09	K607X1AR
		Dilution Factor: 0.5		Analysis Time...: 14:16	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0035	
Prep Batch #....: 9063430						
Silver	0.93	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AQ
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Arsenic	20.0	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AD
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.023	
Beryllium	1.6	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AE
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0051	
Cadmium	1.9	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AF
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.013	
Chromium	283 J	0.28	mg/kg	SW846 6020	03/04-03/05/09	K607X1AG
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Copper	129	0.28	mg/kg	SW846 6020	03/04-03/05/09	K607X1AH
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	
Nickel	47.5	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AJ
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0094	
Lead	171 J	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AK
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0047	

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-08-00

TOTAL Metals

Lot-Sample #....: C9B100188-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.3	0.28	mg/kg	SW846 6020	03/04-03/05/09	K607X1AL
		Dilution Factor: 0.5		Analysis Time..: 18:41	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0046	
Selenium	2.3	0.69	mg/kg	SW846 6020	03/04-03/05/09	K607X1AM
		Dilution Factor: 0.5		Analysis Time..: 18:41	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.056	
Thallium	0.40	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AN
		Dilution Factor: 0.5		Analysis Time..: 18:41	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0028	
Zinc	597	0.69	mg/kg	SW846 6020	03/04-03/05/09	K607X1AP
		Dilution Factor: 0.5		Analysis Time..: 18:41	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

TOTAL Metals

Lot-Sample #....: C9B100188-004

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 49

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.45	0.032	mg/kg	SW846 7471A	02/17/09	K60711AR
		Dilution Factor: 0.5		Analysis Time...: 14:21	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0024	
Prep Batch #....: 9063430						
Silver	0.50	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AQ
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	12.5	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AD
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	1.0	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AE
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	
Cadmium	1.4	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AF
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0089	
Chromium	156 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60711AG
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0078	
Copper	60.4	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60711AH
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0083	
Nickel	35.6	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AJ
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0067	
Lead	146 J	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AK
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-09-00

TOTAL Metals

Lot-Sample #....: C9B100188-004

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	0.84	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60711AL
		Dilution Factor: 0.5		Analysis Time..: 18:15	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0032	
Selenium	1.5	0.49	mg/kg	SW846 6020	03/04-03/05/09	K60711AM
		Dilution Factor: 0.5		Analysis Time..: 18:15	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.040	
Thallium	0.25	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AN
		Dilution Factor: 0.5		Analysis Time..: 18:15	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	619	0.49	mg/kg	SW846 6020	03/04-03/05/09	K60711AP
		Dilution Factor: 0.5		Analysis Time..: 18:15	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-00

TOTAL Metals

Lot-Sample #...: C9B100188-005

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 59

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	1.7	0.041	mg/kg	SW846 7471A	02/17/09	K60721AR
		Dilution Factor: 0.5		Analysis Time...: 14:23	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0031	
Prep Batch #...: 9063430						
Silver	1.1	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AQ
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0030	
Arsenic	46.8	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AD
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.6	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AE
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0046	
Cadmium	7.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AF
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	200 J	0.25	mg/kg	SW846 6020	03/04-03/05/09	K60721AG
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0099	
Copper	130	0.25	mg/kg	SW846 6020	03/04-03/05/09	K60721AH
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	56.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AJ
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0084	
Lead	1150 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AK
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0042	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-00

TOTAL Metals

Lot-Sample #....: C9B100188-005

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	1.9	0.25	mg/kg	SW846 6020	03/04-03/05/09	K60721AL
		Dilution Factor: 0.5		Analysis Time..: 18:19	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	
Selenium	7.8	0.62	mg/kg	SW846 6020	03/04-03/05/09	K60721AM
		Dilution Factor: 0.5		Analysis Time..: 18:19	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.050	
Thallium	0.85	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AN
		Dilution Factor: 0.5		Analysis Time..: 18:19	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0025	
Zinc	2730	6.2	mg/kg	SW846 6020	03/04-03/09/09	K60721AP
		Dilution Factor: 5		Analysis Time..: 10:09	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.14	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

TOTAL Metals

Lot-Sample #...: C9B100188-006

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 58

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	1.1	0.039	mg/kg	SW846 7471A	02/17/09	K60741AR
		Dilution Factor: 0.5		Analysis Time...: 14:25	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0030	
Prep Batch #...: 9063430						
Silver	1.9	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AQ
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0028	
Arsenic	34.1	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AD
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.3	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AE
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0044	
Cadmium	4.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AF
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	235 J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K60741AG
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0095	
Copper	275	0.24	mg/kg	SW846 6020	03/04-03/05/09	K60741AH
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	42.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AJ
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0080	
Lead	567 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AK
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

TOTAL Metals

Lot-Sample #....: C9B100188-006

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.4	0.24	mg/kg	SW846 6020	03/04-03/05/09	K60741AL
		Dilution Factor: 0.5		Analysis Time..: 18:23	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0039	
Selenium	5.1	0.59	mg/kg	SW846 6020	03/04-03/05/09	K60741AM
		Dilution Factor: 0.5		Analysis Time..: 18:23	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.048	
Thallium	0.76	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AN
		Dilution Factor: 0.5		Analysis Time..: 18:23	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Zinc	1400	0.59	mg/kg	SW846 6020	03/04-03/05/09	K60741AP
		Dilution Factor: 0.5		Analysis Time..: 18:23	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-00

TOTAL Metals

Lot-Sample #....: C9B100188-007

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 50

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 9048181						
Mercury	0.59	0.033	mg/kg	SW846 7471A	02/17/09	K60771AR
		Dilution Factor: 0.5		Analysis Time...: 14:26	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0025	
Prep Batch #....: 9063430						
Silver	0.67	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AQ
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	12.6	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AD
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	1.0	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AE
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Cadmium	1.9	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AF
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0091	
Chromium	107 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60771AG
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0080	
Copper	75.5	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60771AH
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0085	
Nickel	31.5	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AJ
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0068	
Lead	268 J	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AK
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0034	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-00

TOTAL Metals

Lot-Sample #...: C9B100188-007

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.82	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60771AL
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	1.6	0.50	mg/kg	SW846 6020	03/04-03/05/09	K60771AM
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.040	
Thallium	0.40	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AN
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	609	0.50	mg/kg	SW846 6020	03/04-03/05/09	K60771AP
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13A-00

TOTAL Metals

Lot-Sample #...: C9B100188-008

Date Sampled...: 02/09/09

% Moisture.....: 24

Date Received...: 02/10/09

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	0.13	0.032	mg/kg	SW846 7471A	02/17/09	K608A1AR
		Dilution Factor: 0.75		Analysis Time...: 14:28	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0025	
Prep Batch #...: 9063430						
Silver	0.17	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AQ
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	7.8	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AD
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	0.66	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AE
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	
Cadmium	0.61	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AF
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0090	
Chromium	178 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608A1AG
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0079	
Copper	30.9	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608A1AH
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0084	
Nickel	19.0	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AJ
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0067	
Lead	87.2 J	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AK
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13A-00

TOTAL Metals

Lot-Sample #....: C9B100188-008

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.38	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608A1AL
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0032	
Selenium	0.32 B	0.49	mg/kg	SW846 6020	03/04-03/05/09	K608A1AM
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.040	
Thallium	0.41	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AN
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	150	0.49	mg/kg	SW846 6020	03/04-03/05/09	K608A1AP
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

TOTAL Metals

Lot-Sample #...: C9B100188-009

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 73

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	0.30	0.062	mg/kg	SW846 7471A	02/17/09	K608C1AR
		Dilution Factor: 0.5		Analysis Time...: 14:30	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0047	
Prep Batch #...: 9063430						
Silver	0.96	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Arsenic	13.6	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AD
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.031	
Beryllium	1.7	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AE
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0069	
Cadmium	1.8	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AF
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Chromium	127 J	0.37	mg/kg	SW846 6020	03/04-03/05/09	K608C1AG
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.015	
Copper	80.6	0.37	mg/kg	SW846 6020	03/04-03/05/09	K608C1AH
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Nickel	45.0	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.013	
Lead	167 J	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AK
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0063	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

TOTAL Metals

Lot-Sample #...: C9B100188-009

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.79	0.37	mg/kg	SW846 6020	03/04-03/05/09	K608C1AL
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0062	
Selenium	2.4	0.93	mg/kg	SW846 6020	03/04-03/05/09	K608C1AM
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.076	
Thallium	0.65	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AN
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Zinc	479	0.93	mg/kg	SW846 6020	03/04-03/05/09	K608C1AP
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.022	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13C-00

TOTAL Metals

Lot-Sample #...: C9B100188-010

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 78

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	0.32	0.074	mg/kg	SW846 7471A	02/17/09	K608F1AR
		Dilution Factor: 0.5		Analysis Time...: 14:31	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0056	
Prep Batch #...: 9063430						
Silver	0.99	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0054	
Arsenic	14.8	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AD
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.037	
Beryllium	1.9	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AE
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0083	
Cadmium	1.9	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AF
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Chromium	124 J	0.45	mg/kg	SW846 6020	03/04-03/05/09	K608F1AG
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Copper	87.7	0.45	mg/kg	SW846 6020	03/04-03/05/09	K608F1AH
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.019	
Nickel	49.2	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.015	
Lead	169 J	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AK
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0076	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13C-00

TOTAL Metals

Lot-Sample #...: C9B100188-010

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.71	0.45	mg/kg	SW846 6020	03/04-03/05/09	K608F1AL
		Dilution Factor: 0.5		Analysis Time..: 19:08	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Selenium	2.6	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608F1AM
		Dilution Factor: 0.5		Analysis Time..: 19:08	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.091	
Thallium	0.68	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AN
		Dilution Factor: 0.5		Analysis Time..: 19:08	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Zinc	495	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608F1AP
		Dilution Factor: 0.5		Analysis Time..: 19:08	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.026	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-14-00

TOTAL Metals

Lot-Sample #....: C9B100188-011

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 76

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.31	0.069	mg/kg	SW846 7471A	02/17/09	K608H1AR
		Dilution Factor: 0.5		Analysis Time...: 14:33	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0053	
Prep Batch #....: 9063430						
Silver	0.92	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0050	
Arsenic	13.3	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AD
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.035	
Beryllium	1.8	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AE
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0078	
Cadmium	1.9	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AF
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.019	
Chromium	137 J	0.42	mg/kg	SW846 6020	03/04-03/05/09	K608H1AG
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Copper	89.6	0.42	mg/kg	SW846 6020	03/04-03/05/09	K608H1AH
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Nickel	47.8	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	
Lead	166 J	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AK
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0072	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-14-00

TOTAL Metals

Lot-Sample #...: C9B100188-011

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.69	0.42	mg/kg	SW846 6020	03/04-03/05/09	K608H1AL
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0069	
Selenium	2.4	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608H1AM
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.085	
Thallium	0.65	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AN
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0042	
Zinc	511	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608H1AP
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.025	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #...: C9B100188-012

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 75

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	0.33	0.066	mg/kg	SW846 7471A	02/17/09	K608J1AR
		Dilution Factor: 0.5		Analysis Time...: 14:34	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0050	
Prep Batch #...: 9063430						
Silver	1.0	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0048	
Arsenic	14.3	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AD
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.033	
Beryllium	1.9	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AE
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Cadmium	1.9	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AF
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Chromium	133 J	0.40	mg/kg	SW846 6020	03/04-03/05/09	K608J1AG
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Copper	86.1	0.40	mg/kg	SW846 6020	03/04-03/05/09	K608J1AH
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Nickel	48.3	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	
Lead	175 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AK
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0068	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #...: C9B100188-012

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.76	0.40	mg/kg	SW846 6020	03/04-03/05/09	K608J1AL
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0066	
Selenium	2.5	1.0	mg/kg	SW846 6020	03/04-03/05/09	K608J1AM
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.082	
Thallium	0.70	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AN
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Zinc	515	1.0	mg/kg	SW846 6020	03/04-03/05/09	K608J1AP
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.024	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B100188

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9B170000-181 Prep Batch #...: 9048181						
Mercury	ND	0.016	mg/kg	SW846 7471A	02/17/09	K69101AA
		Dilution Factor: 0.5				
		Analysis Time...: 14:06		Analyst ID.....: 403938		Instrument ID...: HGH
MB Lot-Sample #: C9C040000-430 Prep Batch #...: 9063430						
Antimony	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Arsenic	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AA
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Beryllium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AC
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Cadmium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AD
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Chromium	0.035 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AE
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Copper	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AF
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Lead	0.0047 B	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AH
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Nickel	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AG
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Selenium	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AK
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9B100188

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Silver	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AN
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AL
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509	Instrument ID...: ICP	
Zinc	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AM
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509	Instrument ID...: ICP	

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B100188

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9B170000-181 Prep Batch #....: 9048181					
Mercury	104	(80 - 120)	SW846 7471A	02/17/09	K69101AC
		Dilution Factor: 0.5	Analysis Time..: 14:08	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-430 Prep Batch #....: 9063430					
Arsenic	88	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AP
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Beryllium	95	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AQ
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Cadmium	91	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AR
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Chromium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AT
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Copper	99	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AU
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Nickel	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AV
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Lead	102	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AW
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Antimony	87	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AX
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Selenium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AO
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B100188

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	92	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A1
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Zinc	84	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A2
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Silver	104	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A3
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B100188

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9B170000-181 Prep Batch #....: 9048181							
Mercury	0.208	0.218	mg/kg	104	SW846 7471A	02/17/09	K69101AC
				Dilution Factor: 0.5	Analysis Time...: 14:08	Analyst ID.....: 403938	
				Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-430 Prep Batch #....: 9063430							
Arsenic	2.00	1.76	mg/kg	88	SW846 6020	03/04-03/05/09	K727R1AP
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Beryllium	2.50	2.38	mg/kg	95	SW846 6020	03/04-03/05/09	K727R1AQ
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Cadmium	2.50	2.29	mg/kg	91	SW846 6020	03/04-03/05/09	K727R1AR
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Chromium	10.0	9.77	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AT
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Copper	12.5	12.4	mg/kg	99	SW846 6020	03/04-03/05/09	K727R1AU
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Nickel	25.0	24.4	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AV
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Lead	1.00	1.02	mg/kg	102	SW846 6020	03/04-03/05/09	K727R1AW
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Antimony	25.0	21.8	mg/kg	87	SW846 6020	03/04-03/05/09	K727R1AX
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Selenium	0.500	0.491	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1A0
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B100188

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	2.50	2.30	mg/kg	92	SW846 6020	03/04-03/05/09	K727R1A1
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Zinc	25.0	21.1	mg/kg	84	SW846 6020	03/04-03/05/09	K727R1A2
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Silver	2.50	2.60	mg/kg	104	SW846 6020	03/04-03/05/09	K727R1A3
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B100188

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B100188-001 Prep Batch #...: 9048181

% Moisture.....: 59

Mercury	76	(75 - 125)		SW846 7471A	02/17/09	K607K1A3
	77	(75 - 125) 0.30 (0-20)		SW846 7471A	02/17/09	K607K1A4

Dilution Factor: 0.5

Analysis Time...: 14:11 Instrument ID...: HGHYDRA Analyst ID.....: 403938

MS Run #.....: 9048139

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B100188

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B100188-001 Prep Batch #...: 9048181

% Moisture.....: 59

Mercury

0.50	0.202	0.651	mg/kg	76		SW846	7471A	02/17/09	K607K1A3
0.50	0.202	0.653	mg/kg	77	C.30	SW846	7471A	02/17/09	K607K1A4

Dilution Factor: 0.5

Analysis Time...: 14:11

Instrument ID...: HGHYDRA

Analyst ID.....: 403938

MS Run #.....: 9048139

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B100188

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B250192-001 Prep Batch #....: 9063430						
% Moisture.....: 59						
Antimony	32 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1CE
	32 N	(75 - 125)	0.27 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Arsenic	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1AX
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Beryllium	84	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A1
	86	(75 - 125)	1.1 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Cadmium	69 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A3
	64 N	(75 - 125)	2.4 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Chromium	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A5
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Copper	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A7
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Lead	NC	(75 - 125)		SW846 6020	03/04-03/09/09	K7N2P1CC
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CD
Dilution Factor: 5						
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B100188

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	89	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1A9
	90	(75 - 125)	0.68	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CA
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Selenium	NC	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CG
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CH
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Silver	85	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CN
	90	(75 - 125)	3.4	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CP
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Thallium	87	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CJ
	87	(75 - 125)	0.18	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CK
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Zinc	NC	(75 - 125)			SW846 6020	03/04-03/09/09	K7N2P1CL
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CM
Dilution Factor: 5							
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B100188

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B250192-001 Prep Batch #...: 9063430

% Moisture.....: 59

Antimony

2.5	61.0	22.1 N	mg/kg	32		SW846 6020	03/04-03/05/09	K7N2P1CE
2.5	61.0	22.2 N	mg/kg	32	0.27	SW846 6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5								
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9063236								

Arsenic

102	4.88	108 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1AX
102	4.88	115 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5								
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9063236								

Beryllium

1.6	6.10	6.76	mg/kg	84		SW846 6020	03/04-03/05/09	K7N2P1A1
1.6	6.10	6.83	mg/kg	86	1.1	SW846 6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5								
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9063236								

Cadmium

8.6	6.10	12.9 N	mg/kg	69		SW846 6020	03/04-03/05/09	K7N2P1A3
8.6	6.10	12.6 N	mg/kg	64	2.4	SW846 6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5								
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9063236								

Chromium

362	24.4	388 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A5
362	24.4	397 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5								
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9063236								

Copper

226	30.5	256 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A7
226	30.5	264 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5								
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9063236								

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B100188

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

	SAMPLE	SPIKE	MEASRD		PERCNT			PREPARATION-	WORK
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	ANALYSIS DATE	ORDER #
Lead									
	2990	2.44	3070 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CC
	2990	2.44	3260 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CD
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Nickel									
	47.2	61.0	102	mg/kg	89		SW846 6020	03/04-03/05/09	K7N2P1A9
	47.2	61.0	102	mg/kg	90	0.68	SW846 6020	03/04-03/05/09	K7N2P1CA
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Selenium									
	14.8	1.22	15.9 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CG
	14.8	1.22	16.5 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CH
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Silver									
	4.2	6.10	9.37	mg/kg	85		SW846 6020	03/04-03/05/09	K7N2P1CN
	4.2	6.10	9.70	mg/kg	90	3.4	SW846 6020	03/04-03/05/09	K7N2P1CP
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Thallium									
	1.2	6.10	6.52	mg/kg	87		SW846 6020	03/04-03/05/09	K7N2P1CJ
	1.2	6.10	6.50	mg/kg	87	0.18	SW846 6020	03/04-03/05/09	K7N2P1CK
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Zinc									
	3730	30.5	3900 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CL
	3730	30.5	3930 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CM
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

GENERAL CHEMISTRY SUMMARY

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B100188

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-06-00	C9B100188 001	K607K1AT	1.4	mg/kg	0.23	1.2	1	2/11/2009 - 2/11/2009 14:06	9042215
BH-SED-07-00	C9B100188 002	K607W1AT	1.2	mg/kg	0.19	1.0	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-08-00	C9B100188 003	K607X1AT	ND	mg/kg	0.27	1.4	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-09-00	C9B100188 004	K60711AT	1.1	mg/kg	0.19	0.98	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-10-00	C9B100188 005	K60721AT	11.3	mg/kg	0.24	1.2	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-11-00	C9B100188 006	K60741AT	11.7	mg/kg	0.23	1.2	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-12-00	C9B100188 007	K60771AT	2.2	mg/kg	0.19	1.0	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-13A-00	C9B100188 008	K608A1AT	7.5	mg/kg	0.13	0.66	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-13B-00	C9B100188 009	K608C1AT	1.1 B	mg/kg	0.36	1.9	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-13C-00	C9B100188 010	K608F1AT	0.93 B	mg/kg	0.43	2.2	1	2/11/2009 - 2/11/2009 14:21	9042215
BH-SED-14-00	C9B100188 011	K608H1AT	1.3 B	mg/kg	0.40	2.1	1	2/11/2009 - 2/11/2009 14:21	9042215
DUP-2	C9B100188 012	K608J1AT	1.1 B	mg/kg	0.39	2.0	1	2/11/2009 - 2/11/2009 14:21	9042215

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Lot Number: C9B100188

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-06-00	C9B100188 001	K607K1AA	41.3	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-07-00	C9B100188 002	K607W1AA	49.4	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-08-00	C9B100188 003	K607X1AA	36.0	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-09-00	C9B100188 004	K60711AA	51.0	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-10-00	C9B100188 005	K60721AA	40.5	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-11-00	C9B100188 006	K60741AA	42.3	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-12-00	C9B100188 007	K60771AA	50.2	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-13A-00	C9B100188 008	K608A1AA	76.3	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-13B-00	C9B100188 009	K608C1AA	26.8	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-13C-00	C9B100188 010	K608F1AA	22.4	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
BH-SED-14-00	C9B100188 011	K608H1AA	23.8	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026
DUP-2	C9B100188 012	K608J1AA	24.9	%	0.0	1.0	1	2/12/2009 - 2/13/2009 08:31	9043026

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B100188

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-06-00	C9B100188 001	K607K1AU	58700	mg/kg	598	2600	2.15	2/12/2009 - 2/13/2009 11:49	9043317
BH-SED-07-00	C9B100188 002	K607W1AU	83900	mg/kg	386	1680	1.66	2/12/2009 - 2/13/2009 11:59	9043317
BH-SED-08-00	C9B100188 003	K607X1AU	100000	mg/kg	699	3040	2.19	2/12/2009 - 2/13/2009 12:10	9043317
BH-SED-09-00	C9B100188 004	K60711AU	129000	mg/kg	403	1750	1.79	2/12/2009 - 2/13/2009 12:20	9043317
BH-SED-10-00	C9B100188 005	K60721AU	108000	mg/kg	619	2690	2.18	2/12/2009 - 2/13/2009 12:31	9043317
BH-SED-11-00	C9B100188 006	K60741AU	83100	mg/kg	542	2360	1.99	2/12/2009 - 2/13/2009 12:41	9043317
BH-SED-12-00	C9B100188 007	K60771AU	146000	mg/kg	502	2180	2.19	2/12/2009 - 2/13/2009 12:52	9043317
BH-SED-13A-00	C9B100188 008	K608A1AU	49600	mg/kg	303	1320	2.01	2/12/2009 - 2/13/2009 13:13	9043317
BH-SED-13B-00	C9B100188 009	K608C1AU	81300	mg/kg	966	4200	2.25	2/12/2009 - 2/13/2009 13:23	9043317
BH-SED-13C-00	C9B100188 010	K608F1AU	61200	mg/kg	988	4300	1.92	2/12/2009 - 2/13/2009 13:34	9043317
BH-SED-14-00	C9B100188 011	K608H1AU	65600	mg/kg	1090	4750	2.26	2/12/2009 - 2/13/2009 13:44	9043317
DUP-2	C9B100188 012	K608J1AU	74000	mg/kg	1110	4810	2.39	2/12/2009 - 2/13/2009 13:55	9043317

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Report ID: C9B100188

Matrix: SOLID

Date/Time Received: 2/10/2009 9:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B110000215B	215 MB	K62GD1AA	ND	mg/kg	0.50	2/11/2009 - 2/11/2009 14:06	9042215	

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Report ID: C9B100188

Matrix: SOLID

Date/Time Received: 2/10/2009 9:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-06-00 DUP	001 DUP	K607K1A2	41.8	%	1.0	2/12/2009 - 2/13/2009 08:31	9043026	1.2 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Report ID:

C9B100188

Matrix: SOLID

Date/Time Received:

2/10/2009 9:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B120000317B	317 MB	K64PH1AA	ND	mg/kg	1250	2/12/2009 - 2/13/2009 11:17	9043317	

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B100188

Matrix: SOLID

Date/Time Received: 2/10/2009 9:30:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-06-00	MS	K607K1A0	100	75 - 125	2/11/2009 - 2/11/2009 14:06	9042215	49 / 20
LAB MS/MSD	MS	K61EM1CX	100	75 - 125	2/11/2009 - 2/11/2009 14:59	9042215	4.5 / 20
BH-SED-06-00	MSD	K607K1A1	56 N *	75 - 125	2/11/2009 - 2/11/2009 14:14	9042215	49 / 20
LAB MS/MSD	MSD	K61EM1C0	95	75 - 125	2/11/2009 - 2/11/2009 14:59	9042215	4.5 / 20
CHECK SAMPLE	LCS	K62GD1AC	101	41 - 159	2/11/2009 - 2/11/2009 14:06	9042215	

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number: C9B120000

Matrix: SOLID

Date/Time Received: 2/10/2009 9:30:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K64PH1AC	101	75 - 125	2/12/2009 - 2/13/2009 11:28	9043317	8.2 / 20
DUPLICATE CHECK	LCSD	K64PH1AD	109	75 - 125	2/12/2009 - 2/13/2009 11:38	9043317	8.2 / 20

TestAmerica
South Burlington, VT
Sample Data Summary
Package

9B100188



Sample Data Summary – Geotechnical

Sample Report Summary

BH-SED-07-00

Date Received: 02/11/09

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	89.2	

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-11-00

Lab Name: TestAmerica Burlington

Contract: C9B100188

SDG No.: 9B100188

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784485

Matrix: SOLID

Client: STLPAP

Date Received: 02/11/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	123.0	

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-12-00

Lab Name: TestAmerica Burlington

Contract: C9B100188

SDG No.: 9B100188

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784486

Matrix: SOLID

Client: STLPAP

Date Received: 02/11/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	91.5	

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-13A-00

Lab Name: TestAmerica Burlington

Contract: C9B100188

SDG No.: 9B100188

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784487

Matrix: SOLID

Client: STLPAP

Date Received: 02/11/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	37.1	

Sample Report Summary

BH-SED-14-00

Sample Report Summary

DUP-2

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	301.4	

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code:	STLPAP
ETR:	130106
SDG:	9B100188

Start Date:	<u>2/19/2009</u>
Start Time:	<u>22:20</u>
End Date:	<u>2/20/2009</u>
Analyst:	<u>TPB</u>

[illegible]

Particle Size of Soils by ASTM D422

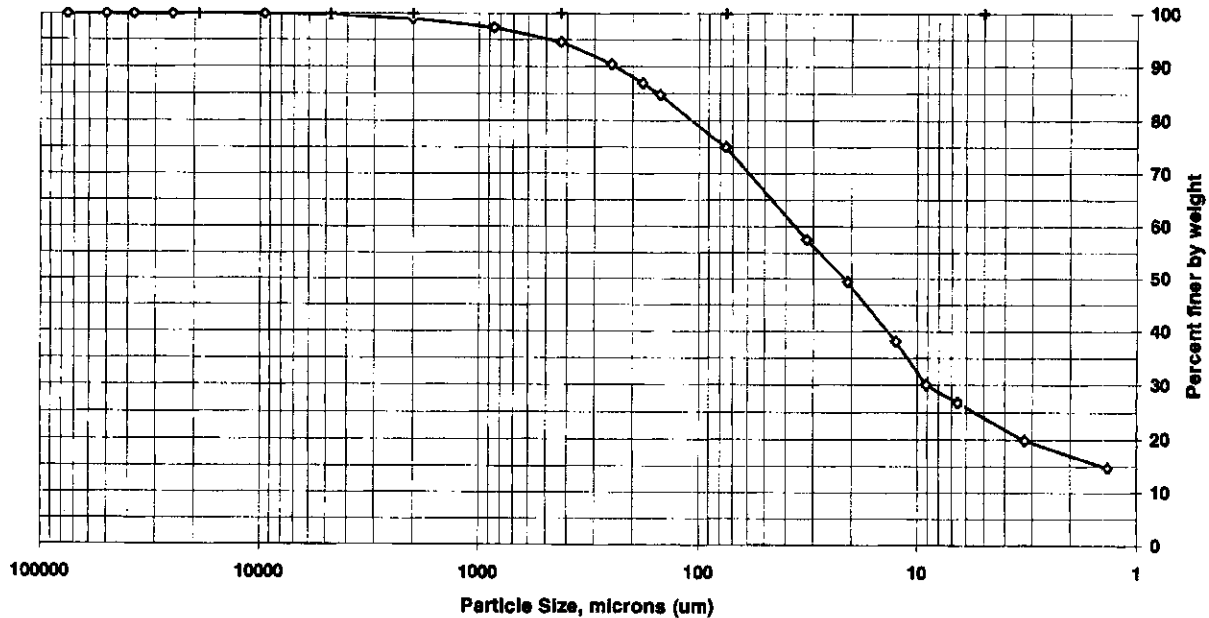
Client Code: STLPAP
 Sample ID: BH-SED-06-00
 Lab ID: 784480

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 42.7%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: 9.5 mm

Non-soil material: shell
 Shape (> #10): angular
 Hardness (> #10): brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.8	0.2
#10	2000	99.0	0.8
#20	850	97.3	1.7
#40	425	94.6	2.7
#60	250	90.4	4.2
#80	180	86.9	3.5
#100	150	84.7	2.2
#200	75	75.0	9.8
Hydrometer	32.0	57.5	17.5
	20.9	49.4	8.1
	12.5	38.1	11.3
	9.1	30.1	8.1
	6.6	26.9	3.2
	3.2	19.9	7.0
V	1.4	14.8	5.1

Soil Classification	Percent of Total Sample
Gravel	0.2
Sand	24.8
Coarse Sand	0.8
Medium Sand	4.4
Fine Sand	19.6
Silt	48.1
Clay	26.9

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with
 a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

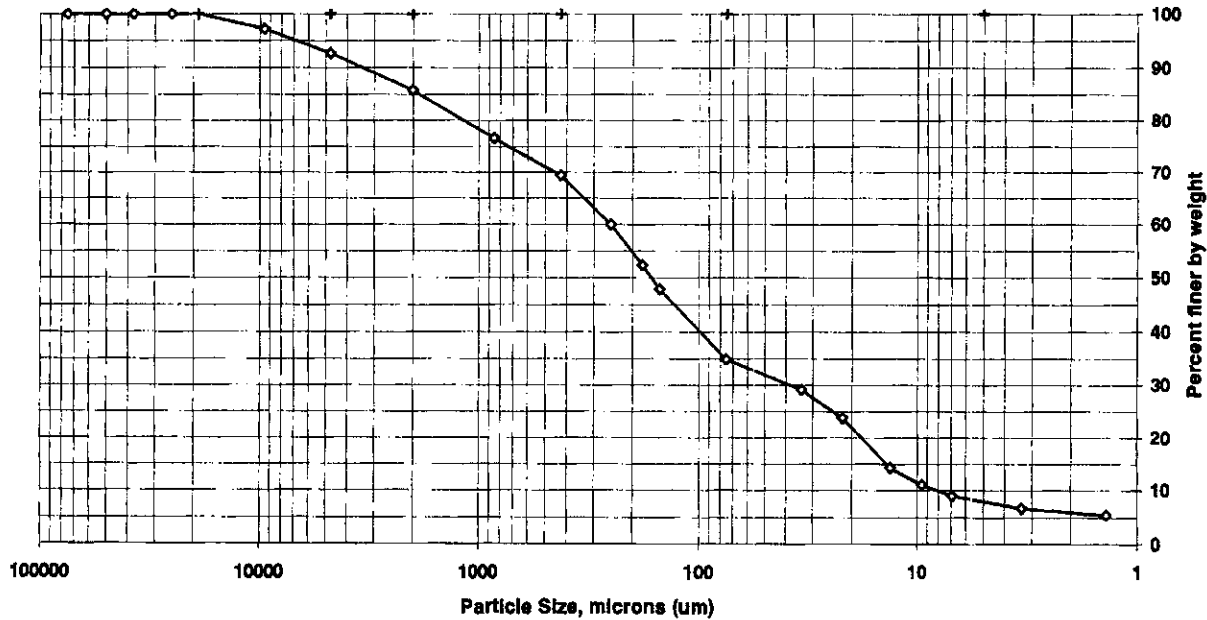
Client Code: STLPAP
Sample ID: BH-SED-07-00
Lab ID: 784481

SDG: 9B100188
ETR(s): 130106

Date Received: 2/11/2009
Start Date: 2/13/2009
End Date: 2/23/2009

Percent Solids: 52.8%
Specific Gravity: 2.650 (assumed)
Maximum Particle Size: 19 mm

Non-soil material: shell/wood
Shape (> #10): subangular
Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	97.2	2.8
#4	4750	92.7	4.5
#10	2000	85.8	6.9
#20	850	76.6	9.2
#40	425	69.4	7.2
#60	250	60.0	9.4
#80	180	52.4	7.7
#100	150	47.9	4.5
#200	75	34.9	13.0
Hydrometer	33.8	29.1	5.7
	21.9	23.8	5.3
	13.3	14.3	9.5
	9.5	11.1	3.2
	6.9	9.0	2.1
	3.3	6.7	2.3
V	1.4	5.5	1.2

Soil Classification	Percent of Total Sample
Gravel	7.3
Sand	57.8
Coarse Sand	6.9
Medium Sand	16.4
Fine Sand	34.5
Silt	25.9
Clay	9.0

Preparation Method: D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

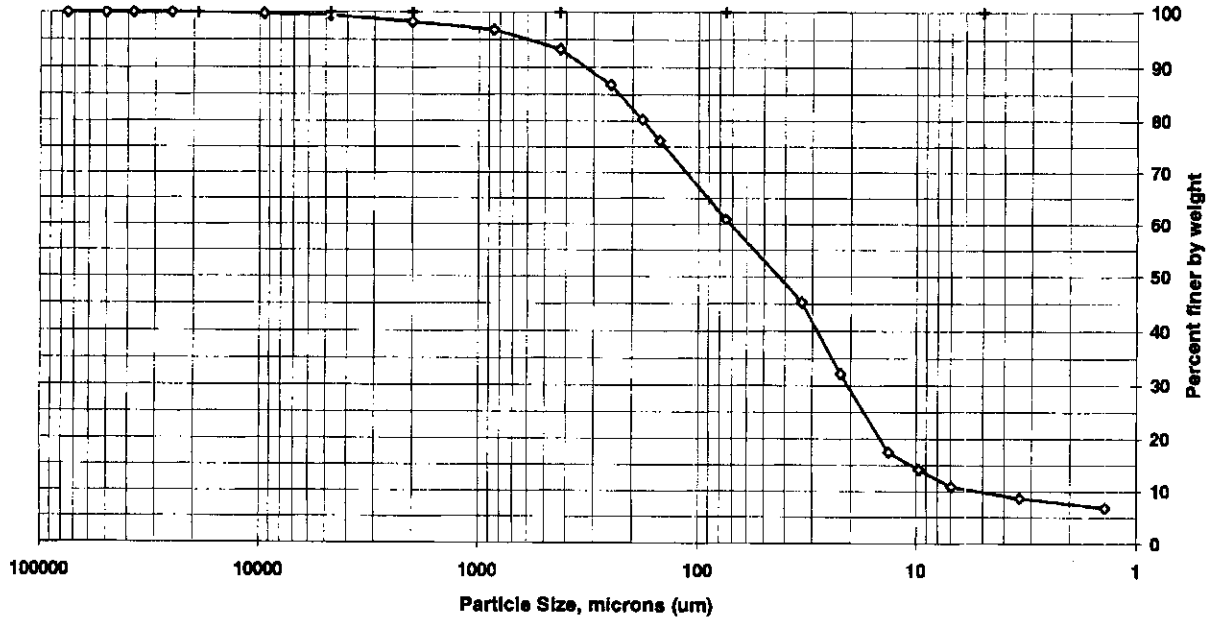
Client Code: STLPAP
 Sample ID: BH-SED-08-00
 Lab ID: 784482

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 38.3%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: 19 mm

Non-soil material: shell/wood
 Shape (> #10): subrounded
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.7	0.3
#4	4750	99.4	0.3
#10	2000	98.3	1.1
#20	850	96.8	1.5
#40	425	93.3	3.5
#60	250	86.7	6.6
#80	180	80.3	6.4
#100	150	76.2	4.1
#200	75	61.0	15.2
Hydrometer	33.6	45.3	15.7
	22.2	32.2	13.1
	13.4	17.5	14.7
	9.7	14.2	3.3
	6.9	10.9	3.3
	3.4	8.7	2.2
V	1.4	6.8	1.9

Soil Classification	Percent of Total Sample
Gravel	0.6
Sand	38.4
Coarse Sand	1.1
Medium Sand	5.0
Fine Sand	32.3
Silt	50.1
Clay	10.9

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

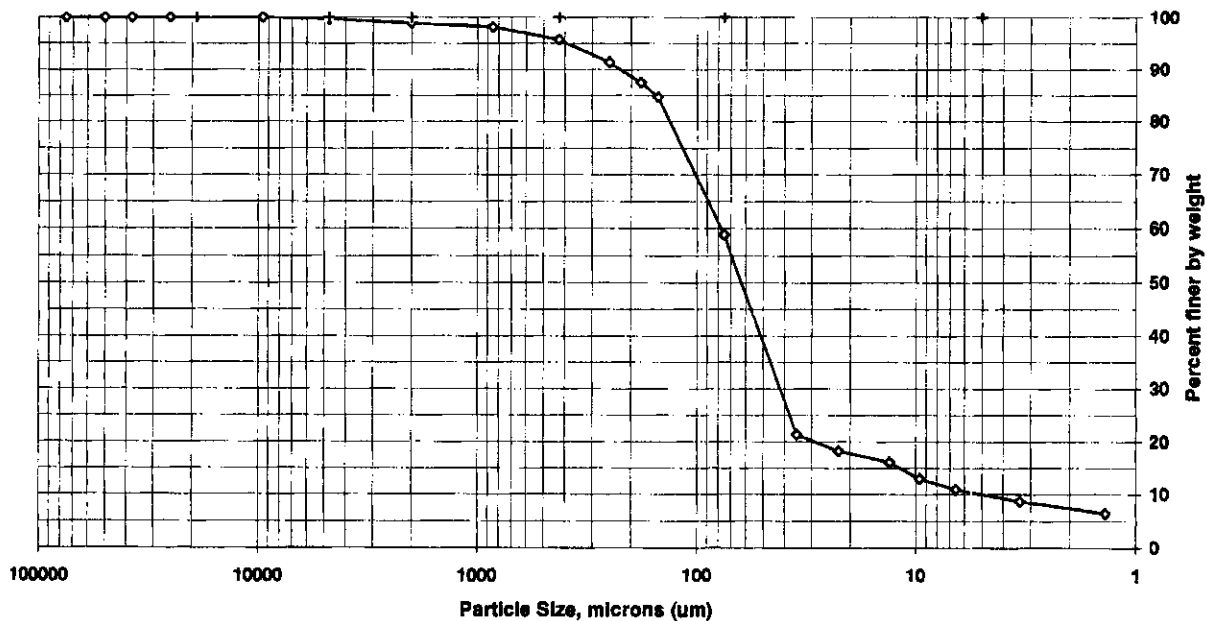
Client Code:	STLPAP
Sample ID:	BH-SED-09-00
Lab ID:	784483

SDG: 9B100188
ETR(s): 130106

Date Received: 2/11/2009
Start Date: 2/13/2009
End Date: 2/23/2009

Percent Solids:	<u>52.1%</u>	
Specific Gravity:	<u>2.650</u>	(assumed)
Maximum Particle Size:	<u>9.5 mm</u>	

Non-soil material:	shell/plant
Shape (> #10):	subrounded
Hardness (> #10):	brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.6	0.4
#10	2000	98.9	0.8
#20	850	98.1	0.8
#40	425	95.7	2.4
#60	250	91.4	4.3
#80	180	87.5	3.9
#100	150	84.6	2.9
#200	75	58.9	25.8
Hydrometer	35.1	21.4	37.5
	22.5	18.3	3.1
	13.1	16.2	2.1
	9.6	13.0	3.1
	6.6	11.0	2.1
	3.3	8.7	2.3
V	1.4	6.4	2.3

Soil Classification	Percent of Total Sample
Gravel	0.4
Sand	40.8
Coarse Sand	0.8
Medium Sand	3.2
Fine Sand	36.8
Silt	47.9
Clay	11.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with
a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

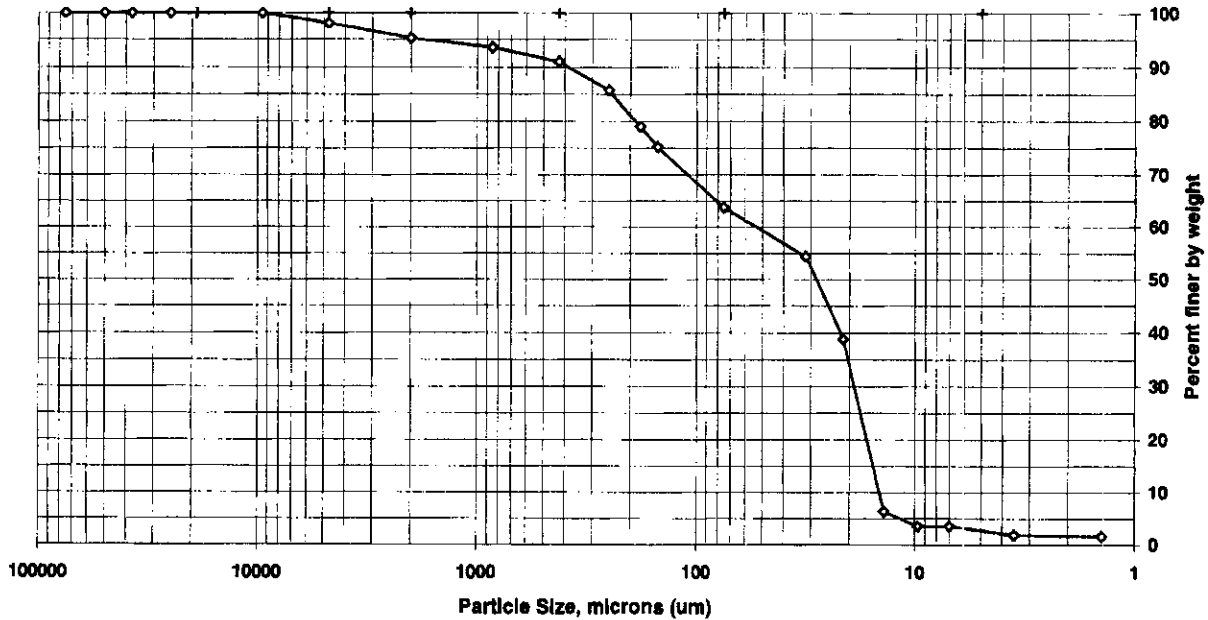
Client Code: STLPAP
 Sample ID: BH-SED-10-00
 Lab ID: 784484

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 45.3%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: 9.5 mm

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	98.1	1.9
#10	2000	95.3	2.8
#20	850	93.6	1.7
#40	425	91.0	2.6
#60	250	85.7	5.3
#80	180	79.0	6.7
#100	150	75.2	3.8
#200	75	63.8	11.4
Hydrometer	31.6	54.4	9.4
	21.4	38.8	15.5
	13.8	6.4	32.5
	9.7	3.5	2.8
	7.0	3.5	0.0
	3.5	1.9	1.6
V	1.4	1.6	0.2

Soil Classification	Percent of Total Sample
Gravel	1.9
Sand	34.3
Coarse Sand	2.8
Medium Sand	4.3
Fine Sand	27.2
Silt	60.3
Clay	3.5

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

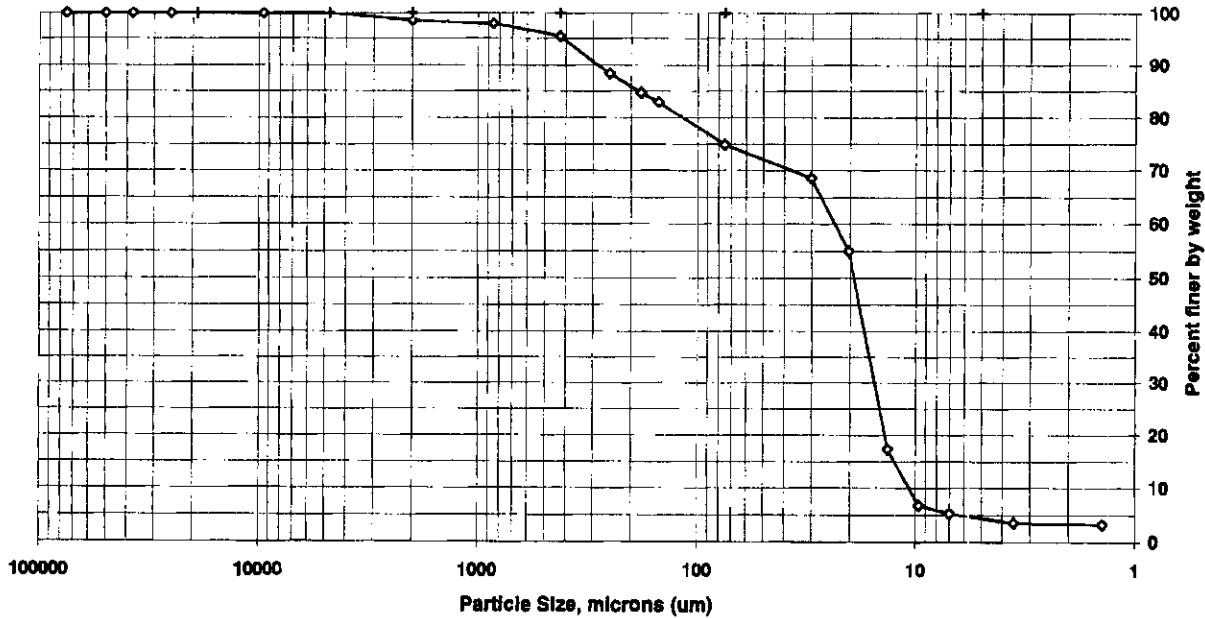
Client Code: STLPAP
 Sample ID: BH-SED-11-00
 Lab ID: 784485

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 44.8%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: Crs sand

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	98.5	1.5
#20	850	97.9	0.6
#40	425	95.5	2.4
#60	250	88.3	7.2
#80	180	84.7	3.6
#100	150	83.0	1.6
#200	75	74.8	8.2
Hydrometer	30.2	68.5	6.3
	20.3	55.0	13.6
	13.4	17.3	37.7
	9.6	6.8	10.5
	7.0	5.3	1.5
	3.6	3.5	1.8
V	1.4	3.3	0.3

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	25.2
Coarse Sand	1.5
Medium Sand	3.1
Fine Sand	20.6
Silt	69.6
Clay	5.3

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

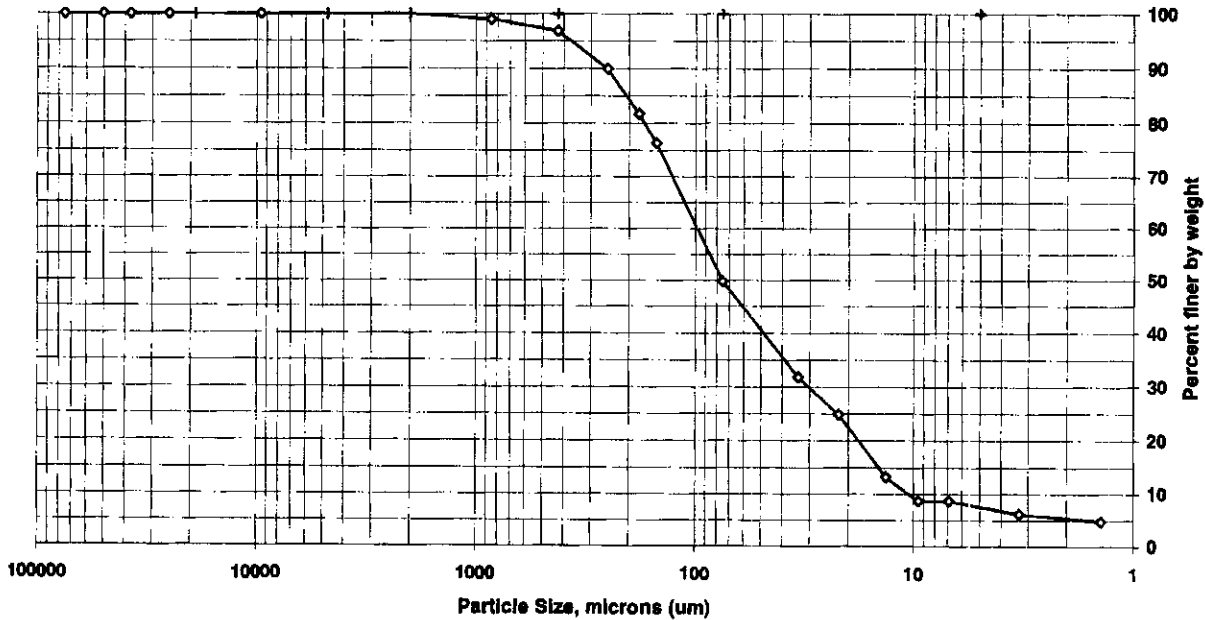
Client Code: STLPAP
Sample ID: BH-SED-12-00
Lab ID: 784486

SDG: 9B100188
ETR(s): 130106

Date Received: 2/11/2009
Start Date: 2/13/2009
End Date: 2/23/2009

Percent Solids: 52.2%
Specific Gravity: 2.650 (assumed)
Maximum Particle Size: Med sand

Non-soil material: na
Shape (> #10): na
Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.0	1.0
#40	425	96.9	2.1
#60	250	89.9	7.0
#80	180	81.8	8.1
#100	150	76.4	5.4
#200	75	49.8	26.5
Hydrometer	33.8	31.8	18.0
	22.1	24.9	6.9
	13.4	13.3	11.6
	9.5	8.7	4.6
	6.9	8.7	0.0
	3.3	6.2	2.5
V	1.4	4.8	1.4

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	50.2
Coarse Sand	0.0
Medium Sand	3.1
Fine Sand	47.1
Silt	41.2
Clay	8.7

Preparation Method: D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

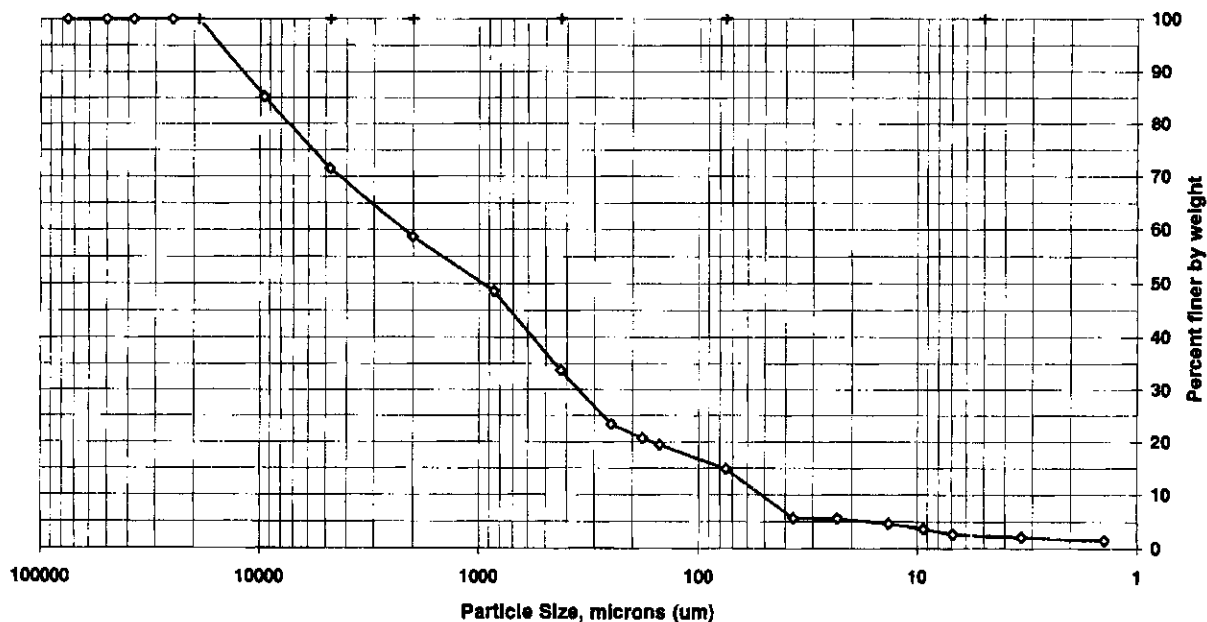
Client Code: STLPAP
 Sample ID: BH-SED-13A-00
 Lab ID: 784487

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 73.0%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: 19 mm

Non-soil material: shell/wood
 Shape (> #10): subangular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	85.2	14.8
#4	4750	71.5	13.7
#10	2000	58.7	12.8
#20	850	48.6	10.2
#40	425	33.7	14.9
#60	250	23.3	10.3
#80	180	20.7	2.6
#100	150	19.5	1.3
#200	75	14.9	4.6
Hydrometer	36.7	5.6	9.3
	23.2	5.6	0.0
	13.5	4.6	1.0
	9.3	3.6	1.0
	6.9	2.7	1.0
	3.3	2.1	0.6
V	1.4	1.5	0.6

Soil Classification	Percent of Total Sample
Gravel	28.5
Sand	56.6
Coarse Sand	12.8
Medium Sand	25.1
Fine Sand	18.8
Silt	12.2
Clay	2.7

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

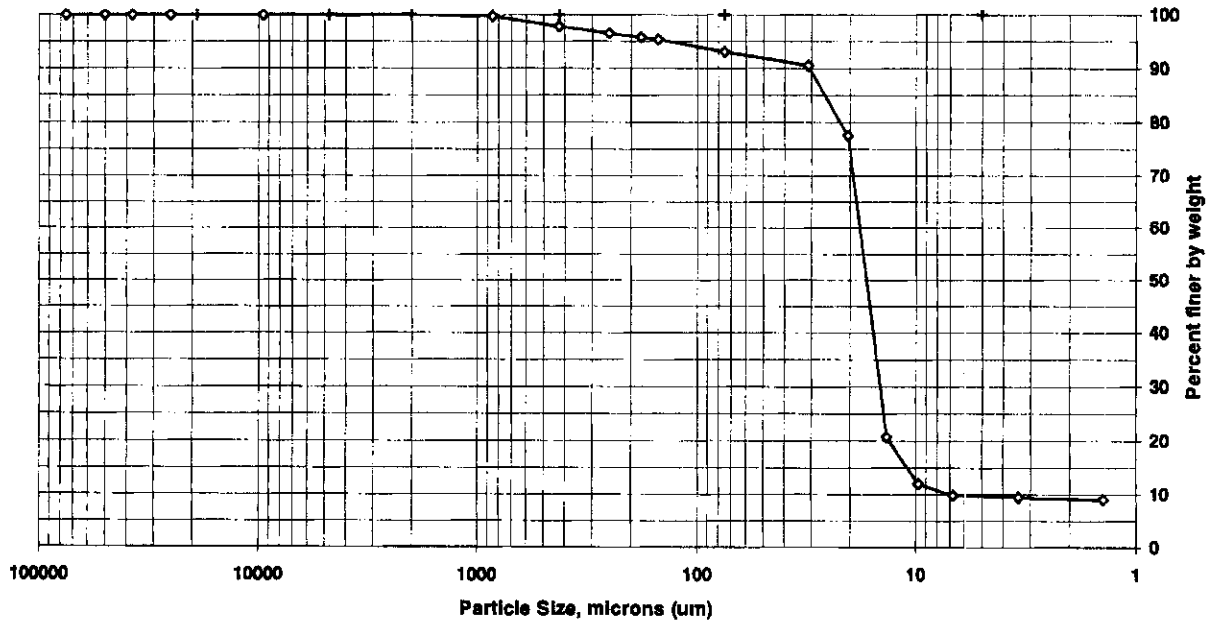
Client Code: STLPAP
 Sample ID: BH-SED-13B-00
 Lab ID: 784488

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 25.4%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: Med sand

Non-soil material: ria
 Shape (> #10): ria
 Hardness (> #10): ria



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.7	0.3
#40	425	97.9	1.8
#60	250	96.6	1.3
#80	180	95.8	0.8
#100	150	95.4	0.4
#200	75	93.0	2.4
Hydrometer	31.0	90.5	2.5
	20.4	77.5	13.1
	13.5	20.7	56.7
	9.7	12.0	8.7
	6.7	9.8	2.2
	3.4	9.5	0.4
V	1.4	9.1	0.4

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	7.0
Coarse Sand	0.0
Medium Sand	2.1
Fine Sand	4.9
Silt	83.2
Clay	9.8

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with
 a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

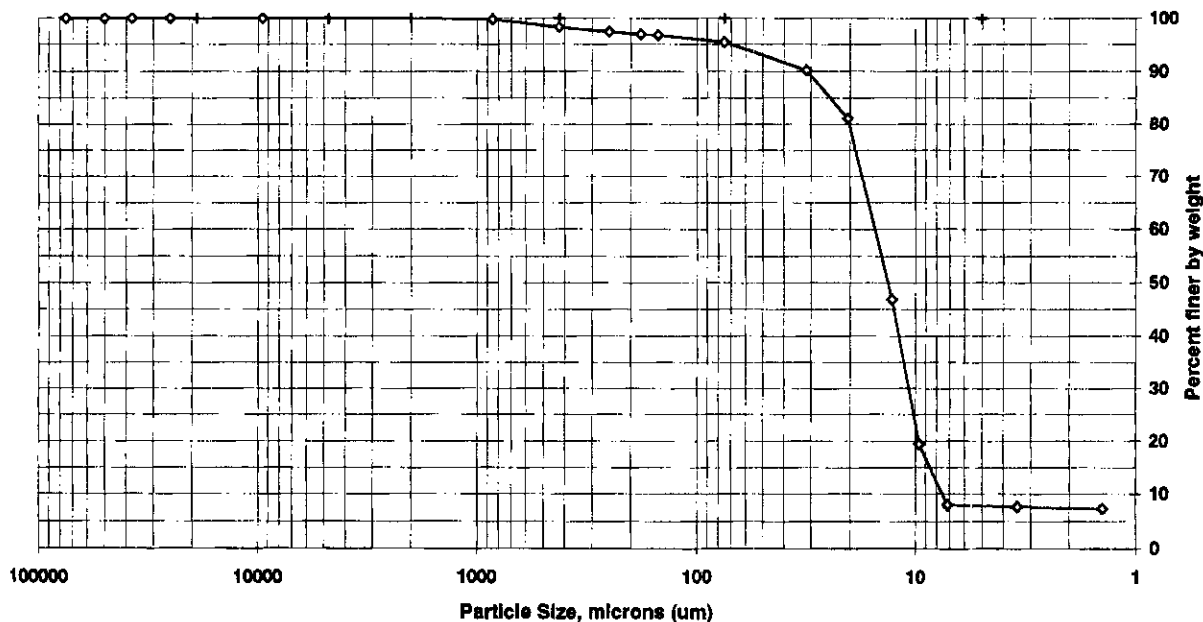
Client Code: STLPAP
 Sample ID: BH-SED-13C-00
 Lab ID: 784489

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 22.6%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: Med sand

Non-soll material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.8	0.2
#40	425	98.3	1.5
#60	250	97.4	0.9
#80	180	96.9	0.5
#100	150	96.7	0.2
#200	75	95.4	1.3
Hydrometer	31.4	90.2	5.1
	20.4	81.1	9.1
	12.8	46.8	34.3
	9.6	19.4	27.4
	7.1	8.0	11.4
	3.4	7.6	0.4
V	1.4	7.2	0.4

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	4.6
Coarse Sand	0.0
Medium Sand	1.7
Fine Sand	2.9
Silt	87.4
Clay	8.0

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

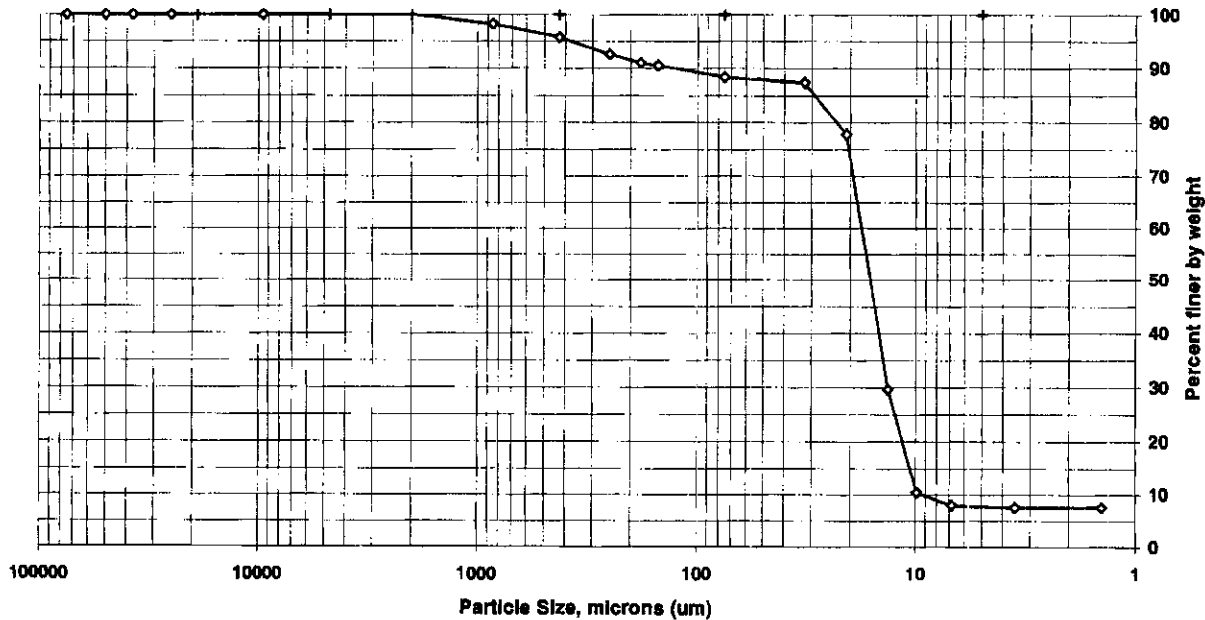
Client Code: STLPAP
 Sample ID: BH-SED-14-00
 Lab ID: 784490

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 23.8%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: Med sand

Non-soil material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	98.2	1.8
#40	425	95.7	2.5
#60	250	92.6	3.2
#80	180	91.0	1.6
#100	150	90.5	0.5
#200	75	88.3	2.2
Hydrometer	32.2	87.4	1.0
	20.9	77.8	9.6
	13.4	29.7	48.1
	9.8	10.4	19.2
	6.8	8.0	2.4
	3.5	7.6	0.4
V	1.4	7.6	0.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	11.7
Coarse Sand	0.0
Medium Sand	4.3
Fine Sand	7.4
Silt	80.3
Clay	8.0

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

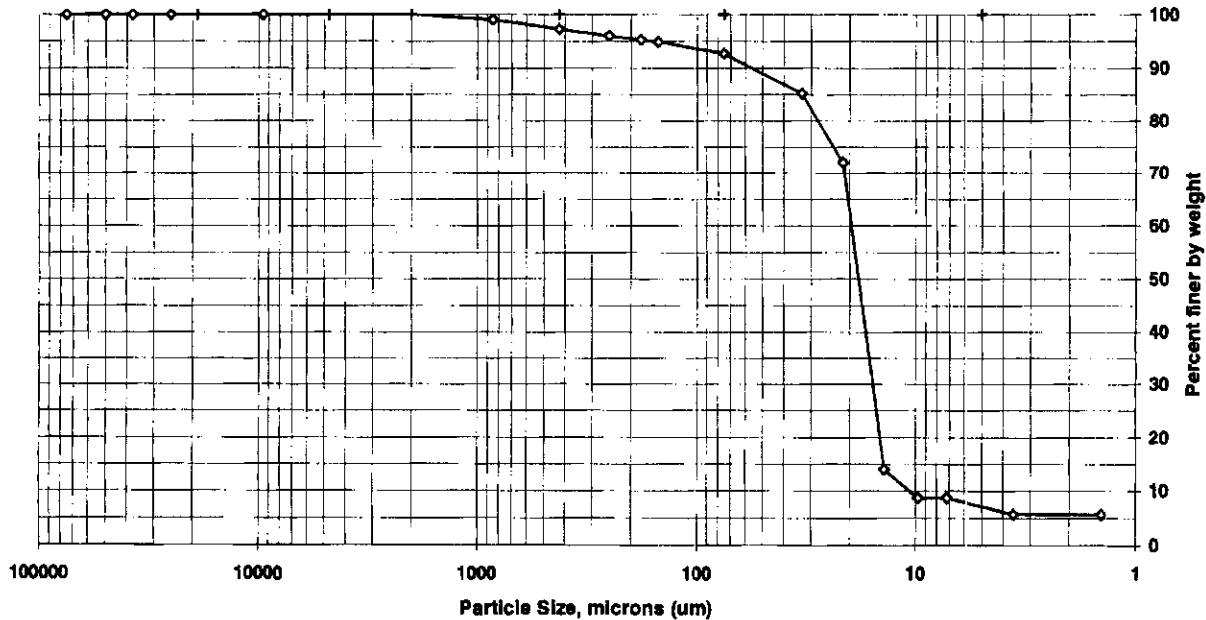
Client Code: STLPAP
 Sample ID: DUP-2
 Lab ID: 784491

SDG: 9B100188
 ETR(s): 130106

Date Received: 2/11/2009
 Start Date: 2/13/2009
 End Date: 2/23/2009

Percent Solids: 24.9%
 Specific Gravity: 2.650 (assumed)
 Maximum Particle Size: Med sand

Non-soil material: ra
 Shape (> #10): ra
 Hardness (> #10): ra



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.0	1.0
#40	425	97.3	1.7
#60	250	96.1	1.2
#80	180	95.3	0.7
#100	150	94.9	0.4
#200	75	92.7	2.2
Hydrometer	33.0	85.2	7.5
	21.5	72.0	13.2
	13.9	14.1	58.0
	9.7	8.8	5.3
	7.2	8.8	0.0
	3.6	5.7	3.1
V	1.4	5.7	0.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	7.3
Coarse Sand	0.0
Medium Sand	2.7
Fine Sand	4.6
Silt	83.9
Clay	8.8

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B100188

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-06-00	C9B100188-001	Soil
1MS*	BH-SED-06-00MS	C9B100188-001MS	Soil
1MSD*	BH-SED-06-00MSD	C9B100188-001MSD	Soil
2	BH-SED-07-00	C9B100188-002	Soil
3	BH-SED-08-00	C9B100188-003	Soil
4	BH-SED-09-00	C9B100188-004	Soil
5	BH-SED-10-00	C9B100188-005	Soil
6	BH-SED-11-00	C9B100188-006	Soil
7	BH-SED-12-00	C9B100188-007	Soil
8	BH-SED-13A-00	C9B100188-008	Soil
9	BH-SED-13B-00	C9B100188-009	Soil
10	BH-SED-13C-00	C9B100188-010	Soil
11	BH-SED-14-00	C9B100188-011	Soil
12	DUP-2	C9B100188-012	Soil

* MS/MSD - Cyanide only

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
1	Cyanide	Ok/56%/Ok	L/UL	All samples

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13B-00 mg/kg	DUP-1 mg/kg	RPD	Qualifier
Total Cyanide	1.1	1.1	0%	None
TOC	81300	74000	9%	None

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

EA/MES Sparrows Point 18001868

1-12

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: EA Engineering, Science and Technology
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9B100188

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-06-00	C9B100188 001	K607K1AT	1.4	mg/kg	0.23	1.2	1	2/11/2009 - 2/11/2009 14:06	9042215
BH-SED-07-00	C9B100188 002	K607W1AT	1.2	mg/kg	0.19	1.0	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-08-00	C9B100188 003	K607X1AT	1.4	mg/kg	0.27	1.4	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-09-00	C9B100188 004	K60711AT	1.1	mg/kg	0.19	0.98	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-10-00	C9B100188 005	K60721AT	11.3	mg/kg	0.24	1.2	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-11-00	C9B100188 006	K60741AT	11.7	mg/kg	0.23	1.2	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-12-00	C9B100188 007	K60771AT	2.2	mg/kg	0.19	1.0	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-13A-00	C9B100188 008	K608A1AT	7.5	mg/kg	0.13	0.66	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-13B-00	C9B100188 009	K608C1AT	1.1	mg/kg	0.36	1.9	1	2/11/2009 - 2/11/2009 14:14	9042215
BH-SED-13C-00	C9B100188 010	K608F1AT	0.93	mg/kg	0.43	2.2	1	2/11/2009 - 2/11/2009 14:21	9042215
BH-SED-14-00	C9B100188 011	K608H1AT	1.3	mg/kg	0.40	2.1	1	2/11/2009 - 2/11/2009 14:21	9042215
DUP-2	C9B100188 012	K608J1AT	1.1	mg/kg	0.39	2.0	1	2/11/2009 - 2/11/2009 14:21	9042215

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: EA Engineering, Science and Technology
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9B100188

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-06-00	C9B100188 001	K607K1AU	58700	mg/kg	598	2600	2.15	2/12/2009 - 2/13/2009 11:49	9043317
BH-SED-07-00	C9B100188 002	K607W1AU	83900	mg/kg	386	1680	1.66	2/12/2009 - 2/13/2009 11:59	9043317
BH-SED-08-00	C9B100188 003	K607X1AU	100000	mg/kg	699	3040	2.19	2/12/2009 - 2/13/2009 12:10	9043317
BH-SED-09-00	C9B100188 004	K60711AU	129000	mg/kg	403	1750	1.79	2/12/2009 - 2/13/2009 12:20	9043317
BH-SED-10-00	C9B100188 005	K60721AU	108000	mg/kg	619	2690	2.18	2/12/2009 - 2/13/2009 12:31	9043317
BH-SED-11-00	C9B100188 006	K60741AU	83100	mg/kg	542	2360	1.99	2/12/2009 - 2/13/2009 12:41	9043317
BH-SED-12-00	C9B100188 007	K60771AU	146000	mg/kg	502	2180	2.19	2/12/2009 - 2/13/2009 12:52	9043317
BH-SED-13A-00	C9B100188 008	K608A1AU	49600	mg/kg	303	1320	2.01	2/12/2009 - 2/13/2009 13:13	9043317
BH-SED-13B-00	C9B100188 009	K608C1AU	81300	mg/kg	986	4200	2.25	2/12/2009 - 2/13/2009 13:23	9043317
BH-SED-13C-00	C9B100188 010	K608F1AU	61200	mg/kg	988	4300	1.92	2/12/2009 - 2/13/2009 13:34	9043317
BH-SED-14-00	C9B100188 011	K608H1AU	65600	mg/kg	1090	4750	2.26	2/12/2009 - 2/13/2009 13:44	9043317
DUP-2	C9B100188 012	K608J1AU	74000	mg/kg	1110	4810	2.39	2/12/2009 - 2/13/2009 13:55	9043317

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B100188

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-06-00	C9B100188-001	Soil
1MS*	BH-SED-06-00MS	C9B100188-001MS	Soil
1MSD*	BH-SED-06-00MSD	C9B100188-001MSD	Soil
2	BH-SED-07-00	C9B100188-002	Soil
3	BH-SED-08-00	C9B100188-003	Soil
4	BH-SED-09-00	C9B100188-004	Soil
5	BH-SED-10-00	C9B100188-005	Soil
6	BH-SED-11-00	C9B100188-006	Soil
7	BH-SED-12-00	C9B100188-007	Soil
8	BH-SED-13A-00	C9B100188-008	Soil
9	BH-SED-13B-00	C9B100188-009	Soil
10	BH-SED-13C-00	C9B100188-010	Soil
11	BH-SED-14-00	C9B100188-011	Soil
12	DUP-2	C9B100188-012	Soil

* MS/MSD - Mercury only

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
Reference	Antimony	32%/32%/Ok	L/UL	All samples
	Cadmium	69%/64%/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - An ICP serial dilution sample was not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13B-00 mg/kg	DUP-1 mg/kg	RPD	Qualifier
Mercury	0.30	0.33	10%	None
Silver	0.96	1.0	4%	None
Arsenic	13.6	14.3	5%	None
Beryllium	1.7	1.9	11%	None
Cadmium	1.8	1.9	5%	None
Chromium	127	133	5%	None
Copper	80.6	86.1	7%	None
Nickel	45.0	48.3	7%	None
Lead	167	175	5%	None
Antimony	0.79	0.76	4%	None
Selenium	2.4	2.5	4%	None
Thallium	0.65	0.70	7%	None
Zinc	479	515	7%	None

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

TOTAL Metals

Lot-Sample #....: C9B100188-001

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 59

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.50	0.040	mg/kg	SW846 7471A	02/17/09	K607K1AR
		Dilution Factor: 0.5		Analysis Time...: 14:10	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0030	
Prep Batch #....: 9063430						
Silver	0.86	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AQ
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0029	
Arsenic	19.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AD
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AE
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Cadmium	1.7 L	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AF
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	180 J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K607K1AG
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0097	
Copper	97.3	0.24	mg/kg	SW846 6020	03/04-03/05/09	K607K1AH
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	36.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AJ
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0082	
Lead	166 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AK
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	

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Client Sample ID: BH-SED-06-00

TOTAL Metals

Lot-Sample #....: C9B100188-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.1 L	0.24	mg/kg	SW846 6020	03/04-03/05/09	K607K1AL
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.0040	
Selenium	2.3	0.60	mg/kg	SW846 6020	03/04-03/05/09	K607K1AM
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.049	
Thallium	0.29	0.12	mg/kg	SW846 6020	03/04-03/05/09	K607K1AN
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.0024	
Zinc	498	0.60	mg/kg	SW846 6020	03/04-03/05/09	K607K1AP
		Dilution Factor: 0.5		Analysis Time...: 18:32	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.014	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

mw
5/11/09

EA Engineering, Science and Technology

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Client Sample ID: BH-SKD-07-00

TOTAL Metals

Lot-Sample #....: C9B100188-002

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 51

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.43	0.033	mg/kg	SW846 7471A	02/17/09	K607W1AR
		Dilution Factor: 0.5		Analysis Time...: 14:14	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0025	
Prep Batch #....: 9063430						
Silver	0.71	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AQ
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	22.9	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AD
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Beryllium	1.6	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AE
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Cadmium	1.8 L	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AF
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0092	
Chromium	261 f	0.20	mg/kg	SW846 6020	03/04-03/05/09	K607W1AG
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0081	
Copper	87.7	0.20	mg/kg	SW846 6020	03/04-03/05/09	K607W1AH
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0086	
Nickel	35.0	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AJ
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0069	
Lead	208 f	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AK
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0034	

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Client Sample ID: BH-SED-07-00

TOTAL Metals

Lot-Sample #....: C9B100188-002

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.96 L	0.20	mg/kg	SW846 6020	03/04-03/05/09	K607W1AL
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	2.8	0.51	mg/kg	SW846 6020	03/04-03/05/09	K607W1AM
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	
Thallium	0.37	0.10	mg/kg	SW846 6020	03/04-03/05/09	K607W1AN
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	617	0.51	mg/kg	SW846 6020	03/04-03/05/09	K607W1AP
		Dilution Factor: 0.5		Analysis Time...: 18:36	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

lew
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

TOTAL Metals

Lot-Sample #....: C9B100188-003

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 64

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.44	0.046	mg/kg	SW846 7471A	02/17/09	K607X1AR
		Dilution Factor: 0.5		Analysis Time...: 14:16	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0035	
Prep Batch #....: 9063430						
Silver	0.93	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AQ
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Arsenic	20.0	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AD
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.023	
Beryllium	1.6	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AE
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0051	
Cadmium	1.9 L	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AF
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.013	
Chromium	283 f	0.28	mg/kg	SW846 6020	03/04-03/05/09	K607X1AG
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Copper	129	0.28	mg/kg	SW846 6020	03/04-03/05/09	K607X1AH
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	
Nickel	47.5	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AJ
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0094	
Lead	171 f	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AK
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0047	

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-08-00

TOTAL Metals

Lot-Sample #...: C9B100188-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.3 L	0.28	mg/kg	SW846 6020	03/04-03/05/09	K607X1AL
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0046	
Selenium	2.3	0.69	mg/kg	SW846 6020	03/04-03/05/09	K607X1AM
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.056	
Thallium	0.40	0.14	mg/kg	SW846 6020	03/04-03/05/09	K607X1AN
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0028	
Zinc	597	0.69	mg/kg	SW846 6020	03/04-03/05/09	K607X1AP
		Dilution Factor: 0.5		Analysis Time...: 18:41	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

TOTAL Metals

Lot-Sample #...: C9B100188-004

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 49

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.45	0.032	mg/kg	SW846 7471A	02/17/09	K60711AR
		Dilution Factor: 0.5		Analysis Time...: 14:21	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0024	
Prep Batch #....: 9063430						
Silver	0.50	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AQ
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	12.5	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AD
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	1.0	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AE
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	
Cadmium	1.4 L	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AF
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0089	
Chromium	156 p	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60711AG
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0078	
Copper	60.4	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60711AH
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0083	
Nickel	35.6	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AJ
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0067	
Lead	146 p	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AK
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	

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5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-09-00

TOTAL Metals

Lot-Sample #...: C9B100188-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.84 L	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60711AL
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0032	
Selenium	1.5	0.49	mg/kg	SW846 6020	03/04-03/05/09	K60711AM
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.040	
Thallium	0.25	0.098	mg/kg	SW846 6020	03/04-03/05/09	K60711AN
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	619	0.49	mg/kg	SW846 6020	03/04-03/05/09	K60711AP
		Dilution Factor: 0.5		Analysis Time...: 18:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

mw
03/11/09

EA Engineering, Science and Technology

5

Client Sample ID: BH-SKD-10-00

TOTAL Metals

Lot-Sample #....: C9B100188-005

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 59

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	1.7	0.041	mg/kg	SW846 7471A	02/17/09	K60721AR
		Dilution Factor: 0.5		Analysis Time...: 14:23	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0031	
Prep Batch #....: 9063430						
Silver	1.1	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AQ
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0030	
Arsenic	46.8	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AD
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.6	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AE
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0046	
Cadmium	7.4 L	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AF
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	200 f	0.25	mg/kg	SW846 6020	03/04-03/05/09	K60721AG
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0099	
Copper	130	0.25	mg/kg	SW846 6020	03/04-03/05/09	K60721AH
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	56.4	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AJ
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0084	
Lead	1150 f	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AK
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0042	

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5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-00

TOTAL Metals

Lot-Sample #....: C9B100188-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.9 L	0.25	mg/kg	SW846 6020	03/04-03/05/09	K60721AL
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	
Selenium	7.8	0.62	mg/kg	SW846 6020	03/04-03/05/09	K60721AM
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.050	
Thallium	0.85	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60721AN
		Dilution Factor: 0.5		Analysis Time...: 18:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0025	
Zinc	2730	6.2	mg/kg	SW846 6020	03/04-03/09/09	K60721AP
		Dilution Factor: 5		Analysis Time...: 10:09	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.14	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

lms
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

TOTAL Metals

Lot-Sample #...: C9B100188-006

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 58

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	1.1	0.039	mg/kg	SW846 7471A	02/17/09	K60741AR
		Dilution Factor: 0.5		Analysis Time...: 14:25	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0030	
Prep Batch #...: 9063430						
Silver	1.9	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AQ
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0028	
Arsenic	34.1	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AD
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.3	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AE
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0044	
Cadmium	4.4 L	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AF
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	235 J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K60741AG
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0095	
Copper	275	0.24	mg/kg	SW846 6020	03/04-03/05/09	K60741AH
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	42.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AJ
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0080	
Lead	567 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AK
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-11-00

TOTAL Metals

Lot-Sample #...: C9B100188-006

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.4 L	0.24	mg/kg	SW846 6020	03/04-03/05/09	K60741AL
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0039	
Selenium	5.1	0.59	mg/kg	SW846 6020	03/04-03/05/09	K60741AM
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.048	
Thallium	0.76	0.12	mg/kg	SW846 6020	03/04-03/05/09	K60741AN
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Zinc	1400	0.59	mg/kg	SW846 6020	03/04-03/05/09	K60741AP
		Dilution Factor: 0.5		Analysis Time...: 18:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

ew
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-00

TOTAL Metals

Lot-Sample #....: C9B100188-007

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 50

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.59	0.033	mg/kg	SW846 7471A	02/17/09	K60771AR
		Dilution Factor: 0.5		Analysis Time...: 14:26		Analyst ID.....: 403938
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139		MDL.....: 0.0025
Prep Batch #....: 9063430						
Silver	0.67	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AQ
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.0024
Arsenic	12.6	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AD
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.016
Beryllium	1.0	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AE
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.0037
Cadmium	1.9 L	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AF
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.0091
Chromium	107 f	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60771AG
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.0080
Copper	75.5	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60771AH
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.0085
Nickel	31.5	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AJ
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.0068
Lead	268 f	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AK
		Dilution Factor: 0.5		Analysis Time...: 18:28		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9063236		MDL.....: 0.0034

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-12-00

TOTAL Metals

Lot-Sample #....: C9B100188-007

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.82 L	0.20	mg/kg	SW846 6020	03/04-03/05/09	K60771AL
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	1.6	0.50	mg/kg	SW846 6020	03/04-03/05/09	K60771AM
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.040	
Thallium	0.40	0.10	mg/kg	SW846 6020	03/04-03/05/09	K60771AN
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	609	0.50	mg/kg	SW846 6020	03/04-03/05/09	K60771AP
		Dilution Factor: 0.5		Analysis Time...: 18:28	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

SW
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13A-00

TOTAL Metals

Lot-Sample #...: C9B100188-008

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.13	0.032	mg/kg	SW846 7471A	02/17/09	K608A1AR
		Dilution Factor: 0.75		Analysis Time...: 14:28	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0025	
Prep Batch #....: 9063430						
Silver	0.17	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AQ
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	7.8	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AD
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	0.66	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AE
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	
Cadmium	0.61 L	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AF
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0090	
Chromium	178 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608A1AG
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0079	
Copper	30.9	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608A1AH
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0084	
Nickel	19.0	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AJ
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0067	
Lead	87.2 J	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AK
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	

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AW
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13A-00

TOTAL Metals

Lot-Sample #...: C9B100188-008

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.38 <i>L</i>	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608A1AL
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0032	
Selenium	0.32 <i>J</i>	0.49	mg/kg	SW846 6020	03/04-03/05/09	K608A1AM
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.040	
Thallium	0.41	0.098	mg/kg	SW846 6020	03/04-03/05/09	K608A1AN
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	150	0.49	mg/kg	SW846 6020	03/04-03/05/09	K608A1AP
		Dilution Factor: 0.75		Analysis Time...: 18:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

hw
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

TOTAL Metals

Lot-Sample #...: C9B100188-009

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 73

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.30	0.062	mg/kg	SW846 7471A	02/17/09	K608C1AR
		Dilution Factor: 0.5		Analysis Time...: 14:30	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0047	
Prep Batch #....: 9063430						
Silver	0.96	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Arsenic	13.6	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AD
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.031	
Beryllium	1.7	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AE
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0069	
Cadmium	1.8 L	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AF
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Chromium	127 f	0.37	mg/kg	SW846 6020	03/04-03/05/09	K608C1AG
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.015	
Copper	80.6	0.37	mg/kg	SW846 6020	03/04-03/05/09	K608C1AH
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Nickel	45.0	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.013	
Lead	167 f	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AK
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0063	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

TOTAL Metals

Lot-Sample #....: C9B100188-009

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.79 L	0.37	mg/kg	SW846 6020	03/04-03/05/09	K608C1AL
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0062	
Selenium	2.4	0.93	mg/kg	SW846 6020	03/04-03/05/09	K608C1AM
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.076	
Thallium	0.65	0.19	mg/kg	SW846 6020	03/04-03/05/09	K608C1AN
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Zinc	479	0.93	mg/kg	SW846 6020	03/04-03/05/09	K608C1AP
		Dilution Factor: 0.5		Analysis Time...: 19:04	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.022	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-13C-00

TOTAL Metals

Lot-Sample #...: C9B100188-010

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 78

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9048181						
Mercury	0.32	0.074	mg/kg	SW846 7471A	02/17/09	K608F1AR
		Dilution Factor: 0.5		Analysis Time...: 14:31	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0056	
Prep Batch #...: 9063430						
Silver	0.99	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0054	
Arsenic	14.8	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AD
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.037	
Beryllium	1.9	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AE
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0083	
Cadmium	1.9 L	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AF
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Chromium	124 f	0.45	mg/kg	SW846 6020	03/04-03/05/09	K608F1AG
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Copper	87.7	0.45	mg/kg	SW846 6020	03/04-03/05/09	K608F1AH
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.019	
Nickel	49.2	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.015	
Lead	169 f	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AK
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0076	

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-13C-00

TOTAL Metals

Lot-Sample #...: C9B100188-010

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.71 L	0.45	mg/kg	SW846 6020	03/04-03/05/09	K608F1AL
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Selenium	2.6	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608F1AM
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.091	
Thallium	0.68	0.22	mg/kg	SW846 6020	03/04-03/05/09	K608F1AN
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Zinc	495	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608F1AP
		Dilution Factor: 0.5		Analysis Time...: 19:08	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.026	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-14-00

TOTAL Metals

Lot-Sample #....: C9B100188-011

Matrix.....: SOLID

Date Sampled....: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 76

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.31	0.069	mg/kg	SW846 7471A	02/17/09	K608H1AR
		Dilution Factor: 0.5		Analysis Time...: 14:33	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0053	
Prep Batch #....: 9063430						
Silver	0.92	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0050	
Arsenic	13.3	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AD
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.035	
Beryllium	1.8	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AE
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0078	
Cadmium	1.9 L	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AF
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.019	
Chromium	137 f	0.42	mg/kg	SW846 6020	03/04-03/05/09	K608H1AG
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Copper	89.6	0.42	mg/kg	SW846 6020	03/04-03/05/09	K608H1AH
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Nickel	47.8	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	
Lead	166 f	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AK
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0072	

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5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-14-00

TOTAL Metals

Lot-Sample #...: C9B100188-011

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.69 L	0.42	mg/kg	SW846 6020	03/04-03/05/09	K608H1AL
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0069	
Selenium	2.4	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608H1AM
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.085	
Thallium	0.65	0.21	mg/kg	SW846 6020	03/04-03/05/09	K608H1AN
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0042	
Zinc	511	1.1	mg/kg	SW846 6020	03/04-03/05/09	K608H1AP
		Dilution Factor: 0.5		Analysis Time...: 19:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.025	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

12

Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #...: C9B100188-012

Matrix.....: SOLID

Date Sampled...: 02/09/09

Date Received...: 02/10/09

% Moisture.....: 75

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9048181						
Mercury	0.33	0.066	mg/kg	SW846 7471A	02/17/09	K608J1AR
		Dilution Factor: 0.5		Analysis Time...: 14:34	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9048139	MDL.....: 0.0050	
Prep Batch #....: 9063430						
Silver	1.0	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0048	
Arsenic	14.3	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AD
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.033	
Beryllium	1.9	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AE
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Cadmium	1.9 L	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AF
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Chromium	133 f	0.40	mg/kg	SW846 6020	03/04-03/05/09	K608J1AG
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Copper	86.1	0.40	mg/kg	SW846 6020	03/04-03/05/09	K608J1AH
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.017	
Nickel	48.3	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	
Lead	175 f	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AK
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0068	

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Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #...: C9B100188-012

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.76 L	0.40	mg/kg	SW846 6020	03/04-03/05/09	K608J1AL
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0066	
Selenium	2.5	1.0	mg/kg	SW846 6020	03/04-03/05/09	K608J1AM
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.082	
Thallium	0.70	0.20	mg/kg	SW846 6020	03/04-03/05/09	K608J1AN
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Zinc	515	1.0	mg/kg	SW846 6020	03/04-03/05/09	K608J1AP
		Dilution Factor: 0.5		Analysis Time...: 19:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.024	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

lw
5/1/09

POLYNUCLEAR AROMATIC HYDROCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B100188

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-06-00	C9B100188-001	Soil
1DL	BH-SED-06-00DL	C9B100188-001DL	Soil
2	BH-SED-07-00	C9B100188-002	Soil
2DL	BH-SED-07-00DL	C9B100188-002DL	Soil
3	BH-SED-08-00	C9B100188-003	Soil
4	BH-SED-09-00	C9B100188-004	Soil
4DL	BH-SED-09-00DL	C9B100188-004DL	Soil
5	BH-SED-10-00	C9B100188-005	Soil
6	BH-SED-11-00	C9B100188-006	Soil
6DL	BH-SED-11-00DL	C9B100188-006DL	Soil
7	BH-SED-12-00	C9B100188-007	Soil
8	BH-SED-13A-00	C9B100188-008	Soil
8MS	BH-SED-13A-00MS	C9B100188-008MS	Soil
8MSD	BH-SED-13A-00MSD	C9B100188-008MSD	Soil
9	BH-SED-13B-00	C9B100188-009	Soil
10	BH-SED-13C-00	C9B100188-010	Soil
11	BH-SED-14-00	C9B100188-011	Soil
12	DUP-2	C9B100188-012	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13B-00 ug/kg	DUP-1 ug/kg	RPD	Qualifier
1-Methylnaphthalene	140	150	7%	None
2-Methylnaphthalene	280	320	13%	None
Naphthalene	1700	2000	16%	None
Acenaphthylene	200	210	5%	None
Acenaphthene	98	94	4%	None
Fluorene	150	220	38%	None
Phenanthrene	530	640	19%	None
Anthracene	280	330	16%	None
Fluoranthene	1100	1200	9%	None
Pyrene	790	910	14%	None
Benzo (a) anthracene	580	650	11%	None
Chrysene	640	750	16%	None
Benzo (b) fluoranthene	1500	1600	6%	None
Benzo (k) fluoranthene	350	420	18%	None
Benzo (a) pyrene	630	730	15%	None
Indeno (1,2,3-cd) pyrene	400	440	10%	None
Dibenzo (a,h) anthracene	86	130	41%	None
Benzo (g,h,i) perylene	460	550	18%	None

Compound Quantitation - Several samples exhibited high concentrations of target compounds and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting.

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-06-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-001 Work Order #....: K607K1AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/18/09
 Prep Batch #....: 9048010 Analysis Time...: 19:50
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	760	160	ug/kg	24
2-Methylnaphthalene	1400	160	ug/kg	32
Naphthalene	20000	160	ug/kg	23
Acenaphthylene	8400	160	ug/kg	32
Acenaphthene	4200	160	ug/kg	26
Fluorene	2500	160	ug/kg	24
Phenanthrene	16000	160	ug/kg	19
Anthracene	18000	800	ug/kg	28
Fluoranthene	44000 43000 E	160	ug/kg	14
Pyrene	32000	160	ug/kg	43
Benzo (a) anthracene	32000	160	ug/kg	26
Chrysene	31000	160	ug/kg	28
Benzo (b) fluoranthene	31000	160	ug/kg	33
Benzo (k) fluoranthene	17000	160	ug/kg	34
Benzo (a) pyrene	26000 37000 E	160	ug/kg	45
Indeno (1,2,3-cd) pyrene	19000	160	ug/kg	8.9
Dibenzo (a,h) anthracene	6300	160	ug/kg	36
Benzo (ghi) perylene	20000	160	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-001 Work Order #....: K607K2AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/19/09
 Prep Batch #....: 9048010 Analysis Time...: 16:06
 Dilution Factor: 15 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	560	240	ug/kg	37
2-Methylnaphthalene	1000	240	ug/kg	48
Naphthalene	16000	240	ug/kg	35
Acenaphthylene	6400	240	ug/kg	48
Acenaphthene	3000	240	ug/kg	39
Fluorene	1900	240	ug/kg	36
Phenanthrene	11000	240	ug/kg	29
Anthracene	13000	1200	ug/kg	42
Fluoranthene	44000	240	ug/kg	20
Pyrene	28000	240	ug/kg	64
Benzo (a) anthracene	24000	240	ug/kg	39
Chrysene	23000	240	ug/kg	42
Benzo (b) fluoranthene	23000	240	ug/kg	49
Benzo (k) fluoranthene	12000	240	ug/kg	50
Benzo (a) pyrene	26000	240	ug/kg	68
Indeno (1,2,3-cd) pyrene	12000	240	ug/kg	13
Dibenzo (a,h) anthracene	3800	240	ug/kg	53
Benzo (ghi) perylene	13000	240	ug/kg	18
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Nitrobenzene-d5	NC,DIL	(27 - 110)		
Terphenyl-d14	NC,DIL	(21 - 130)		
2-Fluorobiphenyl	NC,DIL	(28 - 108)		
2-Fluorophenol	NC,DIL	(28 - 107)		
Phenol-d5	NC,DIL	(30 - 112)		
2,4,6-Tribromophenol	NC,DIL	(21 - 116)		

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-002	Work Order #....: K607W1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 20:29	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 51	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	630	140	ug/kg	20
2-Methylnaphthalene	990	140	ug/kg	27
Naphthalene	14000	140	ug/kg	20
Acenaphthylene	8100	140	ug/kg	27
Acenaphthene	4600	140	ug/kg	22
Fluorene	2400	140	ug/kg	20
Phenanthrene	15000	140	ug/kg	16
Anthracene	21000	670	ug/kg	24
Fluoranthene	140000 36000 E	140	ug/kg	11
Pyrene	27000	140	ug/kg	36
Benzo (a) anthracene	61000 28000 E	140	ug/kg	22
Chrysene	63000 29000 E	140	ug/kg	24
Benzo (b) fluoranthene	24000	140	ug/kg	27
Benzo (k) fluoranthene	18000	140	ug/kg	28
Benzo (a) pyrene	56000 31000 E	140	ug/kg	38
Indeno (1,2,3-cd) pyrene	17000	140	ug/kg	7.4
Dibenzo (a,h) anthracene	4300	140	ug/kg	30
Benzo (ghi) perylene	18000	140	ug/kg	9.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Semivolatiles

Lot-Sample #...: C9B100188-002 Work Order #...: K607W2AC Matrix.....: SOLID
 Date Sampled...: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/24/09
 Prep Batch #...: 9048010 Analysis Time...: 03:12
 Dilution Factor: 200 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 51 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1200 J	2700	ug/kg	410
2-Methylnaphthalene	1800 J	2700	ug/kg	530
Naphthalene	28000	2700	ug/kg	390
Acenaphthylene	16000	2700	ug/kg	540
Acenaphthene	8400	2700	ug/kg	430
Fluorene	4700	2700	ug/kg	410
Phenanthrene	28000	2700	ug/kg	320
Anthracene	40000	13000	ug/kg	470
Fluoranthene	140000	2700	ug/kg	230
Pyrene	75000	2700	ug/kg	720
Benzo (a) anthracene	61000	2700	ug/kg	430
Chrysene	63000	2700	ug/kg	470
Benzo (b) fluoranthene	59000	2700	ug/kg	550
Benzo (k) fluoranthene	31000	2700	ug/kg	560
Benzo (a) pyrene	56000	2700	ug/kg	760
Indeno (1,2,3-cd) pyrene	31000	2700	ug/kg	150
Dibenzo (a,h) anthracene	5100	2700	ug/kg	590
Benzo (ghi) perylene	31000	2700	ug/kg	200

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-003	Work Order #....: K607X1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 20:48	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 64	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	300	190	ug/kg	28
2-Methylnaphthalene	670	190	ug/kg	36
Naphthalene	12000	190	ug/kg	27
Acenaphthylene	2000	190	ug/kg	37
Acenaphthene	760	190	ug/kg	30
Fluorene	610	190	ug/kg	28
Phenanthrene	3600	190	ug/kg	22
Anthracene	3700	920	ug/kg	32
Fluoranthene	14000	190	ug/kg	16
Pyrene	9100	190	ug/kg	49
Benzo (a) anthracene	8100	190	ug/kg	30
Chrysene	7600	190	ug/kg	32
Benzo (b) fluoranthene	8800	190	ug/kg	37
Benzo (k) fluoranthene	3600	190	ug/kg	39
Benzo (a) pyrene	8800	190	ug/kg	52
Indeno (1,2,3-cd) pyrene	4900	190	ug/kg	10
Dibenzo (a,h) anthracene	1500	190	ug/kg	41
Benzo (ghi) perylene	5400	190	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

Handwritten:
5/11/09

4

EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-004	Work Order #....: K60711AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 21:08	
Dilution Factor: 9.9	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 49	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	350	130	ug/kg	20
2-Methylnaphthalene	610	130	ug/kg	25
Naphthalene	13000	130	ug/kg	19
Acenaphthylene	3500	130	ug/kg	26
Acenaphthene	1100	130	ug/kg	21
Fluorene	1000	130	ug/kg	20
Phenanthrene	8100	130	ug/kg	15
Anthracene	6500	640	ug/kg	23
Fluoranthene	29000 28000 E	130	ug/kg	11
Pyrene	17000	130	ug/kg	34
Benzo (a) anthracene	19000	130	ug/kg	21
Chrysene	18000	130	ug/kg	23
Benzo (b) fluoranthene	20000	130	ug/kg	26
Benzo (k) fluoranthene	11000	130	ug/kg	27
Benzo (a) pyrene	25000	130	ug/kg	36
Indeno (1,2,3-cd) pyrene	14000	130	ug/kg	7.1
Dibenzo (a,h) anthracene	4900	130	ug/kg	28
Benzo (ghi) perylene	15000	130	ug/kg	9.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

low
5/11/09

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-09-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-004 Work Order #....: K60712AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/19/09
 Prep Batch #....: 9048010 Analysis Time...: 16:25
 Dilution Factor: 14.9 Initial Wgt/Vol: 30.2 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 49 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	290	200	ug/kg	29
2-Methylnaphthalene	490	200	ug/kg	38
Naphthalene	10000	200	ug/kg	28
Acenaphthylene	2600	200	ug/kg	39
Acenaphthene	850	200	ug/kg	31
Fluorene	860	200	ug/kg	29
Phenanthrene	6300	200	ug/kg	23
Anthracene	4900	200	ug/kg	34
Fluoranthene	29000	200	ug/kg	16
Pyrene	17000	200	ug/kg	52
Benzo (a) anthracene	17000	200	ug/kg	31
Chrysene	16000	200	ug/kg	34
Benzo (b) fluoranthene	16000	200	ug/kg	39
Benzo (k) fluoranthene	8600	200	ug/kg	41
Benzo (a) pyrene	18000	200	ug/kg	55
Indeno (1,2,3-cd) pyrene	8900	200	ug/kg	11
Dibenzo (a,h) anthracene	2800	200	ug/kg	43
Benzo (ghi) perylene	8700	200	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SIED-10-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-005	Work Order #....: K60721AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 21:27	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 59	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	590	170	ug/kg	25
2-Methylnaphthalene	680	170	ug/kg	32
Naphthalene	9900	170	ug/kg	24
Acenaphthylene	3000	170	ug/kg	33
Acenaphthene	1800	170	ug/kg	26
Fluorene	1700	170	ug/kg	25
Phenanthrene	6400	170	ug/kg	20
Anthracene	4900	810	ug/kg	29
Fluoranthene	31000	170	ug/kg	14
Pyrene	21000	170	ug/kg	44
Benzo (a) anthracene	15000	170	ug/kg	26
Chrysene	14000	170	ug/kg	29
Benzo (b) fluoranthene	13000	170	ug/kg	33
Benzo (k) fluoranthene	8100	170	ug/kg	34
Benzo (a) pyrene	15000	170	ug/kg	46
Indeno (1,2,3-cd) pyrene	7400	170	ug/kg	9.1
Dibenzo (a,h) anthracene	2600	170	ug/kg	36
Benzo (ghi) perylene	7900	170	ug/kg	12

SURROGATE	PERCENT		RECOVERY	
	RECOVERY		LIMITS	
Nitrobenzene-d5	NC,DIL		(27 - 110)	
Terphenyl-d14	NC,DIL		(21 - 130)	
2-Fluorobiphenyl	NC,DIL		(28 - 108)	
2-Fluorophenol	NC,DIL		(28 - 107)	
Phenol-d5	NC,DIL		(30 - 112)	
2,4,6-Tribromophenol	NC,DIL		(21 - 116)	

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EW
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-11-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-006 Work Order #....: K60741AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/18/09
 Prep Batch #....: 9048010 Analysis Time...: 21:46
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	760	160	ug/kg	24
2-Methylnaphthalene	1600	160	ug/kg	31
Naphthalene	37000 32000 E	160	ug/kg	23
Acenaphthylene	1600	160	ug/kg	31
Acenaphthene	1200	160	ug/kg	25
Fluorene	1600	160	ug/kg	24
Phenanthrene	5600	160	ug/kg	19
Anthracene	4300	780	ug/kg	28
Fluoranthene	26000	160	ug/kg	13
Pyrene	17000	160	ug/kg	42
Benzo (a) anthracene	13000	160	ug/kg	25
Chrysene	11000	160	ug/kg	28
Benzo (b) fluoranthene	10000	160	ug/kg	32
Benzo (k) fluoranthene	5900	160	ug/kg	33
Benzo (a) pyrene	12000	160	ug/kg	44
Indeno (1,2,3-cd) pyrene	5400	160	ug/kg	8.7
Dibenzo (a,h) anthracene	1900	160	ug/kg	35
Benzo (ghi) perylene	6000	160	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

LW
 5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-006 Work Order #....: K60742AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/19/09
 Prep Batch #....: 9048010 Analysis Time...: 16:46
 Dilution Factor: 12.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	850	200	ug/kg	30
2-Methylnaphthalene	1700	200	ug/kg	39
Naphthalene	37000	200	ug/kg	29
Acenaphthylene	1800	200	ug/kg	39
Acenaphthene	1300	200	ug/kg	32
Fluorene	1800	200	ug/kg	30
Phenanthrene	5700	200	ug/kg	24
Anthracene	4400	980	ug/kg	35
Fluoranthene	28000	200	ug/kg	17
Pyrene	19000	200	ug/kg	52
Benzo (a) anthracene	14000	200	ug/kg	32
Chrysene	13000	200	ug/kg	34
Benzo (b) fluoranthene	12000	200	ug/kg	40
Benzo (k) fluoranthene	4600	200	ug/kg	41
Benzo (a) pyrene	12000	200	ug/kg	55
Indeno (1,2,3-cd) pyrene	5000	200	ug/kg	11
Dibenzo (a,h) anthracene	1700	200	ug/kg	43
Benzo (ghi) perylene	5400	200	ug/kg	14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-12-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-007	Work Order #....: K60771AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 22:06	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 50	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	180	130	ug/kg	20
2-Methylnaphthalene	370	130	ug/kg	26
Naphthalene	5300	130	ug/kg	19
Acenaphthylene	950	130	ug/kg	26
Acenaphthene	240	130	ug/kg	21
Fluorene	350	130	ug/kg	20
Phenanthrene	1700	130	ug/kg	16
Anthracene	1200	660	ug/kg	23
Fluoranthene	7500	130	ug/kg	11
Pyrene	5000	130	ug/kg	35
Benzo (a) anthracene	4800	130	ug/kg	21
Chrysene	4800	130	ug/kg	23
Benzo (b) fluoranthene	4900	130	ug/kg	27
Benzo (k) fluoranthene	3000	130	ug/kg	28
Benzo (a) pyrene	5500	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	3100	130	ug/kg	7.3
Dibenzo (a,h) anthracene	1000	130	ug/kg	29
Benzo (ghi) perylene	3500	130	ug/kg	9.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13A-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-008 Work Order #....: K608A1AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/18/09
 Prep Batch #....: 9048010 Analysis Time...: 18:52
 Dilution Factor: 15 Initial Wgt/Vol: 20 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 24 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	830	130	ug/kg	20
2-Methylnaphthalene	1600	130	ug/kg	26
Naphthalene	16000	130	ug/kg	19
Acenaphthylene	1500	130	ug/kg	26
Acenaphthene	910	130	ug/kg	21
Fluorene	1800	130	ug/kg	20
Phenanthrene	7900	130	ug/kg	16
Anthracene	2200	650	ug/kg	23
Fluoranthene	8900	130	ug/kg	11
Pyrene	6000	130	ug/kg	35
Benzo (a) anthracene	4000	130	ug/kg	21
Chrysene	3300	130	ug/kg	23
Benzo (b) fluoranthene	3600	130	ug/kg	27
Benzo (k) fluoranthene	1800	130	ug/kg	27
Benzo (a) pyrene	3600	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	1700	130	ug/kg	7.2
Dibenzo (a,h) anthracene	530	130	ug/kg	29
Benzo (ghi) perylene	1800	130	ug/kg	9.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-009 Work Order #....: K608C1AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/18/09
 Prep Batch #....: 9048010 Analysis Time...: 22:25
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 73 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	140 J	250	ug/kg	38
2-Methylnaphthalene	280	250	ug/kg	49
Naphthalene	1700	250	ug/kg	36
Acenaphthylene	200 J	250	ug/kg	50
Acenaphthene	98 J	250	ug/kg	40
Fluorene	150 J	250	ug/kg	38
Phenanthrene	530	250	ug/kg	30
Anthracene	280 J	1200	ug/kg	44
Fluoranthene	1100	250	ug/kg	21
Pyrene	790	250	ug/kg	66
Benzo (a) anthracene	580	250	ug/kg	40
Chrysene	640	250	ug/kg	44
Benzo (b) fluoranthene	1500	250	ug/kg	50
Benzo (k) fluoranthene	350	250	ug/kg	52
Benzo (a) pyrene	630	250	ug/kg	70
Indeno (1,2,3-cd) pyrene	400	250	ug/kg	14
Dibenzo (a,h) anthracene	86 J	250	ug/kg	55
Benzo (ghi) perylene	460	250	ug/kg	18

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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 5/11/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-13C-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-010	Work Order #....: K608F1AC	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #....: 9048010	Analysis Time...: 22:44	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 78	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	70 J	300	ug/kg	45
2-Methylnaphthalene	140 J	300	ug/kg	59
Naphthalene	770	300	ug/kg	43
Acenaphthylene	110 J	300	ug/kg	59
Acenaphthene	59 J	300	ug/kg	48
Fluorene	100 J	300	ug/kg	45
Phenanthrene	310	300	ug/kg	36
Anthracene	160 J	1500	ug/kg	52
Fluoranthene	590	300	ug/kg	25
Pyrene	430	300	ug/kg	79
Benzo (a) anthracene	310	300	ug/kg	48
Chrysene	310	300	ug/kg	52
Benzo (b) fluoranthene	1400	300	ug/kg	60
Benzo (k) fluoranthene	190 J	300	ug/kg	62
Benzo (a) pyrene	320	300	ug/kg	84
Indeno (1,2,3-cd) pyrene	180 J	300	ug/kg	16
Dibenzo (a,h) anthracene	ND	300	ug/kg	66
Benzo (ghi) perylene	220 J	300	ug/kg	22

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

W
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-14-00

GC/MS Semivolatiles

Lot-Sample #....: C9B100188-011 Work Order #....: K608H1AC Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....: 9048002
 Prep Date.....: 02/17/09 Analysis Date...: 02/18/09
 Prep Batch #....: 9048010 Analysis Time...: 23:04
 Dilution Factor: 9.9 Initial Wgt/Vol: 30.2 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 76 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

REPORTING

PARAMETER	RESULT	LIMIT	UNITS	MDL
1-Methylnaphthalene	170 J	280	ug/kg	42
2-Methylnaphthalene	320	280	ug/kg	55
Naphthalene	1500	280	ug/kg	40
Acenaphthylene	200 J	280	ug/kg	55
Acenaphthene	240 J	280	ug/kg	45
Fluorene	320	280	ug/kg	42
Phenanthrene	860	280	ug/kg	33
Anthracene	390 J	1400	ug/kg	49
Fluoranthene	1700	280	ug/kg	23
Pyrene	1200	280	ug/kg	74
Benzo (a) anthracene	770	280	ug/kg	44
Chrysene	880	280	ug/kg	49
Benzo (b) fluoranthene	1700	280	ug/kg	56
Benzo (k) fluoranthene	290	280	ug/kg	58
Benzo (a) pyrene	730	280	ug/kg	78
Indeno (1,2,3-cd) pyrene	400	280	ug/kg	15
Dibenzo (a,h) anthracene	120 J	280	ug/kg	61
Benzo (ghi) perylene	510	280	ug/kg	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LWS
 5/1/09

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EA Engineering, Science and Technology

Client Sample ID: DUP-2

GC/MS Semivolatiles

Lot-Sample #...: C9B100188-012	Work Order #...: K608J1AC	Matrix.....: SOLID
Date Sampled...: 02/09/09	Date Received...: 02/10/09	MS Run #.....: 9048002
Prep Date.....: 02/17/09	Analysis Date...: 02/18/09	
Prep Batch #...: 9048010	Analysis Time...: 23:23	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 75	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	150 J	270	ug/kg	41
2-Methylnaphthalene	320	270	ug/kg	53
Naphthalene	2000	270	ug/kg	39
Acenaphthylene	210 J	270	ug/kg	53
Acenaphthene	94 J	270	ug/kg	43
Fluorene	220 J	270	ug/kg	40
Phenanthrene	640	270	ug/kg	32
Anthracene	330 J	1300	ug/kg	47
Fluoranthene	1200	270	ug/kg	23
Pyrene	910	270	ug/kg	71
Benzo (a) anthracene	650	270	ug/kg	43
Chrysene	750	270	ug/kg	47
Benzo (b) fluoranthene	1600	270	ug/kg	54
Benzo (k) fluoranthene	420	270	ug/kg	56
Benzo (a) pyrene	730	270	ug/kg	75
Indeno (1,2,3-cd) pyrene	440	270	ug/kg	15
Dibenzo (a,h) anthracene	130 J	270	ug/kg	59
Benzo (ghi) perylene	550	270	ug/kg	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

5/1/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B100188

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-06-00	C9B100188-001	Soil
2	BH-SED-07-00	C9B100188-002	Soil
3	BH-SED-08-00	C9B100188-003	Soil
4	BH-SED-09-00	C9B100188-004	Soil
5	BH-SED-10-00	C9B100188-005	Soil
6	BH-SED-11-00	C9B100188-006	Soil
7	BH-SED-12-00	C9B100188-007	Soil
8	BH-SED-13A-00	C9B100188-008	Soil
9	BH-SED-13B-00	C9B100188-009	Soil
10	BH-SED-13C-00	C9B100188-010	Soil
11	BH-SED-14-00	C9B100188-011	Soil
12	DUP-2	C9B100188-012	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for preserved water and soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.043 RRF	L/R	All samples

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
02/17/09	Acrolein	0.030 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13B-00 ug/kg	DUP-1 ug/kg	RPD	Qualifier
None	ND	ND	-	-

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-001 Work Order #....: K607K1AX Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 11:44
 Dilution Factor: 0.99 Initial Wgt/Vol: 5.03 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 59 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	240	ug/kg	17
Acrylonitrile	ND	240	ug/kg	25
Benzene	ND	12	ug/kg	1.6
Bromodichloromethane	ND	12	ug/kg	1.3
Bromoform	ND	12	ug/kg	1.1
Bromomethane	ND	12	ug/kg	1.8
2-Butanone (MEK)	ND	12	ug/kg	2.1
Carbon tetrachloride	ND	12	ug/kg	1.1
Chloroethane	ND	12	ug/kg	3.7
2-Chloroethyl vinyl ether	ND	24	ug/kg	1.9
Chloroform	ND	12	ug/kg	1.4
Chloromethane	ND	12	ug/kg	2.0
Dibromochloromethane	ND	12	ug/kg	1.7
1,2-Dichlorobenzene	ND	12	ug/kg	1.9
1,3-Dichlorobenzene	ND	12	ug/kg	1.6
1,4-Dichlorobenzene	ND	12	ug/kg	1.5
trans-1,2-Dichloroethene	ND	12	ug/kg	1.4
Dichlorodifluoromethane	ND	12	ug/kg	1.6
1,1-Dichloroethane	ND	12	ug/kg	1.4
1,2-Dichloroethane	ND	12	ug/kg	1.5
1,1-Dichloroethene	ND	12	ug/kg	2.0
1,2-Dichloropropane	ND	12	ug/kg	1.3
cis-1,3-Dichloropropene	ND	12	ug/kg	1.6
trans-1,3-Dichloropropene	ND	12	ug/kg	1.4
Ethylbenzene	ND	12	ug/kg	1.5
Methylene chloride	ND	12	ug/kg	1.6
1,1,2,2-Tetrachloroethane	ND	12	ug/kg	1.7
Tetrachloroethene	ND	12	ug/kg	1.6
Toluene	ND	12	ug/kg	1.7
1,1,1-Trichloroethane	ND	12	ug/kg	1.2
1,1,2-Trichloroethane	ND	12	ug/kg	2.0
Trichloroethene	ND	12	ug/kg	1.6
Trichlorofluoromethane	ND	12	ug/kg	2.2
Vinyl chloride	ND	12	ug/kg	1.1

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 5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-06-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-001 Work Order #....: K607K1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	98	(58 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

luw
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-002	Work Order #....: K607W1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 12:09	
Dilution Factor: 0.82	Initial Wgt/Vol: 6.07 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 51	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	170	ug/kg	12
Acrylonitrile	ND	170	ug/kg	17
Benzene	ND	8.3	ug/kg	1.1
Bromodichloromethane	ND	8.3	ug/kg	0.93
Bromoform	ND	8.3	ug/kg	0.73
Bromomethane	ND	8.3	ug/kg	1.2
2-Butanone (MEK)	ND	8.3	ug/kg	1.5
Carbon tetrachloride	ND	8.3	ug/kg	0.74
Chloroethane	ND	8.3	ug/kg	2.6
2-Chloroethyl vinyl ether	ND	17	ug/kg	1.3
Chloroform	ND	8.3	ug/kg	0.97
Chloromethane	ND	8.3	ug/kg	1.4
Dibromochloromethane	ND	8.3	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.3	ug/kg	1.3
1,3-Dichlorobenzene	ND	8.3	ug/kg	1.1
1,4-Dichlorobenzene	ND	8.3	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.3	ug/kg	0.99
Dichlorodifluoromethane	ND	8.3	ug/kg	1.1
1,1-Dichloroethane	ND	8.3	ug/kg	0.95
1,2-Dichloroethane	ND	8.3	ug/kg	1.0
1,1-Dichloroethene	ND	8.3	ug/kg	1.4
1,2-Dichloropropane	ND	8.3	ug/kg	0.90
cis-1,3-Dichloropropene	ND	8.3	ug/kg	1.1
trans-1,3-Dichloropropene	ND	8.3	ug/kg	0.99
Ethylbenzene	ND	8.3	ug/kg	1.1
Methylene chloride	ND	8.3	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	8.3	ug/kg	1.2
Tetrachloroethene	ND	8.3	ug/kg	1.1
Toluene	ND	8.3	ug/kg	1.2
1,1,1-Trichloroethane	ND	8.3	ug/kg	0.81
1,1,2-Trichloroethane	ND	8.3	ug/kg	1.4
Trichloroethene	ND	8.3	ug/kg	1.1
Trichlorofluoromethane	ND	8.3	ug/kg	1.5
Vinyl chloride	ND	8.3	ug/kg	0.78

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-07-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-002 Work Order #....: K607W1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	88	(52 - 124)
Toluene-d8	97	(72 - 127)
4-Bromofluorobenzene	94	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-003 Work Order #....: K607X1AX Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 12:33
 Dilution Factor: 0.93 Initial Wgt/Vol: 5.39 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 64 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	260	ug/kg	18
Acrylonitrile	ND	260	ug/kg	27
Benzene	ND	13	ug/kg	1.7
Bromodichloromethane	ND	13	ug/kg	1.4
Bromoform	ND	13	ug/kg	1.1
Bromomethane	ND	13	ug/kg	1.9
2-Butanone (MEK)	ND	13	ug/kg	2.3
Carbon tetrachloride	ND	13	ug/kg	1.2
Chloroethane	ND	13	ug/kg	4.0
2-Chloroethyl vinyl ether	ND	26	ug/kg	2.0
Chloroform	ND	13	ug/kg	1.5
Chloromethane	ND	13	ug/kg	2.2
Dibromochloromethane	ND	13	ug/kg	1.8
1,2-Dichlorobenzene	ND	13	ug/kg	2.1
1,3-Dichlorobenzene	ND	13	ug/kg	1.7
1,4-Dichlorobenzene	ND	13	ug/kg	1.6
trans-1,2-Dichloroethene	ND	13	ug/kg	1.5
Dichlorodifluoromethane	ND	13	ug/kg	1.7
1,1-Dichloroethane	ND	13	ug/kg	1.5
1,2-Dichloroethane	ND	13	ug/kg	1.6
1,1-Dichloroethene	ND	13	ug/kg	2.2
1,2-Dichloropropane	ND	13	ug/kg	1.4
cis-1,3-Dichloropropene	ND	13	ug/kg	1.8
trans-1,3-Dichloropropene	ND	13	ug/kg	1.5
Ethylbenzene	ND	13	ug/kg	1.7
Methylene chloride	ND	13	ug/kg	1.7
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.9
Tetrachloroethene	ND	13	ug/kg	1.8
Toluene	ND	13	ug/kg	1.9
1,1,1-Trichloroethane	ND	13	ug/kg	1.3
1,1,2-Trichloroethane	ND	13	ug/kg	2.1
Trichloroethene	ND	13	ug/kg	1.7
Trichlorofluoromethane	ND	13	ug/kg	2.4
Vinyl chloride	ND	13	ug/kg	1.2

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-08-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-003 Work Order #....: K607X1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	104	(72 - 127)
4-Bromofluorobenzene	101	(63 - 120)
Dibromofluoromethane	108	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-09-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-004 Work Order #....: K60711AX Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 12:58
 Dilution Factor: 0.97 Initial Wgt/Vol: 5.18 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 49 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND/R	190	ug/kg	13
Acrylonitrile	ND	190	ug/kg	20
Benzene	ND	9.5	ug/kg	1.3
Bromodichloromethane	ND	9.5	ug/kg	1.1
Bromoform	ND	9.5	ug/kg	0.84
Bromomethane	ND	9.5	ug/kg	1.4
2-Butanone (MEK)	ND	9.5	ug/kg	1.7
Carbon tetrachloride	ND	9.5	ug/kg	0.85
Chloroethane	ND	9.5	ug/kg	2.9
2-Chloroethyl vinyl ether	ND	19	ug/kg	1.5
Chloroform	ND	9.5	ug/kg	1.1
Chloromethane	ND	9.5	ug/kg	1.6
Dibromochloromethane	ND	9.5	ug/kg	1.3
1,2-Dichlorobenzene	ND	9.5	ug/kg	1.5
1,3-Dichlorobenzene	ND	9.5	ug/kg	1.2
1,4-Dichlorobenzene	ND	9.5	ug/kg	1.2
trans-1,2-Dichloroethene	ND	9.5	ug/kg	1.1
Dichlorodifluoromethane	ND	9.5	ug/kg	1.3
1,1-Dichloroethane	ND	9.5	ug/kg	1.1
1,2-Dichloroethane	ND	9.5	ug/kg	1.2
1,1-Dichloroethene	ND	9.5	ug/kg	1.6
1,2-Dichloropropane	ND	9.5	ug/kg	1.0
cis-1,3-Dichloropropene	ND	9.5	ug/kg	1.3
trans-1,3-Dichloropropene	ND	9.5	ug/kg	1.1
Ethylbenzene	ND	9.5	ug/kg	1.2
Methylene chloride	ND	9.5	ug/kg	1.3
1,1,2,2-Tetrachloroethane	ND	9.5	ug/kg	1.4
Tetrachloroethene	ND	9.5	ug/kg	1.3
Toluene	ND	9.5	ug/kg	1.4
1,1,1-Trichloroethane	ND	9.5	ug/kg	0.92
1,1,2-Trichloroethane	ND	9.5	ug/kg	1.6
Trichloroethene	ND	9.5	ug/kg	1.3
Trichlorofluoromethane	ND	9.5	ug/kg	1.7
Vinyl chloride	ND	9.5	ug/kg	0.89

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-09-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-004 Work Order #....: K60711AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	97	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-10-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-005	Work Order #....: K60721AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 13:23	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.85 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 59	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING	LIMIT	UNITS	MDL
Acrolein	ND R		250	ug/kg	18
Acrylonitrile	ND		250	ug/kg	26
Benzene	ND		13	ug/kg	1.7
Bromodichloromethane	ND		13	ug/kg	1.4
Bromoform	ND		13	ug/kg	1.1
Bromomethane	ND		13	ug/kg	1.9
2-Butanone (MEK)	ND		13	ug/kg	2.2
Carbon tetrachloride	ND		13	ug/kg	1.1
Chloroethane	ND		13	ug/kg	3.9
2-Chloroethyl vinyl ether	ND		25	ug/kg	2.0
Chloroform	ND		13	ug/kg	1.5
Chloromethane	ND		13	ug/kg	2.2
Dibromochloromethane	ND		13	ug/kg	1.8
1,2-Dichlorobenzene	ND		13	ug/kg	2.0
1,3-Dichlorobenzene	ND		13	ug/kg	1.7
1,4-Dichlorobenzene	ND		13	ug/kg	1.6
trans-1,2-Dichloroethene	ND		13	ug/kg	1.5
Dichlorodifluoromethane	ND		13	ug/kg	1.7
1,1-Dichloroethane	ND		13	ug/kg	1.5
1,2-Dichloroethane	ND		13	ug/kg	1.6
1,1-Dichloroethene	ND		13	ug/kg	2.2
1,2-Dichloropropane	ND		13	ug/kg	1.4
cis-1,3-Dichloropropene	ND		13	ug/kg	1.7
trans-1,3-Dichloropropene	ND		13	ug/kg	1.5
Ethylbenzene	ND		13	ug/kg	1.6
Methylene chloride	ND		13	ug/kg	1.7
1,1,2,2-Tetrachloroethane	ND		13	ug/kg	1.8
Tetrachloroethene	ND		13	ug/kg	1.7
Toluene	ND		13	ug/kg	1.9
1,1,1-Trichloroethane	ND		13	ug/kg	1.2
1,1,2-Trichloroethane	ND		13	ug/kg	2.1
Trichloroethene	ND		13	ug/kg	1.7
Trichlorofluoromethane	ND		13	ug/kg	2.3
Vinyl chloride	ND		13	ug/kg	1.2

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-005 Work Order #....: K60721AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	94	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-006 Work Order #....: K60741AX Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 13:47
 Dilution Factor: 0.88 Initial Wgt/Vol: 5.71 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 58 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	10	ug/kg	1.4
Bromodichloromethane	ND	10	ug/kg	1.2
Bromoform	ND	10	ug/kg	0.92
Bromomethane	ND	10	ug/kg	1.5
2-Butanone (MEK)	ND	10	ug/kg	1.8
Carbon tetrachloride	ND	10	ug/kg	0.93
Chloroethane	ND	10	ug/kg	3.2
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.6
Chloroform	ND	10	ug/kg	1.2
Chloromethane	ND	10	ug/kg	1.8
Dibromochloromethane	ND	10	ug/kg	1.5
1,2-Dichlorobenzene	ND	10	ug/kg	1.7
1,3-Dichlorobenzene	ND	10	ug/kg	1.4
1,4-Dichlorobenzene	ND	10	ug/kg	1.3
trans-1,2-Dichloroethene	ND	10	ug/kg	1.2
Dichlorodifluoromethane	ND	10	ug/kg	1.4
1,1-Dichloroethane	ND	10	ug/kg	1.2
1,2-Dichloroethane	ND	10	ug/kg	1.3
1,1-Dichloroethene	ND	10	ug/kg	1.8
1,2-Dichloropropane	ND	10	ug/kg	1.1
cis-1,3-Dichloropropene	ND	10	ug/kg	1.4
trans-1,3-Dichloropropene	ND	10	ug/kg	1.2
Ethylbenzene	ND	10	ug/kg	1.3
Methylene chloride	ND	10	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	10	ug/kg	1.5
Tetrachloroethene	ND	10	ug/kg	1.4
Toluene	ND	10	ug/kg	1.5
1,1,1-Trichloroethane	ND	10	ug/kg	1.0
1,1,2-Trichloroethane	ND	10	ug/kg	1.7
Trichloroethene	ND	10	ug/kg	1.4
Trichlorofluoromethane	ND	10	ug/kg	1.9
Vinyl chloride	ND	10	ug/kg	0.98

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-006 Work Order #....: K60741AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	102	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-007	Work Order #....: K60771AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 14:12	
Dilution Factor: 0.97	Initial Wgt/Vol: 5.16 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 50	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	190	ug/kg	14
Acrylonitrile	ND	190	ug/kg	20
Benzene	ND	9.7	ug/kg	1.3
Bromodichloromethane	ND	9.7	ug/kg	1.1
Bromoform	ND	9.7	ug/kg	0.86
Bromomethane	ND	9.7	ug/kg	1.4
2-Butanone (MEK)	ND	9.7	ug/kg	1.7
Carbon tetrachloride	ND	9.7	ug/kg	0.86
Chloroethane	ND	9.7	ug/kg	3.0
2-Chloroethyl vinyl ether	ND	19	ug/kg	1.5
Chloroform	ND	9.7	ug/kg	1.1
Chloromethane	ND	9.7	ug/kg	1.6
Dibromochloromethane	ND	9.7	ug/kg	1.4
1,2-Dichlorobenzene	ND	9.7	ug/kg	1.5
1,3-Dichlorobenzene	ND	9.7	ug/kg	1.3
1,4-Dichlorobenzene	ND	9.7	ug/kg	1.2
trans-1,2-Dichloroethene	ND	9.7	ug/kg	1.2
Dichlorodifluoromethane	ND	9.7	ug/kg	1.3
1,1-Dichloroethane	ND	9.7	ug/kg	1.1
1,2-Dichloroethane	ND	9.7	ug/kg	1.2
1,1-Dichloroethene	ND	9.7	ug/kg	1.6
1,2-Dichloropropane	ND	9.7	ug/kg	1.1
cis-1,3-Dichloropropene	ND	9.7	ug/kg	1.3
trans-1,3-Dichloropropene	ND	9.7	ug/kg	1.2
Ethylbenzene	ND	9.7	ug/kg	1.2
Methylene chloride	ND	9.7	ug/kg	1.3
1,1,2,2-Tetrachloroethane	ND	9.7	ug/kg	1.4
Tetrachloroethene	ND	9.7	ug/kg	1.3
Toluene	ND	9.7	ug/kg	1.4
1,1,1-Trichloroethane	ND	9.7	ug/kg	0.94
1,1,2-Trichloroethane	ND	9.7	ug/kg	1.6
Trichloroethene	ND	9.7	ug/kg	1.3
Trichlorofluoromethane	ND	9.7	ug/kg	1.8
Vinyl chloride	ND	9.7	ug/kg	0.91

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-12-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-007 Work Order #....: K60771AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	97	(63 - 120)
Dibromofluoromethane	102	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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GC/MS Volatiles

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	130	ug/kg	9.3
Acrylonitrile	ND	130	ug/kg	14
Benzene	79	6.6	ug/kg	0.89
Bromodichloromethane	ND	6.6	ug/kg	0.74
Bromoform	ND	6.6	ug/kg	0.59
Bromomethane	ND	6.6	ug/kg	0.98
2-Butanone (MEK)	ND	6.6	ug/kg	1.2
Carbon tetrachloride	ND	6.6	ug/kg	0.59
Chloroethane	ND	6.6	ug/kg	2.1
2-Chloroethyl vinyl ether	ND	13	ug/kg	1.0
Chloroform	ND	6.6	ug/kg	0.77
Chloromethane	ND	6.6	ug/kg	1.1
Dibromochloromethane	ND	6.6	ug/kg	0.94
1,2-Dichlorobenzene	ND	6.6	ug/kg	1.1
1,3-Dichlorobenzene	ND	6.6	ug/kg	0.87
1,4-Dichlorobenzene	ND	6.6	ug/kg	0.84
trans-1,2-Dichloroethene	ND	6.6	ug/kg	0.79
Dichlorodifluoromethane	ND	6.6	ug/kg	0.88
1,1-Dichloroethane	ND	6.6	ug/kg	0.76
1,2-Dichloroethane	ND	6.6	ug/kg	0.81
1,1-Dichloroethene	ND	6.6	ug/kg	1.1
1,2-Dichloropropane	ND	6.6	ug/kg	0.72
cis-1,3-Dichloropropene	ND	6.6	ug/kg	0.90
trans-1,3-Dichloropropene	ND	6.6	ug/kg	0.79
Ethylbenzene	4.9 J	6.6	ug/kg	0.85
Methylene chloride	ND	6.6	ug/kg	0.89
1,1,2,2-Tetrachloroethane	ND	6.6	ug/kg	0.95
Tetrachloroethene	ND	6.6	ug/kg	0.90
Toluene	57	6.6	ug/kg	0.97
1,1,1-Trichloroethane	ND	6.6	ug/kg	0.64
1,1,2-Trichloroethane	ND	6.6	ug/kg	1.1
Trichloroethene	ND	6.6	ug/kg	0.87
Trichlorofluoromethane	ND	6.6	ug/kg	1.2
Vinyl chloride	ND	6.6	ug/kg	0.62

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13A-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-008 Work Order #....: K608A1AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	110	(63 - 120)
Dibromofluoromethane	98	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-009	Work Order #....: K608C1AX	Matrix.....: SOLID
Date Sampled....: 02/09/09	Date Received...: 02/10/09	MS Run #.....:
Prep Date.....: 02/17/09	Analysis Date...: 02/17/09	
Prep Batch #....: 9048090	Analysis Time...: 15:01	
Dilution Factor: 0.98	Initial Wgt/Vol: 5.1 g	Final Wgt/Vol...: 5 mL
* Moisture.....: 73	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	370	ug/kg	26
Acrylonitrile	ND	370	ug/kg	38
Benzene	ND	18	ug/kg	2.5
Bromodichloromethane	ND	18	ug/kg	2.1
Bromoform	ND	18	ug/kg	1.6
Bromomethane	ND	18	ug/kg	2.7
2-Butanone (MEK)	ND	18	ug/kg	3.2
Carbon tetrachloride	ND	18	ug/kg	1.6
Chloroethane	ND	18	ug/kg	5.7
2-Chloroethyl vinyl ether	ND	37	ug/kg	2.8
Chloroform	ND	18	ug/kg	2.1
Chloromethane	ND	18	ug/kg	3.1
Dibromochloromethane	ND	18	ug/kg	2.6
1,2-Dichlorobenzene	ND	18	ug/kg	2.9
1,3-Dichlorobenzene	ND	18	ug/kg	2.4
1,4-Dichlorobenzene	ND	18	ug/kg	2.3
trans-1,2-Dichloroethene	ND	18	ug/kg	2.2
Dichlorodifluoromethane	ND	18	ug/kg	2.4
1,1-Dichloroethane	ND	18	ug/kg	2.1
1,2-Dichloroethane	ND	18	ug/kg	2.2
1,1-Dichloroethene	ND	18	ug/kg	3.1
1,2-Dichloropropane	ND	18	ug/kg	2.0
cis-1,3-Dichloropropene	ND	18	ug/kg	2.5
trans-1,3-Dichloropropene	ND	18	ug/kg	2.2
Ethylbenzene	ND	18	ug/kg	2.4
Methylene chloride	ND	18	ug/kg	2.5
1,1,2,2-Tetrachloroethane	ND	18	ug/kg	2.6
Tetrachloroethene	ND	18	ug/kg	2.5
Toluene	ND	18	ug/kg	2.7
1,1,1-Trichloroethane	ND	18	ug/kg	1.8
1,1,2-Trichloroethane	ND	18	ug/kg	3.0
Trichloroethene	ND	18	ug/kg	2.4
Trichlorofluoromethane	ND	18	ug/kg	3.4
Vinyl chloride	ND	18	ug/kg	1.7

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-13B-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-009 Work Order #....: K608C1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	104	(72 - 127)
4-Bromofluorobenzene	90	(63 - 120)
Dibromofluoromethane	101	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

JW
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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-13C-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-010 Work Order #....: K608F1AX Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 15:25
 Dilution Factor: 0.94 Initial Wgt/Vol: 5.33 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 78 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	420	ug/kg	30
Acrylonitrile	ND	420	ug/kg	44
Benzene	ND	21	ug/kg	2.8
Bromodichloromethane	ND	21	ug/kg	2.4
Bromoform	ND	21	ug/kg	1.9
Bromomethane	ND	21	ug/kg	3.1
2-Butanone (MEK)	ND	21	ug/kg	3.7
Carbon tetrachloride	ND	21	ug/kg	1.9
Chloroethane	ND	21	ug/kg	6.5
2-Chloroethyl vinyl ether	ND	42	ug/kg	3.3
Chloroform	ND	21	ug/kg	2.5
Chloromethane	ND	21	ug/kg	3.6
Dibromochloromethane	ND	21	ug/kg	3.0
1,2-Dichlorobenzene	ND	21	ug/kg	3.4
1,3-Dichlorobenzene	ND	21	ug/kg	2.8
1,4-Dichlorobenzene	ND	21	ug/kg	2.7
trans-1,2-Dichloroethene	ND	21	ug/kg	2.5
Dichlorodifluoromethane	ND	21	ug/kg	2.8
1,1-Dichloroethane	ND	21	ug/kg	2.4
1,2-Dichloroethane	ND	21	ug/kg	2.6
1,1-Dichloroethene	ND	21	ug/kg	3.6
1,2-Dichloropropane	ND	21	ug/kg	2.3
cis-1,3-Dichloropropene	ND	21	ug/kg	2.9
trans-1,3-Dichloropropene	ND	21	ug/kg	2.5
Ethylbenzene	ND	21	ug/kg	2.7
Methylene chloride	ND	21	ug/kg	2.8
1,1,2,2-Tetrachloroethane	ND	21	ug/kg	3.0
Tetrachloroethene	ND	21	ug/kg	2.9
Toluene	ND	21	ug/kg	3.1
1,1,1-Trichloroethane	ND	21	ug/kg	2.0
1,1,2-Trichloroethane	ND	21	ug/kg	3.5
Trichloroethene	ND	21	ug/kg	2.8
Trichlorofluoromethane	ND	21	ug/kg	3.9
Vinyl chloride	ND	21	ug/kg	2.0

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-13C-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-010 Work Order #....: K608F1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	87	(52 - 124)
Toluene-d8	103	(72 - 127)
4-Bromofluorobenzene	92	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-14-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-011 Work Order #....: K608H1AX Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 15:49
 Dilution Factor: 1.01 Initial Wgt/Vol: 4.97 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 76 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	420	ug/kg	30
Acrylonitrile	ND	420	ug/kg	44
Benzene	ND	21	ug/kg	2.9
Bromodichloromethane	ND	21	ug/kg	2.4
Bromoform	ND	21	ug/kg	1.9
Bromomethane	ND	21	ug/kg	3.1
2-Butanone (MEK)	ND	21	ug/kg	3.7
Carbon tetrachloride	ND	21	ug/kg	1.9
Chloroethane	ND	21	ug/kg	6.6
2-Chloroethyl vinyl ether	ND	42	ug/kg	3.3
Chloroform	ND	21	ug/kg	2.5
Chloromethane	ND	21	ug/kg	3.6
Dibromochloromethane	ND	21	ug/kg	3.0
1,2-Dichlorobenzene	ND	21	ug/kg	3.4
1,3-Dichlorobenzene	ND	21	ug/kg	2.8
1,4-Dichlorobenzene	ND	21	ug/kg	2.7
trans-1,2-Dichloroethene	ND	21	ug/kg	2.5
Dichlorodifluoromethane	ND	21	ug/kg	2.8
1,1-Dichloroethane	ND	21	ug/kg	2.4
1,2-Dichloroethane	ND	21	ug/kg	2.6
1,1-Dichloroethene	ND	21	ug/kg	3.6
1,2-Dichloropropane	ND	21	ug/kg	2.3
cis-1,3-Dichloropropene	ND	21	ug/kg	2.9
trans-1,3-Dichloropropene	ND	21	ug/kg	2.5
Ethylbenzene	ND	21	ug/kg	2.7
Methylene chloride	ND	21	ug/kg	2.9
1,1,2,2-Tetrachloroethane	ND	21	ug/kg	3.1
Tetrachloroethene	ND	21	ug/kg	2.9
Toluene	ND	21	ug/kg	3.1
1,1,1-Trichloroethane	ND	21	ug/kg	2.1
1,1,2-Trichloroethane	ND	21	ug/kg	3.5
Trichloroethene	ND	21	ug/kg	2.8
Trichlorofluoromethane	ND	21	ug/kg	3.9
Vinyl chloride	ND	21	ug/kg	2.0

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-14-00

GC/MS Volatiles

Lot-Sample #....: C9B100188-011 Work Order #....: K608H1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	87	(52 - 124)
Toluene-d8	107	(72 - 127)
4-Bromofluorobenzene	90	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

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EA Engineering, Science and Technology

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Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #....: C9B100188-012 Work Order #....: K608J1AX Matrix.....: SOLID
 Date Sampled....: 02/09/09 Date Received...: 02/10/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 16:13
 Dilution Factor: 0.97 Initial Wgt/Vol: 5.17 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 75 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	390	ug/kg	28
Acrylonitrile	ND	390	ug/kg	40
Benzene	ND	20	ug/kg	2.6
Bromodichloromethane	ND	20	ug/kg	2.2
Bromoform	ND	20	ug/kg	1.7
Bromomethane	ND	20	ug/kg	2.9
2-Butanone (MEK)	ND	20	ug/kg	3.4
Carbon tetrachloride	ND	20	ug/kg	1.7
Chloroethane	ND	20	ug/kg	6.0
2-Chloroethyl vinyl ether	ND	39	ug/kg	3.0
Chloroform	ND	20	ug/kg	2.3
Chloromethane	ND	20	ug/kg	3.3
Dibromochloromethane	ND	20	ug/kg	2.8
1,2-Dichlorobenzene	ND	20	ug/kg	3.1
1,3-Dichlorobenzene	ND	20	ug/kg	2.6
1,4-Dichlorobenzene	ND	20	ug/kg	2.5
trans-1,2-Dichloroethene	ND	20	ug/kg	2.3
Dichlorodifluoromethane	ND	20	ug/kg	2.6
1,1-Dichloroethane	ND	20	ug/kg	2.2
1,2-Dichloroethane	ND	20	ug/kg	2.4
1,1-Dichloroethene	ND	20	ug/kg	3.3
1,2-Dichloropropane	ND	20	ug/kg	2.1
cis-1,3-Dichloropropene	ND	20	ug/kg	2.6
trans-1,3-Dichloropropene	ND	20	ug/kg	2.3
Ethylbenzene	ND	20	ug/kg	2.5
Methylene chloride	ND	20	ug/kg	2.6
1,1,2,2-Tetrachloroethane	ND	20	ug/kg	2.8
Tetrachloroethene	ND	20	ug/kg	2.7
Toluene	ND	20	ug/kg	2.8
1,1,1-Trichloroethane	ND	20	ug/kg	1.9
1,1,2-Trichloroethane	ND	20	ug/kg	3.2
Trichloroethene	ND	20	ug/kg	2.6
Trichlorofluoromethane	ND	20	ug/kg	3.6
Vinyl chloride	ND	20	ug/kg	1.8

(Continued on next page)

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EA Engineering, Science and Technology

Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #....: C9B100188-012 Work Order #....: K608J1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	90	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	84	(63 - 120)
Dibromofluoromethane	103	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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5/1/09

SUBSURFACE SEDIMENT ANALYTICAL REPORTS

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

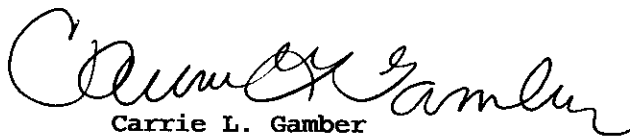
EA/MES Sparrows Point 18001868

Lot #: C9B140124

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 23, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B140124

Sample Receiving:

TestAmerica's Pittsburgh laboratory received one sample on February 14, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard 2C30217K; but were within expected performance range for these compounds: 1,2,4-trichlorobenzene 26.8%, 1,2-dibromo-3-chloropropane 32.2%, methylene chloride 27.3%, and naphthalene 29.8%.

The following compound had the %D > 25% in the calibration verification standard 1C30217K; but was within expected performance range for the compound: acrolein 29.4%.

GC/MS Semivolatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard F022509C; but were within expected performance range for these compounds: benzo(b)fluoranthene 31% and benzo(k)fluoranthene 28%.

Due to the concentration of target compounds detected, the sample was analyzed at a dilution. The surrogates were diluted out.

CASE NARRATIVE

**EA Engineering
Sparrows Point**

LOT # C9B140124

Metals:

Sample BH-SED-12-4 was inadvertently digested using 1.0-gram for the 6020 analysis instead of 1.82-grams required for sediment with a total solid content of 56.1%.

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

General Chemistry:

The sample was analyzed at a dilution for TOC.

TestAmerica's Burlington laboratory performed the grain size and the moisture analyses. All data is included in the package.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

February 26, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9B140124

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on February 17th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/17/09 ETR No: 130140			
784764	BH-SED-12-4	02/13/09	SOLID
784764DP	BH-SED-12-4REP	02/13/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The sample was analyzed for particle size by ASTM D422 and moisture content by ASTM D2216. Replicate analysis was performed on sample BH-SED-12-4 for the moisture content determination.


Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,


for

Ron Pentkowski
Project Manager

Enclosure

METHODS SUMMARY

C9B140124

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B140124

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K673P	001	BH-SED-12-4	02/13/09	14:10

NOTE(S) :

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

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA Engineering Project: Sparrows Point Quote: _____
 Cooler Rec'd & Opened for Temp. Check on: 2/14/09
 Coolers Opened and Unpacked on: 2/14/09 By: Millie
 (Signature)
 TestAmerica Pittsburgh Lot Number: C9B140124

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

Explain any discrepancies: _____

Level 2 Review _____
 Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

UP: Unpreserved

[illegible]

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

Comments: _____

[illegible]

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

[illegible]

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

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

Nitric Acid _____
Sulfuric Acid _____

Hydrochloric Acid _____
Sodium Hydroxide _____

208

500

FedEx Saturday Delivery

151968 10/04.

FedEx Express US Airbill

FedEx
Tracking
Number

8565 6932 6547

1 From This portion can be removed for Recipient's records.

Date 2/13/09

FedEx Tracking Number

856569326547

0212-0722-5

Sender's
Name

TODD WARD

Phone

410 746-1250

Company

E A ENGINEERING SCIENCE & TECH

Address

15 LOVETON CIR

Dept./Floor/Suite/Room

City

SPARKS GLENCOE

State

MD

ZIP

21152

RECIPIENT: PEEL HERE

2 Your Internal Billing Reference

1453706

3 To

Recipient's
Name

SAMPLE MANAGEMENT

Phone

712 963-2728

Company

TEST AMERICA - PITTSBURGH

Recipient's
Address

301 ALPHA DRIVE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

RIDC PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City

PITTSBURGH

State

PA

ZIP

15238

0326961324



8565 6932 6547



emp# 416012 13FEB09 17:14

☐ FedEx First Overnight
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.

☐ FedEx 2Day
Second business day delivery to select locations.*
Saturday Delivery NOT available.

☐ FedEx 3Day
Third business day delivery to select locations.*
Saturday Delivery NOT available.

* To meet locations.

4b Express Services

☐ FedEx 1Day
Next business day.** Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ FedEx 2Day
Second business day delivery to select locations.*
Saturday Delivery NOT available.

☐ FedEx 3Day
Third business day delivery to select locations.*
Saturday Delivery NOT available.

** To meet locations.

5 Packaging

☐ FedEx Envelope* ☐ FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.

☐ FedEx Box ☐ FedEx Tube ☒ Other

* Declared value limit \$500.

6 Special Handling

☒ **SATURDAY Delivery**
Not available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.

☐ **HOLD Weekday
at FedEx Location**
Not available for
FedEx First Overnight.

☐ **HOLD Saturday
at FedEx Location**
Available ONLY for FedEx Priority
Overnight and FedEx 2Day
to select locations.

Does this shipment contain dangerous goods?
One box must be checked.

☒ No ☐ Yes
As per attached
Shipper's Declaration.

☐ Yes
Shipper's Declaration
not required.

☐ Dry Ice
Dry Ice, 9 UN 1845

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender
Acct. No. in Section
1 will be billed.

☐ Recipient ☐ Third Party ☐ Credit Card

☐ Obtain Recip.
Acct. No. ☐ Cash/Check

Total Packages 1 **Total Weight** 32 **Total Charges**

Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

☐ No Signature
Required
Package may be left with-
out obtaining a signature
for delivery.

☐ Direct Signature
Anyone at recipient's
address may sign for delivery.
Fee applies.

☐ Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

Rev. Date 8/06-Put #150270-01/04-2005 FedEx-PRINTED IN U.S.A.-SRS

519

INTER-COMPANY LOG

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-14
Analytical Due Date: 2009-03-12
Report Due Date: 2009-03-13

SMP#: 1 CLIENT ID: BH-SED-12-4 DATE SAMPLED: 20090213 MATRIX: A SOLID

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / **QC TYPE:** 01 STANDARD TEST SET
WORKORDER K673P1AW

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K673P1AV

METAL: XX

Thank You

TestAmerica Pittsburgh Sample Receiving

RELINQUISHED BY: M. T. Curran DATE: 2/19/09

RECEIVED FOR LAB BY: [Signature] DATE: 2/17/01 / CVS

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

GC/MS Volatiles

Lot-Sample #... : C9B140124-001	Work Order #... : K673P1A0	Matrix..... : SOLID
Date Sampled... : 02/13/09	Date Received... : 02/14/09	MS Run #..... :
Prep Date..... : 02/17/09	Analysis Date... : 02/17/09	
Prep Batch #... : 9048090	Analysis Time... : 10:06	
Dilution Factor: 1	Initial Wgt/Vol: 5.02 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 44	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	180	ug/kg	13
Acrylonitrile	ND	180	ug/kg	18
Benzene	ND	8.9	ug/kg	1.2
Bromodichloromethane	ND	8.9	ug/kg	1.0
Bromoform	ND	8.9	ug/kg	0.79
Bromomethane	ND	8.9	ug/kg	1.3
2-Butanone (MEK)	ND	8.9	ug/kg	1.6
Carbon tetrachloride	ND	8.9	ug/kg	0.80
Chloroethane	ND	8.9	ug/kg	2.8
2-Chloroethyl vinyl ether	ND	18	ug/kg	1.4
Chloroform	ND	8.9	ug/kg	1.0
Chloromethane	ND	8.9	ug/kg	1.5
Dibromochloromethane	ND	8.9	ug/kg	1.3
1,2-Dichlorobenzene	ND	8.9	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.9	ug/kg	1.2
1,4-Dichlorobenzene	ND	8.9	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.9	ug/kg	1.1
Dichlorodifluoromethane	ND	8.9	ug/kg	1.2
1,1-Dichloroethane	ND	8.9	ug/kg	1.0
1,2-Dichloroethane	ND	8.9	ug/kg	1.1
1,1-Dichloroethene	ND	8.9	ug/kg	1.5
1,2-Dichloropropane	ND	8.9	ug/kg	0.97
cis-1,3-Dichloropropene	ND	8.9	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.9	ug/kg	1.1
Ethylbenzene	ND	8.9	ug/kg	1.1
Methylene chloride	ND	8.9	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.9	ug/kg	1.3
Tetrachloroethene	ND	8.9	ug/kg	1.2
Toluene	ND	8.9	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.9	ug/kg	0.87
1,1,2-Trichloroethane	ND	8.9	ug/kg	1.5
Trichloroethene	ND	8.9	ug/kg	1.2
Trichlorofluoromethane	ND	8.9	ug/kg	1.6
Vinyl chloride	ND	8.9	ug/kg	0.84

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

GC/MS Volatiles

Lot-Sample #...: C9B140124-001 Work Order #...: K673P1A0 Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	84	(52 - 124)
Toluene-d8	90	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B140124

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-12-4	84	90	91	100	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
SRG02 = Toluene-d8
SRG03 = 4-Bromofluorobenzene
SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
(72-127)
(63-120)
(68-121)

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

FORM II

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B140124

Extraction: XXA4EQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	METHOD BLK. K69QN1AA	97	97	91	94	00
02	LCS K69QN1AC	99	104	111	101	00
03	LCSD K69QN1AD	100	105	108	96	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170000

WO #: K69QN1AC

BATCH: 9048090

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	48.1	120	59 - 129	
Trichloroethene	40.0	37.5	94	76 - 119	
Benzene	40.0	42.1	105	77 - 120	
Toluene	40.0	42.5	106	78 - 124	
Chlorobenzene	40.0	41.2	103	79 - 120	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170000

WO #: K69QN1AD

BATCH: 9048090

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	46.4	116	59 - 129	
Trichloroethene	40.0	39.1	98	76 - 119	
Benzene	40.0	43.6	109	77 - 120	
Toluene	40.0	44.9	112	78 - 124	
Chlorobenzene	40.0	41.6	104	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

K69QN1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3021701.D

Lot Number: C9B140124

Date Analyzed: 02/17/09

Time Analyzed: 08:28

Matrix: SOLID

Date Extracted: 02/17/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-12-4	K673P1A0	3021705.D	02/17/09	10:06
02	CHECK SAMPLE	K69QN1AC C	3021703.D	02/17/09	09:17
03	DUPLICATE CHECK	K69QN1AD L	3021704.D	02/17/09	09:41
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B140124
MB Lot-Sample #: C9B170000-090

Work Order #...: K69QN1AA

Matrix.....: SOLID

Analysis Date...: 02/17/09
Dilution Factor: 1

Prep Date.....: 02/17/09

Prep Batch #...: 9048090

Initial Wgt/Vol: 5 g

Analyst ID.....: 010099

Analysis Time...: 08:28

Final Wgt/Vol...: 5 mL

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
1,2-Dichloroethane-d4	97	(52 - 124)		
Toluene-d8	97	(72 - 127)		
4-Bromofluorobenzene	91	(63 - 120)		

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B140124

Work Order #...: K69QN1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromofluoromethane	94	(68 - 121)		

NOTE (S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B140124
 Lab File ID (Standard): 2C30217K Date Analyzed: 02/17/09
 Instrument ID: HP3 Time Analyzed: 0748
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	450701	7.40	103279	10.49	227105	12.81
	UPPER LIMIT	901402	7.60	206558	10.69	454210	13.01
	LOWER LIMIT	225351	7.20	51640	10.29	113553	12.61
	EPA SAMPLE NO.						
01	INTRA-LAB BL	601876	7.42	140539	10.49	208672	12.81
02	INTRA-LAB CH	381280	7.41	98308	10.49	220361	12.81
03	INTRA-LAB CH	398585	7.40	99951	10.49	217599	12.81
04	BH-SED-12-4	500515	7.41	120775	10.49	205088	12.82
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

GC/MS Semivolatiles

Lot-Sample #....: C9B140124-001 Work Order #....: K673P1AC Matrix.....: SOLID
 Date Sampled...: 02/13/09 14:10 Date Received...: 02/14/09 09:30 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 10:10
 Dilution Factor: 10.98 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 44 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	64 J	130	ug/kg	20
2-Methylnaphthalene	120 J	130	ug/kg	26
Naphthalene	1900	130	ug/kg	19
Acenaphthylene	300	130	ug/kg	26
Acenaphthene	75 J	130	ug/kg	21
Fluorene	150	130	ug/kg	20
Phenanthrene	740	130	ug/kg	16
Anthracene	630 J	650	ug/kg	23
Fluoranthene	4200	130	ug/kg	11
Pyrene	3200	130	ug/kg	35
Benzo (a) anthracene	2600	130	ug/kg	21
Chrysene	2700	130	ug/kg	23
Benzo (b) fluoranthene	4200	130	ug/kg	26
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	1800	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	1900	130	ug/kg	7.2
Dibenzo (a,h) anthracene	250	130	ug/kg	29
Benzo (ghi) perylene	2000	130	ug/kg	9.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B140124

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-12-4	0 D	0 D	0 D	0 D	0 D	0 D	06
02	INTRA-LAB QC	0 D	0 D	0 D	0 D	0 D	0 D	06
03	METHOD BLK. K7M881AA	82	119	96	91	87	100	00
04	LCS K7M881AC	52	68	58	59	56	81	00
05	LAB MS/MSD D	0 D	0 D	0 D	0 D	0 D	0 D	06
06	LAB MS/MSD S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B250000

WO #: K7M881AC

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	158	47	39 - 105	
2-Chlorophenol	333	187	56	40 - 105	
1,4-Dichlorobenzene	333	183	55	41 - 101	
N-Nitrosodi-n-propylamine	333	163	49	42 - 108	
1,2,4-Trichlorobenzene	333	197	59	41 - 105	
4-Chloro-3-methylphenol	333	203	61	43 - 110	
Acenaphthene	333	191	57	42 - 104	
4-Nitrophenol	333	205	61	27 - 131	
2,4-Dinitrotoluene	333	250	75	48 - 118	
Pentachlorophenol	333	171	51	18 - 125	
Pyrene	333	225	68	39 - 113	
4-Methylphenol	667	359	54	43 - 107	
Hexachloroethane	333	176	53	40 - 102	
Naphthalene	333	187	56	42 - 104	
4-Bromophenyl phenyl ethe	333	232	70	43 - 111	
Butyl benzyl phthalate	333	228	68	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B200184

WO #: K7HF71A2

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	662	130		0*	39 - 105	DIL
2-Chlorophenol	662	ND		0*	40 - 105	DIL
1,4-Dichlorobenzene	662	ND		0*	41 - 101	DIL
N-Nitrosodi-n-propylamine	662	ND		0*	42 - 108	DIL
1,2,4-Trichlorobenzene	662	ND		0*	41 - 105	DIL
4-Chloro-3-methylphenol	662	ND		0*	43 - 110	DIL
Acenaphthene	662	1100		0*	42 - 104	DIL
4-Nitrophenol	662	ND		0*	27 - 131	DIL
2,4-Dinitrotoluene	662	ND		0*	48 - 118	DIL
Pentachlorophenol	662	ND		0*	18 - 125	DIL
Pyrene	662	6800		0*	39 - 113	DIL
4-Methylphenol	1320	ND		0*	43 - 107	DIL
Hexachloroethane	662	ND		0*	40 - 102	DIL
Naphthalene	662	75000		0*	42 - 104	DIL
4-Bromophenyl phenyl ethe	662	ND		0*	43 - 111	DIL
Butyl benzyl phthalate	662	ND		0*	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B200184

WO #: K7HF71A3

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	662		0*	0.0	40	39 - 105	DIL
2-Chlorophenol	662		0*	0.0	37	40 - 105	DIL
1,4-Dichlorobenzene	662		0*	0.0	32	41 - 101	DIL
N-Nitrosodi-n-propylamine	662		0*	0.0	32	42 - 108	DIL
1,2,4-Trichlorobenzene	662		0*	0.0	36	41 - 105	DIL
4-Chloro-3-methylphenol	662		0*	0.0	31	43 - 110	DIL
Acenaphthene	662		0*	0.0	34	42 - 104	DIL
4-Nitrophenol	662		0*	0.0	33	27 - 131	DIL
2,4-Dinitrotoluene	662		0*	0.0	33	48 - 118	DIL
Pentachlorophenol	662		0*	0.0	34	18 - 125	DIL
Pyrene	662		0*	0.0	28	39 - 113	DIL
4-Methylphenol	1320		0*	0.0	36	43 - 107	DIL
Hexachloroethane	662		0*	0.0	34	40 - 102	DIL
Naphthalene	662		0*	0.0	25	42 - 104	DIL
4-Bromophenyl phenyl ethe	662		0*	0.0	20	43 - 111	DIL
Butyl benzyl phthalate	662		0*	0.0	34	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7M881AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0225020.

Lot Number: C9B140124

Date Analyzed: 02/26/09

Time Analyzed: 08:53

Matrix: SOLID

Date Extracted:02/25/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level:(low/med) LOW

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

CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
=====	=====	=====	=====	=====
01 BH-SED-12-4	K673P1AC	F0226021.	02/27/09	10:10
02 INTRA-LAB QC	K7HF71AC	F0225022.	02/26/09	09:37
03 LAB MS/MSD	K7HF71A2 S	F0225023.	02/26/09	09:59
04 LAB MS/MSD	K7HF71A3 D	F0225024.	02/26/09	10:21
05 CHECK SAMPLE	K7M881AC C	F0226015.	02/27/09	07:58
06				
07				
08				
09				
10				
11				
12				
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23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B140124
MB Lot-Sample #: C9B250000-010

Work Order #...: K7M881AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 0.5

Prep Date.....: 02/25/09
Prep Batch #...: 9056010
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 08:53
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo(a,h)anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(27 - 110)
Terphenyl-d14	119	(21 - 130)
2-Fluorobiphenyl	96	(28 - 108)
2-Fluorophenol	91	(28 - 107)
Phenol-d5	87	(30 - 112)
2,4,6-Tribromophenol	100	(21 - 116)

NOTE (S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B140124

Lab File ID (Standard): F02250C2

Date Analyzed: 02/26/09

Instrument ID: 722

Time Analyzed: 0046

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	85600	4.27	297996	5.26	183384	6.61
UPPER LIMIT	171200	4.77	595992	5.76	366768	7.11
LOWER LIMIT	42800	3.77	148998	4.76	91692	6.11
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	68564	4.28	257053	5.26	147817	6.61
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B140124
 Lab File ID (Standard): F02250C2 Date Analyzed: 02/26/09
 Instrument ID: 722 Time Analyzed: 0046

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	278236	7.76	228190	10.08	172747	11.65
UPPER LIMIT	556472	8.26	456380	10.58	345494	12.15
LOWER LIMIT	139118	7.26	114095	9.58	86374	11.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	278674	7.76	202740	10.06	155577	11.64
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B140124

Lab File ID (Standard): F02260C2

Date Analyzed: 02/27/09

Instrument ID: 722

Time Analyzed: 0223

	IS1 (DCB)	RT #	IS2 (NPT)	RT #	IS3 (ANT)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	79117	4.27	290136	5.26	161094	6.62
UPPER LIMIT	158234	4.77	580272	5.76	322188	7.12
LOWER LIMIT	39559	3.77	145068	4.76	80547	6.12
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	88850	4.27	342118	5.26	202723	6.61
02 BH-SED-12-4	73827	4.27	267900	5.26	156990	6.61
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B140124
 Lab File ID (Standard): F02260C2 Date Analyzed: 02/27/09
 Instrument ID: 722 Time Analyzed: 0223

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	261312	7.77	199767	10.11	158164	11.76
UPPER LIMIT	522624	8.27	399534	10.61	316328	12.26
LOWER LIMIT	130656	7.27	99884	9.61	79082	11.26
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	329357	7.77	245402	10.09	174755	11.66
02 BH-SED-12-4	250180	7.76	171614	10.10	179495	11.68
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

METALS SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

TOTAL Metals

Lot-Sample #....: C9B140124-001

Matrix.....: SOLID

Date Sampled....: 02/13/09

Date Received...: 02/14/09

% Moisture.....: 44

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 9062016						
Mercury	0.086	0.032	mg/kg	SW846 7471A	03/03/09	K673P1AR
		Dilution Factor: 0.55		Analysis Time...: 08:05	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0025	
Prep Batch #....: 9063427						
Silver	0.21	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AQ
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0043	
Arsenic	8.6	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AD
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.029	
Beryllium	0.84	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AE
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0066	
Cadmium	0.75	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AF
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.016	
Chromium	46.0 J	0.36	mg/kg	SW846 6020	03/04-03/10/09	K673P1AG
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.014	
Copper	26.0 J	0.36	mg/kg	SW846 6020	03/04-03/10/09	K673P1AH
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.015	
Nickel	22.0	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AJ
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.012	
Lead	72.3 J	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AK
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0061	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

TOTAL Metals

Lot-Sample #....: C9B140124-001

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Antimony	0.38 J	0.36	mg/kg	SW846 6020	03/04-03/10/09	K673P1AL
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0059	
Selenium	0.65 B	0.89	mg/kg	SW846 6020	03/04-03/10/09	K673P1AM
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.072	
Thallium	0.19	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AN
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0036	
Zinc	204 J	0.89	mg/kg	SW846 6020	03/04-03/10/09	K673P1AP
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.021	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B140124

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C030000-016 Prep Batch #...: 9062016						
Mercury	ND	0.016	mg/kg	SW846 7471A	03/03/09	K7XWJ1AA
		Dilution Factor: 0.5				
		Analysis Time...: 08:01		Analyst ID.....: 031043		Instrument ID...: HGH
MB Lot-Sample #: C9C040000-427 Prep Batch #...: 9063427						
Antimony	0.0058 B	0.20	mg/kg	SW846 6020	03/04-03/10/09	K72671AE
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Arsenic	ND	0.10	mg/kg	SW846 6020	03/04-03/10/09	K72671AK
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Beryllium	ND	0.10	mg/kg	SW846 6020	03/04-03/10/09	K72671AM
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Cadmium	ND	0.10	mg/kg	SW846 6020	03/04-03/10/09	K72671AP
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Chromium	0.12 B	0.20	mg/kg	SW846 6020	03/04-03/10/09	K72671AR
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Copper	0.015 B	0.20	mg/kg	SW846 6020	03/04-03/10/09	K72671AT
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Lead	0.0059 B	0.10	mg/kg	SW846 6020	03/04-03/10/09	K72671AA
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Nickel	ND	0.10	mg/kg	SW846 6020	03/04-03/10/09	K72671A1
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Selenium	ND	0.50	mg/kg	SW846 6020	03/04-03/10/09	K72671AC
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9B140124

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Silver	ND	0.10	mg/kg	SW846 6020	03/04-03/10/09	K72671AH
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Thallium	ND	0.10	mg/kg	SW846 6020	03/04-03/10/09	K72671AD
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP
Zinc	0.038 B	0.50	mg/kg	SW846 6020	03/04-03/10/09	K72671AG
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 400149		Instrument ID...: ICP

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B140124

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #...: 9062016					
Mercury	97	(80 - 120)	SW846 7471A	03/03/09	K7XWJ1AC
		Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-427 Prep Batch #...: 9063427					
Lead	102	(80 - 120)	SW846 6020	03/04-03/10/09	K72671A2
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Selenium	88	(80 - 120)	SW846 6020	03/04-03/10/09	K72671A3
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Thallium	97	(80 - 120)	SW846 6020	03/04-03/10/09	K72671A4
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Antimony	92	(80 - 120)	SW846 6020	03/04-03/10/09	K72671A5
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Zinc	99	(80 - 120)	SW846 6020	03/04-03/10/09	K72671A7
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Silver	104	(80 - 120)	SW846 6020	03/04-03/10/09	K72671A8
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Arsenic	95	(80 - 120)	SW846 6020	03/04-03/10/09	K72671CA
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Beryllium	92	(80 - 120)	SW846 6020	03/04-03/10/09	K72671CD
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Cadmium	97	(80 - 120)	SW846 6020	03/04-03/10/09	K72671CF
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B140124

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Chromium	108	(80 - 120)	SW846 6020	03/04-03/10/09	K72671CH
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Copper	108	(80 - 120)	SW846 6020	03/04-03/10/09	K72671CJ
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Nickel	108	(80 - 120)	SW846 6020	03/04-03/10/09	K72671CQ
		Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B140124

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #....: 9062016							
Mercury	0.208	0.203	mg/kg	97	SW846 7471A	03/03/09	K7XWJ1AC
				Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043	
				Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-427 Prep Batch #....: 9063427							
Lead	2.00	2.05	mg/kg	102	SW846 6020	03/04-03/10/09	K72671A2
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Selenium	1.00	0.879	mg/kg	88	SW846 6020	03/04-03/10/09	K72671A3
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Thallium	5.00	4.84	mg/kg	97	SW846 6020	03/04-03/10/09	K72671A4
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Antimony	50.0	45.9	mg/kg	92	SW846 6020	03/04-03/10/09	K72671A5
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Zinc	50.0	49.4	mg/kg	99	SW846 6020	03/04-03/10/09	K72671A7
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Silver	5.00	5.19	mg/kg	104	SW846 6020	03/04-03/10/09	K72671A8
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Arsenic	4.00	3.80	mg/kg	95	SW846 6020	03/04-03/10/09	K72671CA
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Beryllium	5.00	4.61	mg/kg	92	SW846 6020	03/04-03/10/09	K72671CD
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Cadmium	5.00	4.86	mg/kg	97	SW846 6020	03/04-03/10/09	K72671CF
				Dilution Factor: 1	Analysis Time...: 20:24	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B140124

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Chromium	20.0	21.6	mg/kg	108	SW846 6020	03/04-03/10/09	K72671CH
Dilution Factor: 1 Analysis Time..: 20:24 Analyst ID.....: 400149							
Instrument ID..: ICPMS2							
Copper	25.0	27.0	mg/kg	108	SW846 6020	03/04-03/10/09	K72671CJ
Dilution Factor: 1 Analysis Time..: 20:24 Analyst ID.....: 400149							
Instrument ID..: ICPMS2							
Nickel	50.0	54.0	mg/kg	108	SW846 6020	03/04-03/10/09	K72671CQ
Dilution Factor: 1 Analysis Time..: 20:24 Analyst ID.....: 400149							
Instrument ID..: ICPMS2							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B140124

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B250106-002 Prep Batch #...: 9063427						
Antimony	71 N	(75 - 125)		SW846 6020	03/04-03/10/09	K7NE21AM
	71 N	(75 - 125)	0.61 (0-20)	SW846 6020	03/04-03/10/09	K7NE21AN
Dilution Factor: 1						
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9063235						
Arsenic	98	(75 - 125)		SW846 6020	03/04-03/10/09	K7NE21CU
	92	(75 - 125)	2.2 (0-20)	SW846 6020	03/04-03/10/09	K7NE21CV
Dilution Factor: 1						
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9063235						
Beryllium	98	(75 - 125)		SW846 6020	03/04-03/10/09	K7NE21C2
	98	(75 - 125)	0.07 (0-20)	SW846 6020	03/04-03/10/09	K7NE21C3
Dilution Factor: 1						
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9063235						
Cadmium	96	(75 - 125)		SW846 6020	03/04-03/10/09	K7NE21C8
	96	(75 - 125)	0.24 (0-20)	SW846 6020	03/04-03/10/09	K7NE21C9
Dilution Factor: 1						
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9063235						
Chromium	117	(75 - 125)		SW846 6020	03/04-03/10/09	K7NE21DF
	118	(75 - 125)	0.67 (0-20)	SW846 6020	03/04-03/10/09	K7NE21DG
Dilution Factor: 1						
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9063235						
Copper	98	(75 - 125)		SW846 6020	03/04-03/10/09	K7NE21DJ
	98	(75 - 125)	0.14 (0-20)	SW846 6020	03/04-03/10/09	K7NE21DK
Dilution Factor: 1						
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9063235						
Lead	NC	(75 - 125)		SW846 6020	03/04-03/10/09	K7NE21AC
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/10/09	K7NE21AD
Dilution Factor: 1						
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9063235						

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B140124

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	99	(75 - 125)			SW846 6020	03/04-03/10/09	K7NE21D5
	100	(75 - 125)	0.39	(0-20)	SW846 6020	03/04-03/10/09	K7NE21D6
Dilution Factor: 1							
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9063235							
Selenium	78	(75 - 125)			SW846 6020	03/04-03/10/09	K7NE21AF
	65 N	(75 - 125)	9.8	(0-20)	SW846 6020	03/04-03/10/09	K7NE21AG
Dilution Factor: 1							
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9063235							
Silver	103	(75 - 125)			SW846 6020	03/04-03/10/09	K7NE21CM
	100	(75 - 125)	2.2	(0-20)	SW846 6020	03/04-03/10/09	K7NE21CN
Dilution Factor: 1							
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9063235							
Thallium	96	(75 - 125)			SW846 6020	03/04-03/10/09	K7NE21AJ
	97	(75 - 125)	0.36	(0-20)	SW846 6020	03/04-03/10/09	K7NE21AK
Dilution Factor: 1							
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9063235							
Zinc	92	(75 - 125)			SW846 6020	03/04-03/10/09	K7NE21AU
	95	(75 - 125)	0.68	(0-20)	SW846 6020	03/04-03/10/09	K7NE21AV
Dilution Factor: 1							
Analysis Time...: 20:48 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9063235							

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B140124

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B250106-002 Prep Batch #...: 9063427

% Moisture.....: 28

Antimony

0.32	69.0	49.0 N	mg/kg	71		SW846 6020	03/04-03/10/09	K7NE21AM
0.32	69.0	49.4 N	mg/kg	71	0.61	SW846 6020	03/04-03/10/09	K7NE21AN
Dilution Factor: 1								
			Analysis Time...: 20:48	Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9063235								

Arsenic

10.6	5.52	16.0	mg/kg	98		SW846 6020	03/04-03/10/09	K7NE21CU
10.6	5.52	15.7	mg/kg	92	2.2	SW846 6020	03/04-03/10/09	K7NE21CV
Dilution Factor: 1								
			Analysis Time...: 20:48	Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9063235								

Beryllium

0.71	6.90	7.49	mg/kg	98		SW846 6020	03/04-03/10/09	K7NE21C2
0.71	6.90	7.49	mg/kg	98	0.07	SW846 6020	03/04-03/10/09	K7NE21C3
Dilution Factor: 1								
			Analysis Time...: 20:48	Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9063235								

Cadmium

0.74	6.90	7.38	mg/kg	96		SW846 6020	03/04-03/10/09	K7NE21C8
0.74	6.90	7.36	mg/kg	96	0.24	SW846 6020	03/04-03/10/09	K7NE21C9
Dilution Factor: 1								
			Analysis Time...: 20:48	Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9063235								

Chromium

18.6	27.6	50.9	mg/kg	117		SW846 6020	03/04-03/10/09	K7NE21DF
18.6	27.6	51.2	mg/kg	118	0.67	SW846 6020	03/04-03/10/09	K7NE21DG
Dilution Factor: 1								
			Analysis Time...: 20:48	Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9063235								

Copper

21.8	34.5	55.6	mg/kg	98		SW846 6020	03/04-03/10/09	K7NE21DJ
21.8	34.5	55.7	mg/kg	98	0.14	SW846 6020	03/04-03/10/09	K7NE21DK
Dilution Factor: 1								
			Analysis Time...: 20:48	Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9063235								

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B140124

Matrix.....: SOLID

Date Sampled....: 02/24/09

Date Received...: 02/25/09

	SAMPLE	SPIKE	MEASRD	PERCNT			PREPARATION-	WORK
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	ANALYSIS DATE	ORDER #
Lead								
	69.5	2.76	69.5	NC mg/kg			03/04-03/10/09	K7NE21AC
	69.5	2.76	76.9	NC mg/kg			03/04-03/10/09	K7NE21AD
			Dilution Factor: 1					
			Analysis Time...: 20:48		Instrument ID...: ICPMS2		Analyst ID.....: 400149	
			MS Run #.....: 9063235					
Nickel								
	22.6	69.0	91.1	mg/kg	99		03/04-03/10/09	K7NE21D5
	22.6	69.0	91.5	mg/kg	100	0.39	03/04-03/10/09	K7NE21D6
			Dilution Factor: 1					
			Analysis Time...: 20:48		Instrument ID...: ICPMS2		Analyst ID.....: 400149	
			MS Run #.....: 9063235					
Selenium								
	0.83	1.38	1.91	mg/kg	78		03/04-03/10/09	K7NE21AF
	0.83	1.38	1.73	N mg/kg	65	9.8	03/04-03/10/09	K7NE21AG
			Dilution Factor: 1					
			Analysis Time...: 20:48		Instrument ID...: ICPMS2		Analyst ID.....: 400149	
			MS Run #.....: 9063235					
Silver								
	0.069	6.90	7.15	mg/kg	103		03/04-03/10/09	K7NE21CM
	0.069	6.90	6.99	mg/kg	100	2.2	03/04-03/10/09	K7NE21CN
			Dilution Factor: 1					
			Analysis Time...: 20:48		Instrument ID...: ICPMS2		Analyst ID.....: 400149	
			MS Run #.....: 9063235					
Thallium								
	0.17	6.90	6.81	mg/kg	96		03/04-03/10/09	K7NE21AJ
	0.17	6.90	6.83	mg/kg	97	0.36	03/04-03/10/09	K7NE21AK
			Dilution Factor: 1					
			Analysis Time...: 20:48		Instrument ID...: ICPMS2		Analyst ID.....: 400149	
			MS Run #.....: 9063235					
Zinc								
	158	69.0	222	mg/kg	92		03/04-03/10/09	K7NE21AU
	158	69.0	224	mg/kg	95	0.68	03/04-03/10/09	K7NE21AV
			Dilution Factor: 1					
			Analysis Time...: 20:48		Instrument ID...: ICPMS2		Analyst ID.....: 400149	
			MS Run #.....: 9063235					

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B140124

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury	93	(75 - 125)		SW846 7471A	03/03/09	K7RJ81AV
	89	(75 - 125)	2.7 (0-20)	SW846 7471A	03/03/09	K7RJ81AW
Dilution Factor: 0.5						
Analysis Time...: 08:26 Instrument ID...: HGHYDRA Analyst ID.....: 031043						
MS Run #.....: 9062012						

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B140124

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury

0.056	0.103	0.152	mg/kg	93			SW846 7471A	03/03/09	K7RJ81AV
0.056	0.103	0.148	mg/kg	89	2.7		SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY SUMMARY

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B140124

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-12-4	C9B140124 001	K673P1AT	ND	mg/kg	0.17	0.89	1	2/20/2009 - 2/24/2009 09:28	9051081

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method:

SM20

2540G

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B140124

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-12-4	C9B140124 001	K673P1AA	56.1	%	0.0	1.0	1	2/19/2009 - 2/20/2009 05:03	9050033

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B140124

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-12-4	C9B140124 001	K673P1AU	37900	mg/kg	381	1660	1.86	2/17/2009 - 2/17/2009 17:43	9048321

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Report ID: C9B140124

Matrix: SOLID

Date/Time Received: 2/18/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B200000081B	081 MB	K7GNM1AA	ND	mg/kg	0.50	2/20/2009 - 2/24/2009 09:20	9051081	

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Report ID: C9B140124

Matrix: SOLID

Date/Time Received: 2/11/2009 9:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K63L51AE	82.4	%	1.0	2/19/2009 - 2/20/2009 05:03	9050033	0.84 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Report ID: C9B140124

Matrix: SOLID

Date/Time Received: 2/7/2009 9:50:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B170000321B	321 MB	K7AJ11AA	ND	mg/kg	500	2/17/2009 - 2/17/2009 16:19	9048321	

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B200000

Matrix: SOLID

Date/Time Received: 2/18/2009 10:00:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7GNM1AC	103	41 - 159	2/20/2009 - 2/24/2009 09:20	9051081	
LAB MS/MSD	MS	K673C1CA	102	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	3.9 / 20
LAB MS/MSD	MS	K7C311A0	100	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	7.3 / 20
LAB MS/MSD	MSD	K673C1CC	106	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	3.9 / 20
LAB MS/MSD	MSD	K7C311A1	112	75 - 125	2/20/2009 - 2/24/2009 09:31	9051081	7.3 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B170000

Matrix: SOLID

Date/Time Received:

2/7/2009 9:50:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7AJ11AC	99	75 - 125	2/17/2009 - 2/17/2009 16:30	9048321	2.0 / 20
LAB MS/MSD	MSD	K6W551C4	168 N	75 - 125	2/17/2009 - 2/17/2009 17:12	9048321	3.0 / 20
DUPLICATE CHECK	LCSD	K7AJ11AD	101	75 - 125	2/17/2009 - 2/17/2009 16:40	9048321	2.0 / 20
LAB MS/MSD	MS	K6W551C3	163 N	75 - 125	2/17/2009 - 2/17/2009 17:01	9048321	3.0 / 20

TestAmerica
South Burlington, VT
Sample Data Summary
Package

9B140124



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-12-4

Lab Name: TestAmerica Burlington

Contract: C9B140124

SDG No.: 9B140124

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784764

Matrix: SOLID

Client: STLPAP

Date Received: 02/17/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	69.5	

Printed on: 02/24/09 10:23 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.

BH-SED-12-4REP

Lab Name: TestAmerica Burlington

Contract: C9B140124

SDG No.: 9B140124

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784764DP

Matrix: SOLID

Client: STLPAP

Date Received: 02/17/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Sample Result Qual.	Duplicate Sample Result Conc.	Duplicate Sample Result Qual.	RPD ¹
D2216	Moisture Content	02/19/09		%	69.5		77.3		11

1 - Control Limit for RPD is +/- 20%, unless otherwise specified.

Printed on: 02/24/09 10:23 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130140
SDG: 9B140124

Start Date: 2/19/2009
Start Time: 20:25
End Date: 2/20/2009
Analyst: TPB

[illegible]

Particle Size of Soils by ASTM D422

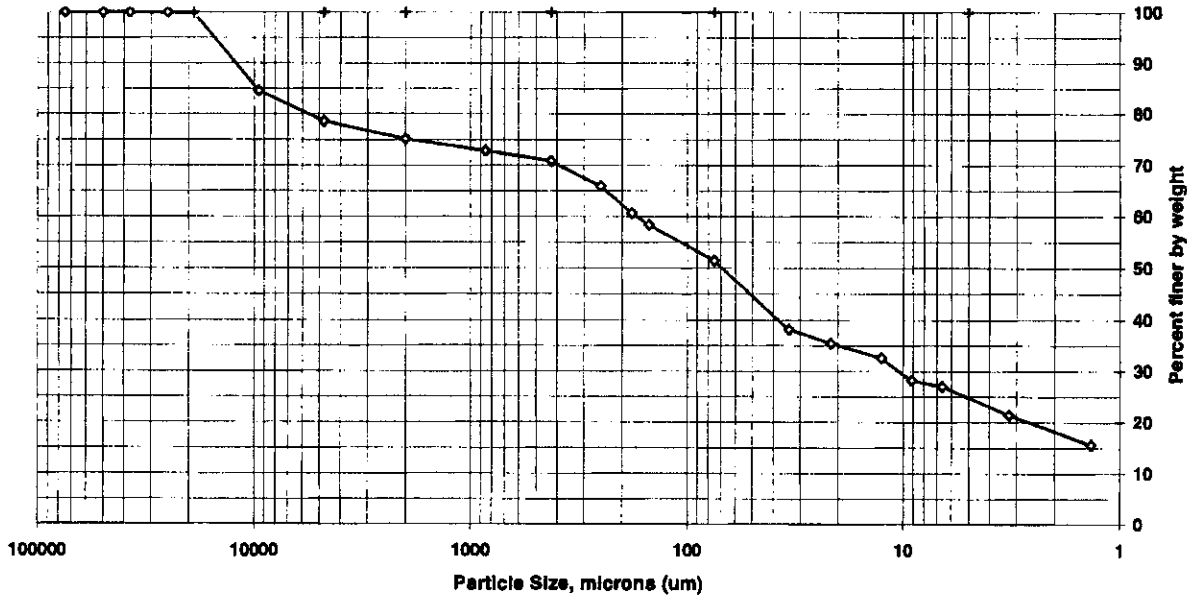
Client Code: STLPAP
 Sample ID: BH-SED-12-4
 Lab ID: 784764

SDG: 9B140124
 ETR(s): 130140

Date Received: 2/17/2009
 Start Date: 2/17/2009
 End Date: 2/24/2009

Percent Solids: 59.0%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: shell
 Shape (> #10): subangular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	84.6	15.4
#4	4750	78.8	6.0
#10	2000	75.1	3.4
#20	850	72.8	2.3
#40	425	70.8	1.9
#60	250	65.9	4.9
#80	180	60.7	5.2
#100	150	58.4	2.3
#200	75	51.4	7.0
Hydrometer	33.8	38.2	13.2
	21.6	35.4	2.8
	12.6	32.8	2.8
	9.1	28.2	4.4
	6.6	27.0	1.2
	3.2	21.4	5.6
V	1.4	15.6	5.8

Soil Classification	Percent of Total Sample
Gravel	21.4
Sand	27.1
Coarse Sand	3.4
Medium Sand	4.3
Fine Sand	19.4
Silt	24.4
Clay	27.0

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B140124

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-12-4	C9B140124-001	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
Reference	TOC	168%/163%/Ok	K	1

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B140124

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-12-4	C9B140124 001	K673P1AT	ND	mg/kg	0.17	0.89	1	2/20/2009 - 2/24/2009 09:28	9051081

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B140124

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-12-4	C9B140124 001	K673P1AU	37900	mg/kg	381	1660	1.86	2/17/2009 - 2/17/2009 17:43	9048321

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B140124

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-12-4	C9B140124-001	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
Reference	Antimony	71%/71%/Ok	L/UL	1
	Selenium	Ok/65%/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

TOTAL Metals

Lot-Sample #....: C9B140124-001

Matrix.....: SOLID

Date Sampled....: 02/13/09

Date Received...: 02/14/09

% Moisture.....: 44

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	0.086	0.032	mg/kg	SW846 7471A	03/03/09	K673P1AR
		Dilution Factor: 0.55		Analysis Time...: 08:05	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0025	
Prep Batch #....: 9063427						
Silver	0.21	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AQ
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0043	
Arsenic	8.6	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AD
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.029	
Beryllium	0.84	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AE
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0066	
Cadmium	0.75	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AF
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.016	
Chromium	46.0 ✓	0.36	mg/kg	SW846 6020	03/04-03/10/09	K673P1AG
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.014	
Copper	26.0 ✓	0.36	mg/kg	SW846 6020	03/04-03/10/09	K673P1AH
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.015	
Nickel	22.0	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AJ
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.012	
Lead	72.3 ✓	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AK
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0061	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

TOTAL Metals

Lot-Sample #...: C9B140124-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.38 <i>L</i>	0.36	mg/kg	SW846 6020	03/04-03/10/09	K673P1AL
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0059	
Selenium	0.65 <i>L</i>	0.89	mg/kg	SW846 6020	03/04-03/10/09	K673P1AM
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.072	
Thallium	0.19	0.18	mg/kg	SW846 6020	03/04-03/10/09	K673P1AN
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.0036	
Zinc	204 <i>L</i>	0.89	mg/kg	SW846 6020	03/04-03/10/09	K673P1AP
		Dilution Factor: 1		Analysis Time...: 20:31	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9063235	MDL.....: 0.021	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

POLYNUCLEAR AROMATIC HYDROCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B140124

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-12-4	C9B140124-001	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

GC/MS Semivolatiles

Lot-Sample #....: C9B140124-001 Work Order #....: K673P1AC Matrix.....: SOLID
 Date Sampled....: 02/13/09 14:10 Date Received...: 02/14/09 09:30 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 10:10
 Dilution Factor: 10.98 Initial Wgt/Vol: 27.3 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 44 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	64 J	130	ug/kg	20
2-Methylnaphthalene	120 J	130	ug/kg	26
Naphthalene	1900	130	ug/kg	19
Acenaphthylene	300	130	ug/kg	26
Acenaphthene	75 J	130	ug/kg	21
Fluorene	150	130	ug/kg	20
Phenanthrene	740	130	ug/kg	16
Anthracene	630 J	650	ug/kg	23
Fluoranthene	4200	130	ug/kg	11
Pyrene	3200	130	ug/kg	35
Benzo (a) anthracene	2600	130	ug/kg	21
Chrysene	2700	130	ug/kg	23
Benzo (b) fluoranthene	4200	130	ug/kg	26
Benzo (k) fluoranthene	ND	130	ug/kg	27
Benzo (a) pyrene	1800	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	1900	130	ug/kg	7.2
Dibenzo (a,h) anthracene	250	130	ug/kg	29
Benzo (ghi) perylene	2000	130	ug/kg	9.6

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B140124

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-12-4	C9B140124-001	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.043 RRF	L/R	1

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
02/17/09	Acrolein	0.030 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample samples was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-12-4

GC/MS Volatiles

Lot-Sample #....: C9B140124-001 Work Order #....: K673P1A0 Matrix.....: SOLID
 Date Sampled....: 02/13/09 Date Received...: 02/14/09 MS Run #.....:
 Prep Date.....: 02/17/09 Analysis Date...: 02/17/09
 Prep Batch #....: 9048090 Analysis Time...: 10:06
 Dilution Factor: 1 Initial Wgt/Vol: 5.02 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 44 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	180	ug/kg	13
Acrylonitrile	ND	180	ug/kg	18
Benzene	ND	8.9	ug/kg	1.2
Bromodichloromethane	ND	8.9	ug/kg	1.0
Bromoform	ND	8.9	ug/kg	0.79
Bromomethane	ND	8.9	ug/kg	1.3
2-Butanone (MEK)	ND	8.9	ug/kg	1.6
Carbon tetrachloride	ND	8.9	ug/kg	0.80
Chloroethane	ND	8.9	ug/kg	2.8
2-Chloroethyl vinyl ether	ND	18	ug/kg	1.4
Chloroform	ND	8.9	ug/kg	1.0
Chloromethane	ND	8.9	ug/kg	1.5
Dibromochloromethane	ND	8.9	ug/kg	1.3
1,2-Dichlorobenzene	ND	8.9	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.9	ug/kg	1.2
1,4-Dichlorobenzene	ND	8.9	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.9	ug/kg	1.1
Dichlorodifluoromethane	ND	8.9	ug/kg	1.2
1,1-Dichloroethane	ND	8.9	ug/kg	1.0
1,2-Dichloroethane	ND	8.9	ug/kg	1.1
1,1-Dichloroethene	ND	8.9	ug/kg	1.5
1,2-Dichloropropane	ND	8.9	ug/kg	0.97
cis-1,3-Dichloropropene	ND	8.9	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.9	ug/kg	1.1
Ethylbenzene	ND	8.9	ug/kg	1.1
Methylene chloride	ND	8.9	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.9	ug/kg	1.3
Tetrachloroethene	ND	8.9	ug/kg	1.2
Toluene	ND	8.9	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.9	ug/kg	0.87
1,1,2-Trichloroethane	ND	8.9	ug/kg	1.5
Trichloroethene	ND	8.9	ug/kg	1.2
Trichlorofluoromethane	ND	8.9	ug/kg	1.6
Vinyl chloride	ND	8.9	ug/kg	0.84

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-12-4

GC/MS Volatiles

Lot-Sample #...: C9B140124-001 Work Order #...: K673P1A0 Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	84	(52 - 124)
Toluene-d8	90	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

kw
5/1/09

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

EA/MES Sparrows Point 18001868

Lot #: C9B170199

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 18, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE

EA Engineering Sparrows Point

LOT # C9B170199

Sample Receiving:

TestAmerica's Pittsburgh laboratory received one sample on February 17, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compound had the %D > 25% in the calibration verification standard CC30224; but was within expected performance range for this compound: dichlorodifluoromethane 31.3%.

The following compound had the %D > 25% in the calibration verification standard 1C30224; but was within expected performance range for this compound: acrylonitrile 32.3%.

GC/MS Semivolatiles:

Due to the concentration of target compounds detected, the sample was analyzed at a dilution. The sample had the surrogates diluted out.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in calibration verification standard F022509C2; but were within expected performance range for these compounds: 2,2-oxybis(1-chloropropane) 32%, 2-nitroaniline 27%, benzo(b)fluoranthene 31%, benzo(k)fluoranthene 28%, benzoic acid 40%, benzyl alcohol 28%, and n-nitrosodi-n-propylamine 27%.

CASE NARRATIVE

**EA Engineering
Sparrows Point**

LOT # C9B170199

Metals:

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

General Chemistry:

The sample was analyzed at a dilution for TOC.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

February 26, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9B170199

Dear Ms. Gamber:

Enclosed are the analytical results for the sample that was received by TestAmerica Burlington on February 18th, 2009. A laboratory identification number was assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/18/09 ETR No: 130149			
784801	BH-SED-01-8	02/16/09	SOLID

Documentation of the condition of the sample at the time of its receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The sample was analyzed for particle size by ASTM D422 and moisture content by ASTM D2216.


Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the sample presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,


for

Ron Pentkowski
Project Manager

Enclosure

METHODS SUMMARY

C9B170199

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
SM20	"STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B170199

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K7AM2	001	BH-SED-01-8	02/16/09	16:30

NOTE (S) :

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

SEDIMENT

Cooler Receipt Form

TestAmerica Pittsburgh

Client: E.A. Engineering Project: 2/17/09 Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 2/17/09

Coolers Opened and Unpacked on: 2/17/09 By: RCF

(Signature)

TestAmerica Pittsburgh Lot Number: C9B170199

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

C9B170199

10

(1 - 68)

REMOVE LINER
TO EXPOSE ADHESIVE
TO EXPOSE ADHESIVE

FedEx US Airbill
Express

FedEx
Tracking
Number

8565 6932 6591

1 From This portion can be removed for Recipient's records

Date 2/16/09 FedEx Tracking Number 856569326591

Sender's Name TODD WARD Phone 410 746-1250

Company E A ENGINEERING SCIENCE & TECH

Address 15 LOVETON CIR

City SPARKS GLENCOE State MD ZIP 21152

2 Your Internal Billing Reference 1453406

3 To Recipient's Name SAMPLE MANAGEMENT Phone 412 963-2428

Company TEST AMERICA - PITTSBURGH

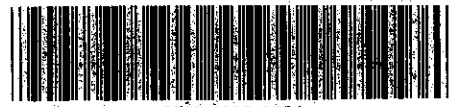
Recipient's Address 301 ALPHA DRIVE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address RIDC PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City PITTSBURGH State PA ZIP 15238



8565 6932 6591

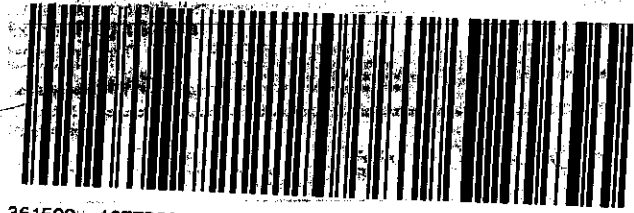
032696132

17 FEB 16 2009
PRIORITY OVERNIGHT

TRK# 8565 6932 6591

NA AGCA

15238
PA-US
PIT



emp# 361599 16FEB09 18:34

02.17
6591
182 A

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-17
Analytical Due Date: 2009-03-16
Report Due Date: 2009-03-17

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-01-8 DATE SAMPLED: 20090216 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7AM21AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7AM21AV METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: Patricia J. Jant DATE: 2/17/09 1700
RECEIVED FOR LAB BY: [Signature] DATE: 2/18/09 1030

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-8

GC/MS Volatiles

Lot-Sample #... : C9B170199-001	Work Order #... : K7AM21AX	Matrix..... : SOLID
Date Sampled... : 02/16/09	Date Received... : 02/17/09	MS Run #..... : 9055019
Prep Date..... : 02/24/09	Analysis Date... : 02/24/09	
Prep Batch #... : 9055034	Analysis Time... : 06:54	
Dilution Factor: 1	Initial Wgt/Vol: 5.02 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 53	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.95
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.96
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-01-8

GC/MS Volatiles

Lot-Sample #...: C9B170199-001 Work Order #...: K7AM21AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	93	(72 - 127)
4-Bromofluorobenzene	112	(63 - 120)
Dibromofluoromethane	95	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170199

Extraction: XXA15QK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	87	96	109	99	00
02	METHOD BLK. K7LLF1AA	91	95	90	90	00
03	LCS K7LLF1AC	93	101	104	96	00
04	LAB MS/MSD D	82	101	102	92	00
05	LAB MS/MSD S	83	100	103	91	00

SURROGATESQC LIMITS

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

(52-124)
 (72-127)
 (63-120)
 (63-121)

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

FORM II

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170199

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-01-8	91	93	112	95	00

<u>SURROGATES</u>	<u>QC LIMITS</u>
SRG01 = 1,2-Dichloroethane-d4	(52-124)
SRG02 = Toluene-d8	(72-127)
SRG03 = 4-Bromofluorobenzene	(63-120)
SRG04 = Dibromofluoromethane	(63-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B240000

WO #: K7LLF1AC

BATCH: 9055034

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	38.0	95	59 - 129	
Trichloroethene	40.0	34.8	87	76 - 119	
Benzene	40.0	38.0	95	77 - 120	
Toluene	40.0	39.7	99	78 - 124	
Chlorobenzene	40.0	38.2	96	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B140187

WO #: K68KR1AD

BATCH: 9055034

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	40.0	ND	44.5	111	59 - 129	
Trichloroethene	40.0	ND	40.6	102	76 - 119	
Benzene	40.0	ND	42.9	107	77 - 120	
Toluene	40.0	ND	45.4	113	78 - 124	
Chlorobenzene	40.0	ND	43.1	108	79 - 120	

NOTES (S) :

 Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B140187

WO #: K68KR1AE

BATCH: 9055034

COMPOUND	SPIKE	MSD	MSD	QC LIMITS				QUAL
	ADDED (ug/kg)	CONCENT. (ug/kg)	% REC	% RPD	RPD	REC		
1,1-Dichloroethene	40.0	46.0	115	3.5	25	59 - 129		
Trichloroethene	40.0	41.7	104	2.5	21	76 - 119		
Benzene	40.0	43.9	110	2.2	20	77 - 120		
Toluene	40.0	46.1	115	1.6	21	78 - 124		
Chlorobenzene	40.0	43.1	108	0.070	20	79 - 120		

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

K7LLF1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3022401.D

Lot Number: C9B170199

Date Analyzed: 02/24/09

Time Analyzed: 06:05

Matrix: SOLID

Date Extracted: 02/24/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	K68KR1AA	3022402.D	02/24/09	06:30
02	LAB MS/MSD	K68KR1AD S	3022405.D	02/24/09	07:44
03	LAB MS/MSD	K68KR1AE D	3022406.D	02/24/09	08:08
04	BH-SED-01-8	K7AM21AX	3022403.D	02/24/09	06:54
05	CHECK SAMPLE	K7LLF1AC C	3022404.D	02/24/09	07:19
06					
07					
08					
09					
10					
11					
12					
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14					
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17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B170199
MB Lot-Sample #: C9B240000-034

Work Order #...: K7LLF1AA

Matrix.....: SOLID

Analysis Date...: 02/24/09
Dilution Factor: 1

Prep Date.....: 02/24/09

Prep Batch #...: 9055034

Analysis Time...: 06:05

Initial Wgt/Vol: 5 g

Final Wgt/Vol...: 5 mL

Analyst ID.....: 010099

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	90	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B170199

Work Order #...: K7LLF1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	90	(68 - 121)		

NOTE(S) :

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

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TESTAMERICA PITTSBURGH Contract:
Lab Code: TA Case No.: SAS No.: SDG No.:
Lab File ID: BF30224 BFB Injection Date: 02/24/09
Instrument ID: HP3 BFB Injection Time: 0427
GC Column: DB624 20M ID: 0.18 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	48.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5 (0.8)1
174	50.0 - 100.0% of mass 95	69.1
175	5.0 - 9.0% of mass 174	4.9 (7.1)1
176	95.0 - 101.0% of mass 174	67.0 (97.0)1
177	5.0 - 9.0% of mass 176	4.7 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD40	VSTD40	CC30224	02/24/09	0459
02	APPIX40	APPIX40	1C30224	02/24/09	0523
03	INTRA-LAB BL	K7LLF1AA	3022401	02/24/09	0605
04	BH-SED-01-8	K7AM21AX	3022403	02/24/09	0654
05	INTRA-LAB CH	K7LLF1AC	3022404	02/24/09	0719
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B170199
 Lab File ID (Standard): CC30224 Date Analyzed: 02/24/09
 Instrument ID: HP3 Time Analyzed: 0459
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	635449	7.40	147176	10.49	296526	12.81
	UPPER LIMIT	1270898	7.60	294352	10.69	593052	13.01
	LOWER LIMIT	317725	7.20	73588	10.29	148263	12.61
	EPA SAMPLE NO.						
01	INTRA-LAB BL	764052	7.42	183873	10.49	270399	12.82
02	BH-SED-01-8	645484	7.41	150707	10.49	292419	12.82
03	INTRA-LAB CH	564908	7.40	126604	10.49	263427	12.81
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-8

GC/MS Semivolatiles

Lot-Sample #....: C9B170199-001	Work Order #....: K7AM21AC	Matrix.....: SOLID
Date Sampled....: 02/16/09 16:30	Date Received...: 02/17/09 09:20	MS Run #.....: 9056002
Prep Date.....: 02/25/09	Analysis Date...: 02/27/09	
Prep Batch #....: 9056010	Analysis Time...: 10:33	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 53	Analyst ID.....: 007062	Instrument ID...: 722
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	1200	140	ug/kg	22
2-Methylnaphthalene	2300	140	ug/kg	28
Naphthalene	28000	140	ug/kg	21
Acenaphthylene	700	140	ug/kg	29
Acenaphthene	300	140	ug/kg	23
Fluorene	860	140	ug/kg	22
Phenanthrene	2100	140	ug/kg	17
Anthracene	1000	710	ug/kg	25
Fluoranthene	4800	140	ug/kg	12
Pyrene	4200	140	ug/kg	38
Benzo (a) anthracene	3000	140	ug/kg	23
Chrysene	1600	140	ug/kg	25
Benzo (b) fluoranthene	2500	140	ug/kg	29
Benzo (k) fluoranthene	1300	140	ug/kg	30
Benzo (a) pyrene	1800	140	ug/kg	40
Indeno (1,2,3-cd) pyrene	1500	140	ug/kg	7.9
Dibenzo (a,h) anthracene	320	140	ug/kg	31
Benzo (ghi) perylene	2000	140	ug/kg	11

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC: The recovery and/or RPD were not calculated.
DIL: The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B170199

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-01-8	0 D	0 D	0 D	0 D	0 D	0 D	06
02	INTRA-LAB QC	0 D	0 D	0 D	0 D	0 D	0 D	06
03	METHOD BLK. K7M881AA	82	119	96	91	87	100	00
04	LCS K7M881AC	52	68	58	59	56	81	00
05	LAB MS/MSD D	0 D	0 D	0 D	0 D	0 D	0 D	06
06	LAB MS/MSD S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATESQC LIMITS

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B250000

WO #: K7M881AC

BAICH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	158	47	39 - 105	
2-Chlorophenol	333	187	56	40 - 105	
1,4-Dichlorobenzene	333	183	55	41 - 101	
N-Nitrosodi-n-propylamine	333	163	49	42 - 108	
1,2,4-Trichlorobenzene	333	197	59	41 - 105	
4-Chloro-3-methylphenol	333	203	61	43 - 110	
Acenaphthene	333	191	57	42 - 104	
4-Nitrophenol	333	205	61	27 - 131	
2,4-Dinitrotoluene	333	250	75	43 - 118	
Pentachlorophenol	333	171	51	13 - 125	
Pyrene	333	225	68	39 - 113	
4-Methylphenol	667	359	54	43 - 107	
Hexachloroethane	333	176	53	40 - 102	
Naphthalene	333	187	56	42 - 104	
4-Bromophenyl phenyl ethe	333	232	70	43 - 111	
Butyl benzyl phthalate	333	228	68	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B200184

WO #: K7HF71A2

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	662	130		0*	39 - 105	DIL
2-Chlorophenol	662	ND		0*	40 - 105	DIL
1,4-Dichlorobenzene	662	ND		0*	41 - 101	DIL
N-Nitrosodi-n-propylamine	662	ND		0*	42 - 108	DIL
1,2,4-Trichlorobenzene	662	ND		0*	41 - 105	DIL
4-Chloro-3-methylphenol	662	ND		0*	43 - 110	DIL
Acenaphthene	662	1100		0*	42 - 104	DIL
4-Nitrophenol	662	ND		0*	27 - 131	DIL
2,4-Dinitrotoluene	662	ND		0*	48 - 118	DIL
Pentachlorophenol	662	ND		0*	18 - 125	DIL
Pyrene	662	6800		0*	39 - 113	DIL
4-Methylphenol	1320	ND		0*	43 - 107	DIL
Hexachloroethane	662	ND		0*	40 - 102	DIL
Naphthalene	662	75000		0*	42 - 104	DIL
4-Bromophenyl phenyl ethe	662	ND		0*	43 - 111	DIL
Butyl benzyl phthalate	662	ND		0*	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B20C184

WO #: K7HF71A3

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	662		0*	0.0	40	39 - 105	DIL
2-Chlorophenol	662		0*	0.0	37	40 - 105	DIL
1,4-Dichlorobenzene	662		0*	0.0	32	41 - 101	DIL
N-Nitrosodi-n-propylamine	662		0*	0.0	32	42 - 108	DIL
1,2,4-Trichlorobenzene	662		0*	0.0	36	41 - 105	DIL
4-Chloro-3-methylphenol	662		0*	0.0	31	43 - 110	DIL
Acenaphthene	662		0*	0.0	34	42 - 104	DIL
4-Nitrophenol	662		0*	0.0	33	27 - 131	DIL
2,4-Dinitrotoluene	662		0*	0.0	33	48 - 118	DIL
Pentachlorophenol	662		0*	0.0	34	18 - 125	DIL
Pyrene	662		0*	0.0	28	39 - 113	DIL
4-Methylphenol	1320		0*	0.0	36	43 - 107	DIL
Hexachloroethane	662		0*	0.0	34	40 - 102	DIL
Naphthalene	662		0*	0.0	25	42 - 104	DIL
4-Bromophenyl phenyl ethe	662		0*	0.0	20	43 - 111	DIL
Butyl benzyl phthalate	662		0*	0.0	34	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7M381AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0225020.

Lot Number: C9B170199

Date Analyzed: 02/26/09

Time Analyzed: 08:53

Matrix: SOLID

Date Extracted: 02/25/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	BH-SED-01-8	K7AM21AC	F0226022.	02/27/09	10:33
02	INTRA-LAB QC	K7HF71AC	F0225022.	02/26/09	09:37
03	LAB MS/MSD	K7HF71A2 S	F0225023.	02/26/09	09:59
04	LAB MS/MSD	K7HF71A3 D	F0225024.	02/26/09	10:21
05	CHECK SAMPLE	K7M881AC C	F0226015.	02/27/09	07:58
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B170199
MB Lot-Sample #: C9B250000-010

Work Order #...: K7M881AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 0.5

Prep Date.....: 02/25/09
Prep Batch #...: 9056010
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 08:53
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1, 2, 3-cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a, h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	82	(27 - 110)
Terphenyl-d14	119	(21 - 130)
2-Fluorobiphenyl	96	(28 - 108)
2-Fluorophenol	91	(28 - 107)
Phenol-d5	87	(30 - 112)
2,4,6-Tribromophenol	100	(21 - 116)

NOTE (S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B170199

Lab File ID (Standard): F02250C2

Date Analyzed: 02/26/09

Instrument ID: 722

Time Analyzed: 0046

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	85600	4.27	297996	5.26	183384	6.61
UPPER LIMIT	171200	4.77	595992	5.76	366768	7.11
LOWER LIMIT	42800	3.77	148998	4.76	91692	6.11
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	68564	4.28	257053	5.26	147817	6.61
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B170199

Lab File ID (Standard): F02250C2

Date Analyzed: 02/26/09

Instrument ID: 722

Time Analyzed: 0046

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	278236	7.76	228190	10.08	172747	11.65
UPPER LIMIT	556472	8.26	456380	10.58	345494	12.15
LOWER LIMIT	139118	7.26	114095	9.58	86374	11.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	278674	7.76	202740	10.06	155577	11.64
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B170199

Lab File ID (Standard): F02260C2

Date Analyzed: 02/27/09

Instrument ID: 722

Time Analyzed: 0223

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	79117	4.27	290136	5.26	161094	6.62
UPPER LIMIT	158234	4.77	580272	5.76	322188	7.12
LOWER LIMIT	39559	3.77	145068	4.76	80547	6.12
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	88850	4.27	342118	5.26	202723	6.61
02 BH-SED-01-8	66787	4.27	247848	5.26	150076	6.61
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B170199
 Lab File ID (Standard): F02260C2 Date Analyzed: 02/27/09
 Instrument ID: 722 Time Analyzed: 0223

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	261312	7.77	199767	10.11	158164	11.76
UPPER LIMIT	522624	8.27	399534	10.61	316328	12.26
LOWER LIMIT	130656	7.27	99884	9.61	79082	11.26
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	329357	7.77	245402	10.09	174755	11.66
02 BH-SED-01-8	262155	7.76	209804	10.10	236426	11.68
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

METALS SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-8

TOTAL Metals

Lot-Sample #....: C9B170199-001

Matrix.....: SOLID

Date Sampled....: 02/16/09

Date Received...: 02/17/09

% Moisture.....: 53

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 9062016						
Mercury	0.79	0.035	mg/kg	SW846 7471A	03/03/09	K7AM21AR
		Dilution Factor: 0.5		Analysis Time...: 08:06	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0027	
Prep Batch #....: 9063430						
Silver	1.7	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AQ
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0026	
Arsenic	13.6	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AD
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Beryllium	1.2	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AE
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Cadmium	2.8	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AF
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0098	
Chromium	97.9 J	0.21	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AG
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0086	
Copper	81.5	0.21	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AH
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0091	
Nickel	22.1	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AJ
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0073	
Lead	426 J	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AK
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-8

TOTAL Metals

Lot-Sample #...: C9B170199-001

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	1.1	0.21	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AL
		Dilution Factor: 0.5		Analysis Time...: 19.21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0035	
Selenium	2.7	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AM
		Dilution Factor: 0.5		Analysis Time...: 19.21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.044	
Thallium	0.69	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AN
		Dilution Factor: 0.5		Analysis Time...: 19.21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0021	
Zinc	1030	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AP
		Dilution Factor: 0.5		Analysis Time...: 19.21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.013	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9B170199

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C030000-016 Prep Batch #....: 9062016						
Mercury	ND	0.016	mg/kg	SW846 7471A	03/03/09	K7XWJ1AA
		Dilution Factor: 0.5				
		Analysis Time...: 08:01		Analyst ID.....: 031043		Instrument ID...: HGH
MB Lot-Sample #: C9C040000-430 Prep Batch #....: 9063430						
Antimony	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Arsenic	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AA
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Beryllium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AC
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Cadmium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AD
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Chromium	0.035 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AE
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Copper	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AF
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Lead	0.0047 B	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AH
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Nickel	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AG
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Selenium	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AK
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9B170199

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Silver	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AN
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Thallium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AL
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Zinc	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AM
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B170199

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #... : 9062016					
Mercury	97	(80 - 120)	SW846 7471A	03/03/09	K7XWJ1AC
		Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-430 Prep Batch #... : 9063430					
Arsenic	88	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AP
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Beryllium	95	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AQ
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Cadmium	91	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AR
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Chromium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AT
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Copper	99	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AU
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Nickel	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AV
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Lead	102	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AW
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Antimony	87	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AX
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Selenium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A0
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B170199

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	92	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A1
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID..: ICPMS			
Zinc	84	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A2
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID..: ICPMS			
Silver	104	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A3
		Dilution Factor: 0.5	Analysis Time..: 18:10	Analyst ID.....: 401509	
		Instrument ID..: ICPMS			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B170199

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #....: 9062016							
Mercury	0.208	0.203	mg/kg	97	SW846 7471A	03/03/09	K7XWJ1AC
					Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043
					Instrument ID...: HGHYDRA		
LCS Lot-Sample#: C9C040000-430 Prep Batch #....: 9063430							
Arsenic	2.00	1.76	mg/kg	88	SW846 6020	03/04-03/05/09	K727R1AP
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Beryllium	2.50	2.38	mg/kg	95	SW846 6020	03/04-03/05/09	K727R1AQ
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Cadmium	2.50	2.29	mg/kg	91	SW846 6020	03/04-03/05/09	K727R1AR
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Chromium	10.0	9.77	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AT
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Copper	12.5	12.4	mg/kg	99	SW846 6020	03/04-03/05/09	K727R1AU
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Nickel	25.0	24.4	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AV
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Lead	1.00	1.02	mg/kg	102	SW846 6020	03/04-03/05/09	K727R1AW
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Antimony	25.0	21.8	mg/kg	87	SW846 6020	03/04-03/05/09	K727R1AX
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Selenium	0.500	0.491	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1A0
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B170199

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	2.50	2.30	mg/kg	92	SW846 6020	03/04-03/05/09	K727R1A1
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Zinc	25.0	21.1	mg/kg	84	SW846 6020	03/04-03/05/09	K727R1A2
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Silver	2.50	2.60	mg/kg	104	SW846 6020	03/04-03/05/09	K727R1A3
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B170199

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B250192-001 Prep Batch #....: 9063430						
% Moisture.....: 59						
Antimony	32 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1CE
	32 N	(75 - 125)	0.27 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Arsenic	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1AX
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Beryllium	84	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A1
	86	(75 - 125)	1.1 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Cadmium	69 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A3
	64 N	(75 - 125)	2.4 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Chromium	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A5
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Copper	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A7
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Lead	NC	(75 - 125)		SW846 6020	03/04-03/09/09	K7N2P1CC
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CD
Dilution Factor: 5						
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B170199

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	89	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1A9
	90	(75 - 125)	0.68	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CA
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Selenium	NC	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CG
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CH
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Silver	85	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CN
	90	(75 - 125)	3.4	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CP
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Thallium	87	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CJ
	87	(75 - 125)	0.18	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CK
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Zinc	NC	(75 - 125)			SW846 6020	03/04-03/09/09	K7N2P1CL
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CM
Dilution Factor: 5							
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B170199

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B250192-001 Prep Batch #...: 9063430

% Moisture.....: 59

Antimony

2.5	61.0	22.1 N	mg/kg	32		SW846	6020	03/04-03/05/09	K7N2P1CE
2.5	61.0	22.2 N	mg/kg	32	0.27	SW846	6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									

Arsenic

102	4.88	108 NC	mg/kg			SW846	6020	03/04-03/05/09	K7N2P1AX
102	4.88	115 NC	mg/kg			SW846	6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									

Beryllium

1.6	6.10	6.76	mg/kg	84		SW846	6020	03/04-03/05/09	K7N2P1A1
1.6	6.10	6.83	mg/kg	86	1.1	SW846	6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									

Cadmium

8.6	6.10	12.9 N	mg/kg	69		SW846	6020	03/04-03/05/09	K7N2P1A3
8.6	6.10	12.6 N	mg/kg	64	2.4	SW846	6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									

Chromium

362	24.4	388 NC	mg/kg			SW846	6020	03/04-03/05/09	K7N2P1A5
362	24.4	397 NC	mg/kg			SW846	6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									

Copper

226	30.5	256 NC	mg/kg			SW846	6020	03/04-03/05/09	K7N2P1A7
226	30.5	264 NC	mg/kg			SW846	6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B170199

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

	SAMPLE	SPIKE	MEASRD		PERCNT			PREPARATION-	WORK
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	ANALYSIS DATE	ORDER #
Lead									
	2990	2.44	3070 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CC
	2990	2.44	3260 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CD
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Nickel									
	47.2	61.0	102	mg/kg	89		SW846 6020	03/04-03/05/09	K7N2P1A9
	47.2	61.0	102	mg/kg	90	0.68	SW846 6020	03/04-03/05/09	K7N2P1CA
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Selenium									
	14.8	1.22	15.9 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CG
	14.8	1.22	16.5 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CH
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Silver									
	4.2	6.10	9.37	mg/kg	85		SW846 6020	03/04-03/05/09	K7N2P1CN
	4.2	6.10	9.70	mg/kg	90	3.4	SW846 6020	03/04-03/05/09	K7N2P1CP
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Thallium									
	1.2	6.10	6.52	mg/kg	87		SW846 6020	03/04-03/05/09	K7N2P1CJ
	1.2	6.10	6.50	mg/kg	87	0.18	SW846 6020	03/04-03/05/09	K7N2P1CK
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Zinc									
	3730	30.5	3900 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CL
	3730	30.5	3930 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CM
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B170199

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury	93	(75 - 125)		SW846 7471A	03/03/09	K7RJ81AV
	89	(75 - 125) 2.7	(0-20)	SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26 Instrument ID...: HGHYDRA Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B170199

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #....: 9062016

% Moisture.....: 19

Mercury

0.056	0.103	0.152	mg/kg	93		SW846	7471A	03/03/09	K7RJ81AV
0.056	0.103	0.148	mg/kg	89	2.7	SW846	7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY SUMMARY

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B170199

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-8	C9B170199 001	K7AM21AT	37.4	mg/kg	0.21	1.1	1	2/20/2009 - 2/24/2009 09:28	9051081

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Lot Number: C9B170199

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-8	C9B170199 001	K7AM21AA	46.6	%	0.0	1.0	1	2/23/2009 - 2/24/2009 05:03	9054037

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B170199

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-8	C9B170199 001	K7AM21AU	311000	mg/kg	4570	19900	18.52	2/26/2009 - 2/26/2009 13:35	9056120

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Report ID: C9B170199

Matrix: SOLID

Date/Time Received: 2/18/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B200000081B	081 MB	K7GNM1AA	ND	mg/kg	0.50	2/20/2009 - 2/24/2009 09:20	9051081	

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Report ID: C9B170199

Matrix: SOLID

Date/Time Received: 2/17/2009 9:20:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-01-8 DUP	001 DUP	K7AM21A0	49.1	%	1.0	2/23/2009 - 2/24/2009 05:03	9054037	5.2 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Report ID: C9B170199

Matrix: SOLID

Date/Time Received: 2/17/2009 9:20:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B250000120B	120 MB	K7NEK1AA	ND	mg/kg	500	2/26/2009 - 2/26/2009 12:21	9056120	

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B200000

Matrix: SOLID

Date/Time Received: 2/18/2009 10:00:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7GNM1AC	103	41 - 159	2/20/2009 - 2/24/2009 09:20	9051081	
LAB MS/MSD	MS	K673C1CA	102	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	3.9 / 20
LAB MS/MSD	MS	K7C311A0	100	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	7.3 / 20
LAB MS/MSD	MSD	K673C1CC	106	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	3.9 / 20
LAB MS/MSD	MSD	K7C311A1	112	75 - 125	2/20/2009 - 2/24/2009 09:31	9051081	7.3 / 20

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B230164

Matrix: SOLID

Date/Time Received:

2/23/2009 10:21:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
LAB MS/MSD	MSD	K7K6J1A3	105	75 - 125	2/26/2009 - 2/26/2009 15:36	9056120	6.2 / 20
LAB MS/MSD	MS	K7K6J1A2	107	75 - 125	2/26/2009 - 2/26/2009 15:26	9056120	6.2 / 20
CHECK SAMPLE	LCS	K7NEK1AC	103	75 - 125	2/26/2009 - 2/26/2009 12:32	9056120	0.95 / 20
DUPLICATE CHECK	LCSD	K7NEK1AD	102	75 - 125	2/26/2009 - 2/26/2009 12:42	9056120	0.95 / 20

TestAmerica
South Burlington, VT
Sample Data Summary
Package

9B170199



Sample Data Summary -- Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-01-8

Lab Name: TestAmerica Burlington

Contract: C9B170199

SDG No.: 9B170199

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784801

Matrix: SOLID

Client: STLPAP

Date Received: 02/18/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/19/09		%	1	0.0	39.6	

Printed on: 02/24/09 10:37 AM

Particle Size of Soils by ASTM D422

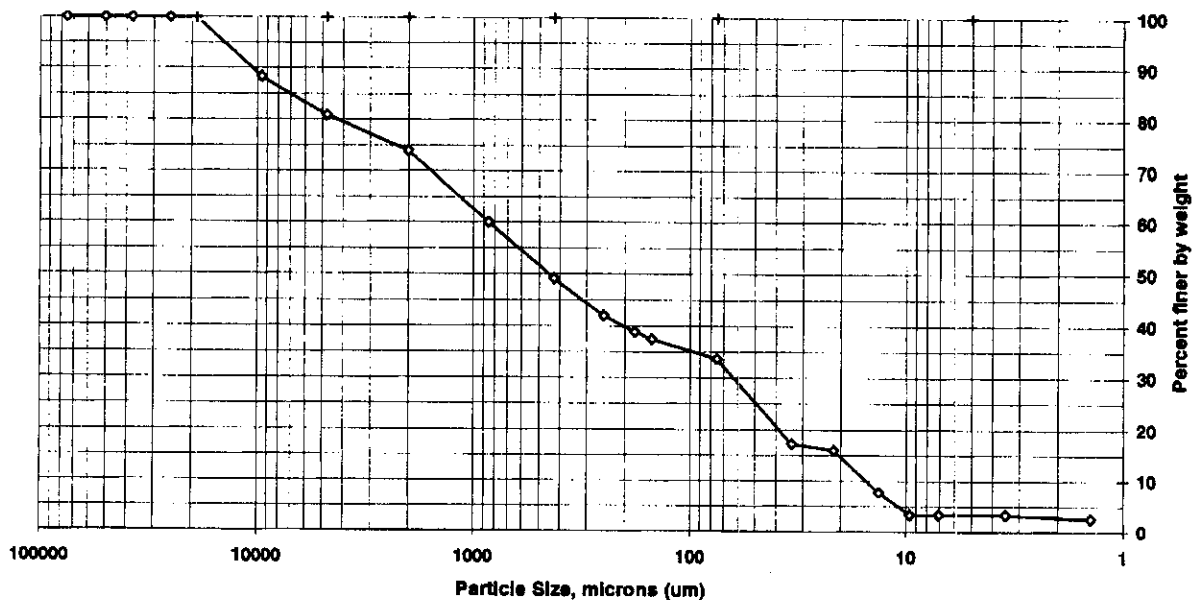
Client Code: STLPAP
 Sample ID: BH-SED-01-8
 Lab ID: 784801

SDG: 9B170199
 ETR(s): 130149

Date Received: 2/18/2009
 Start Date: 2/18/2009
 End Date: 2/24/2009

Percent Solids: 71.6%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: coal
 Shape (> #10): angular
 Hardness (> #10): brittle



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	88.3	11.7
#4	4750	80.8	7.4
#10	2000	74.0	6.9
#20	850	60.0	13.9
#40	425	49.2	10.9
#60	250	42.0	7.2
#80	180	38.8	3.2
#100	150	37.5	1.3
#200	75	33.6	3.9
Hydrometer	33.8	17.3	16.3
	21.6	16.0	1.3
	13.3	7.8	8.2
	9.6	3.4	4.4
	7.1	3.4	0.0
	3.5	3.4	0.0
V	1.4	2.6	0.7

Soil Classification	Percent of Total Sample
Gravel	19.2
Sand	47.3
Coarse Sand	6.9
Medium Sand	24.8
Fine Sand	15.6
Silt	30.2
Clay	3.4

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code:	STLPAP
ETR:	130149
SDG:	9B170199

Start Date: 2/19/2009
Start Time: 20:32
End Date: 2/20/2009
Analyst: TPE

[illegible]

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B170199

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-8	C9B170199-001	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values.

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B170199

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-8	C9B170199 001	K7AM21AT	37.4	mg/kg	0.21	1.1	1	2/20/2009 - 2/24/2009 09:28	9051081

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B170199

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-01-8	C9B170199 001	K7AM21AU	311000	mg/kg	4570	19900	18.52	2/26/2009 - 2/26/2009 13:35	9056120

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B170199

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-8	C9B170199-001	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
Reference	Antimony	32%/32%/Ok	L/UL	1
	Cadmium	69%/64%/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were not identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-8

TOTAL Metals

Lot-Sample #....: C9B170199-001

Matrix.....: SOLID

Date Sampled....: 02/16/09

Date Received...: 02/17/09

% Moisture.....: 53

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	0.79	0.035	mg/kg	SW846 7471A	03/03/09	K7AM21AR
		Dilution Factor: 0.5		Analysis Time...: 08:06	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0027	
Prep Batch #....: 9063430						
Silver	1.7	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AQ
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0026	
Arsenic	13.6	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AD
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Beryllium	1.2	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AE
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Cadmium	2.8 L	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AF
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0098	
Chromium	97.9 J	0.21	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AG
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0086	
Copper	81.5	0.21	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AH
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0091	
Nickel	22.1	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AJ
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0073	
Lead	426 J	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AK
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-01-8

TOTAL Metals

Lot-Sample #....: C9B170199-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.1 L	0.21	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AL
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0035	
Selenium	2.7	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AM
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.044	
Thallium	0.69	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AN
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0021	
Zinc	1030	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7AM21AP
		Dilution Factor: 0.5		Analysis Time...: 19:21	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.013	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

POLYNUCLEAR AROMATIC HYDRCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B170199

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-8	C9B170199-001	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-8

GC/MS Semivolatiles

Lot-Sample #....: C9B170199-001 Work Order #....: K7AM21AC Matrix.....: SOLID
 Date Sampled....: 02/16/09 16:30 Date Received...: 02/17/09 09:20 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 10:33
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 53 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	1200	140	ug/kg	22
2-Methylnaphthalene	2300	140	ug/kg	28
Naphthalene	28000	140	ug/kg	21
Acenaphthylene	700	140	ug/kg	29
Acenaphthene	300	140	ug/kg	23
Fluorene	860	140	ug/kg	22
Phenanthrene	2100	140	ug/kg	17
Anthracene	1000	710	ug/kg	25
Fluoranthene	4800	140	ug/kg	12
Pyrene	4200	140	ug/kg	38
Benzo(a)anthracene	3000	140	ug/kg	23
Chrysene	1600	140	ug/kg	25
Benzo(b)fluoranthene	2500	140	ug/kg	29
Benzo(k)fluoranthene	1300	140	ug/kg	30
Benzo(a)pyrene	1800	140	ug/kg	40
Indeno(1,2,3-cd)pyrene	1500	140	ug/kg	7.9
Dibenzo(a,h)anthracene	320	140	ug/kg	31
Benzo(ghi)perylene	2000	140	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

LW
 5/2/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B170199

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-01-8	C9B170199-001	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for preserved water and soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.043 RRF	L/R	1

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
02/24/09	Acrolein	0.033 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-01-8

GC/MS Volatiles

Lot-Sample #....: C9B170199-001 Work Order #....: K7AM21AX Matrix.....: SOLID
 Date Sampled....: 02/16/09 Date Received...: 02/17/09 MS Run #.....: 9055019
 Prep Date.....: 02/24/09 Analysis Date...: 02/24/09
 Prep Batch #....: 9055034 Analysis Time...: 06:54
 Dilution Factor: 1 Initial Wgt/Vol: 5.02 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 53 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.95
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.96
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-01-8

GC/MS Volatiles

Lot-Sample #...: C9B170199-001 Work Order #...: K7AM21AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	93	(72 - 127)
4-Bromofluorobenzene	112	(63 - 120)
Dibromofluoromethane	95	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

luw
5/2/09

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

EA/MES Sparrows Point 18001868

Lot #: C9B180150

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 18, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification

WW Non-potable Water and/or Wastewater certification

X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pttsburgh.doc

CASE NARRATIVE

**EA Engineering
Sparrows Point**

LOT # C9B180150

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 18, 2009. The cooler was received within the proper temperature range.

Samples labeled BH-SED-03C-02 and BH-SED-03B-02 were listed on the chain of custody as BH-SED-13C-02 and BH-SED-13B-2, respectively. The client was notified and informed the lab that the ID's listed on the sample jars were the correct sample ID's.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard 1C40226; but were within expected performance range for these compounds: 2-chloroethyl vinyl ether 32.1%, and acrolein 42.5%.

The following compounds had the %D > 25% in the calibration verification standard CC40226; but were within expected performance range for these compounds: 1,1,1,2-tetrachloroethane 30.5%, 1,2,3-trichlorobenzene 31.5%, 2-butanone 42.3%, 2-hexanone 31.6%, dichlorodifluoromethane 28.9%, and naphthalene 26.7%.

Due to the concentration of target compounds detected, sample BH-SED-03C-02 was analyzed at a dilution.

Samples BH-SED-03B-2 and BH-SED-06-6 were analyzed at a dilution due to matrix interference. Matrix effect was evident in chromatogram.

GC/MS Semivolatiles:

Due to the concentration of target compounds detected, the samples were analyzed at a dilution. The samples had the surrogates diluted out.

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B180150

GC/MS Semivolatiles (cont):

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in calibration verification standard F022509C2; but were within expected performance range for these compounds: benzo(b)fluoranthene 31% and benzo(k)fluoranthene 28%.

Metals:

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

General Chemistry:

The samples were analyzed at a dilution for TOC.

Grain Size and Moisture:

TestAmerica's Burlington laboratory performed the grain size and the moisture analyses. All data is included in the package.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

February 27, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS: SDG: 9B180150

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on February 19th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/19/09 ETR No: 130173			
784997	BH-SED-13C-02	02/17/09	SOLID
784998	BH-SED-13B-2	02/17/09	SOLID
784999	BH-SED-06-6	02/17/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The samples were analyzed for particle size by ASTM D422 and moisture content by ASTM D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Dusalton
for

Ron Pentkowski
Project Manager

Enclosure

METHODS SUMMARY

C9B180150

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B180150

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
K7C31	001	BH-SED-03C-02	02/17/09	10:30
K7C5C	002	BH-SED-03B-2	02/17/09	12:50
K7C5F	003	BH-SED-06-6	02/17/09	14:50
K7C5J	004	SRM	02/17/09	

NOTE(S) :

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

Client: EA Engineering Science, and Technology, Inc. 15 Loveton Circle Sparks, MD 21152				Project Manager: Frank Barranco Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250				Parameters/Method Numbers for Analysis										Chain of Custody Record	
Project Name: Sparrows Point Offshore Areas								Laboratory: TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber										Remarks	
Project#: 14534.06																			
Page 1 of 1				Sediment Samples															
Date	Time	Water	Sediment	Sample Identification	No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids						
2/17/09	1030		X	BH-SED-13C-02	6	X	X	X	X	X	X	X	X						
	1250		X	BH-SED-13B-2															
	1450		X	BH-SED-06-6															
Sampled by: (Signature) <i>Todd Ward</i>				Date/Time 2/17/09 1450		Relinquished by: (Signature) <i>Todd Ward</i>				Date/Time 2/17/09 1715				SEDIMENT					
Relinquished by: (Signature)				Date/Time		Received by Laboratory: (Signature) <i>Robert R. Jant</i>				Date/Time 2/18/09 1000									

Cooler Receipt Form

TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 2/18/09

Coolers Opened and Unpacked on: 2/18/09 By: PLF

(Signature)

TestAmerica Pittsburgh Lot Number: C9B180150

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

FedEx *US Airbill*
Express

FedEx
Tracking
Number

8565 6932 6617

1 From This portion can be removed for Recipient's records.

Date 2/17/09 FedEx Tracking Number 856569326617

Sender's Name TODD WARD Phone 410 746-1250

Company E A ENGINEERING SCIENCE & TECH

Address 15 LOVETON CIR

City SPARKS GLENCOE State MD ZIP 21152

2 Your Internal Billing Reference

1453406

3 To

Recipient's Name SAMPLE MANAGEMENT Phone 412 963-2428

Company TESTAMERICA - PITTSBURGH

Recipient's Address 301 ALPHA DRIVE

Address RIDC PARK

City PITTSBURGH State PA ZIP 15238



8565 6932 6617

0326961324

Recipient's Copy

4a Express Package Service

- ☒ **FedEx Priority Overnight**
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Standard Overnight**
Next business afternoon.* Saturday Delivery NOT available.
- ☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- ☐ **FedEx 2Day**
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx Express Saver**
Third business day.* Saturday Delivery NOT available.
- * To meet locations.

4b Express Freight Service

- ☐ **FedEx 1Day Freight***
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx 2Day Freight**
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ **FedEx 3Day Freight**
Third business day.* Saturday Delivery NOT available.
- * Call for Confirmation. ** To meet locations.

5 Packaging

- ☐ **FedEx Envelope***
- ☐ **FedEx Pak***
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- ☐ **FedEx Box**
- ☐ **FedEx Tube**
- ☒ **Other**
* Declared value limit \$500.

6 Special Handling

- ☐ **SATURDAY Delivery**
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- ☐ **HOLD Weekday at FedEx Location**
Not available for FedEx First Overnight.
- ☐ **HOLD Saturday at FedEx Location**
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
- Include FedEx address in Section 3.
- Does this shipment contain dangerous goods?
One box must be checked.
- ☒ **No**
- ☐ **Yes**
As per attached Shipper's Declaration.
- ☐ **Yes**
Shipper's Declaration not required.
- ☐ **Dry Ice**
Dry Ice, 9, UN 1845
- ☐ **Cargo Aircraft Only**
- Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to:

- ☒ **Sender**
Acct. No. in Section 1 will be billed.
- ☐ **Recipient**
- ☐ **Third Party**
- ☐ **Credit Card**
- ☐ **Obtain Recip. Acct. No.**
- ☐ **Cash/Check**

Total Packages <u>1</u>	Total Weight <u>40</u>	Total Charges <u>519</u>
Total Packages		Credit Card Auth.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- ☐ **No Signature Required**
Package may be left without obtaining a signature for delivery.
- ☐ **Direct Signature**
Anyone at recipient's address may sign for delivery. *Fee applies.*
- ☐ **Indirect Signature**
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies.*

519

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-18
Analytical Due Date: 2009-03-16
Report Due Date: 2009-03-17

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-13C-02 DATE SAMPLED: 20090217 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7C311AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7C311AV METAL: XX

SMP#: 2 CLIENT ID: BH-SED-13B-2 DATE SAMPLED: 20090217 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7C5C1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7C5C1AV METAL: XX

SMP#: 3 CLIENT ID: BH-SED-06-6 DATE SAMPLED: 20090217 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7C5F1AW METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7C5F1AV METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY:

Patricia R. Jones

DATE: 2/18/09 1700

RECEIVED FOR LAB BY:

[Signature]

DATE: 2/19/09 1025

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

GC/MS Volatiles

Lot-Sample #....: C9B180150-001	Work Order #....: K7C311AX	Matrix.....: SOLID
Date Sampled...: 02/17/09	Date Received...: 02/18/09	MS Run #.....:
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057042	Analysis Time...: 08:21	
Dilution Factor: 1.17	Initial Wgt/Vol: 4.27 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 60	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	15000	ug/kg	2300
Acrylonitrile	ND	15000	ug/kg	1200
Benzene	720 J	730	ug/kg	150
Bromodichloromethane	ND	730	ug/kg	140
Bromoform	ND	730	ug/kg	160
Bromomethane	ND	730	ug/kg	230
2-Butanone (MEK)	ND	730	ug/kg	160
Carbon tetrachloride	ND	730	ug/kg	160
Chloroethane	ND	730	ug/kg	110
2-Chloroethyl vinyl ether	ND	1500	ug/kg	160
Chloroform	ND	730	ug/kg	150
Chloromethane	ND	730	ug/kg	200
Dibromochloromethane	ND	730	ug/kg	95
1,2-Dichlorobenzene	ND	730	ug/kg	100
1,3-Dichlorobenzene	ND	730	ug/kg	74
1,4-Dichlorobenzene	ND	730	ug/kg	77
trans-1,2-Dichloroethene	ND	730	ug/kg	110
Dichlorodifluoromethane	ND	730	ug/kg	93
1,1-Dichloroethane	ND	730	ug/kg	150
1,2-Dichloroethane	ND	730	ug/kg	140
1,1-Dichloroethene	ND	730	ug/kg	160
1,2-Dichloropropane	ND	730	ug/kg	190
cis-1,3-Dichloropropene	ND	730	ug/kg	110
trans-1,3-Dichloropropene	ND	730	ug/kg	85
Ethylbenzene	4000	730	ug/kg	91
Methylene chloride	ND	730	ug/kg	160
1,1,2,2-Tetrachloroethane	ND	730	ug/kg	140
Tetrachloroethene	ND	730	ug/kg	120
Toluene	3600	730	ug/kg	120
1,1,1-Trichloroethane	ND	730	ug/kg	150
1,1,2-Trichloroethane	ND	730	ug/kg	170
Trichloroethene	ND	730	ug/kg	120
Trichlorofluoromethane	ND	730	ug/kg	160
Vinyl chloride	ND	730	ug/kg	190

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-03C-02

GC/MS Volatiles

Lot-Sample #...: C9B180150-001 Work Order #...: K7C311AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	94	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

GC/MS Volatiles

Lot-Sample #....: C9B180150-002	Work Order #....: K7C5C1AX	Matrix.....: SOLID
Date Sampled....: 02/17/09	Date Received...: 02/18/09	MS Run #.....:
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057042	Analysis Time...: 10:18	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.85 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 54	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	11000	ug/kg	1800
Acrylonitrile	ND	11000	ug/kg	910
Benzene	200 J	560	ug/kg	110
Bromodichloromethane	ND	560	ug/kg	100
Bromoform	ND	560	ug/kg	120
Bromomethane	ND	560	ug/kg	180
2-Butanone (MEK)	ND	560	ug/kg	120
Carbon tetrachloride	ND	560	ug/kg	120
Chloroethane	ND	560	ug/kg	84
2-Chloroethyl vinyl ether	ND	1100	ug/kg	120
Chloroform	ND	560	ug/kg	110
Chloromethane	ND	560	ug/kg	160
Dibromochloromethane	ND	560	ug/kg	73
1,2-Dichlorobenzene	ND	560	ug/kg	76
1,3-Dichlorobenzene	ND	560	ug/kg	57
1,4-Dichlorobenzene	ND	560	ug/kg	59
trans-1,2-Dichloroethene	ND	560	ug/kg	84
Dichlorodifluoromethane	ND	560	ug/kg	71
1,1-Dichloroethane	ND	560	ug/kg	110
1,2-Dichloroethane	ND	560	ug/kg	110
1,1-Dichloroethene	ND	560	ug/kg	120
1,2-Dichloropropane	ND	560	ug/kg	140
cis-1,3-Dichloropropene	ND	560	ug/kg	81
trans-1,3-Dichloropropene	ND	560	ug/kg	65
Ethylbenzene	200 J	560	ug/kg	70
Methylene chloride	ND	560	ug/kg	120
1,1,2,2-Tetrachloroethane	ND	560	ug/kg	100
Tetrachloroethene	ND	560	ug/kg	93
Toluene	ND	560	ug/kg	95
1,1,1-Trichloroethane	ND	560	ug/kg	120
1,1,2-Trichloroethane	ND	560	ug/kg	130
Trichloroethene	ND	560	ug/kg	90
Trichlorofluoromethane	ND	560	ug/kg	130
Vinyl chloride	ND	560	ug/kg	140

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

GC/MS Volatiles

Lot-Sample #...: C9B180150-002 Work Order #...: K7C5C1AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	107	(52 - 124)
Toluene-d8	104	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	103	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

KA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

GC/MS Volatiles

Lot-Sample #....: C9B180150-003	Work Order #....: K7C5F1AX	Matrix.....: SOLID
Date Sampled....: 02/17/09	Date Received...: 02/18/09	MS Run #.....:
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057042	Analysis Time...: 10:41	
Dilution Factor: 1.04	Initial Wgt/Vol: 4.79 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 58	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	13000	ug/kg	2000
Acrylonitrile	ND	13000	ug/kg	1000
Benzene	ND	630	ug/kg	120
Bromodichloromethane	ND	630	ug/kg	120
Bromoform	ND	630	ug/kg	130
Bromomethane	ND	630	ug/kg	200
2-Butanone (MEK)	ND	630	ug/kg	140
Carbon tetrachloride	ND	630	ug/kg	140
Chloroethane	ND	630	ug/kg	94
2-Chloroethyl vinyl ether	ND	1300	ug/kg	140
Chloroform	ND	630	ug/kg	130
Chloromethane	ND	630	ug/kg	170
Dibromochloromethane	ND	630	ug/kg	81
1,2-Dichlorobenzene	ND	630	ug/kg	85
1,3-Dichlorobenzene	ND	630	ug/kg	63
1,4-Dichlorobenzene	ND	630	ug/kg	66
trans-1,2-Dichloroethene	ND	630	ug/kg	94
Dichlorodifluoromethane	ND	630	ug/kg	80
1,1-Dichloroethane	ND	630	ug/kg	130
1,2-Dichloroethane	ND	630	ug/kg	120
1,1-Dichloroethene	ND	630	ug/kg	130
1,2-Dichloropropane	ND	630	ug/kg	160
cis-1,3-Dichloropropene	ND	630	ug/kg	91
trans-1,3-Dichloropropene	ND	630	ug/kg	73
Ethylbenzene	ND	630	ug/kg	78
Methylene chloride	ND	630	ug/kg	140
1,1,2,2-Tetrachloroethane	ND	630	ug/kg	120
Tetrachloroethene	ND	630	ug/kg	100
Toluene	ND	630	ug/kg	110
1,1,1-Trichloroethane	ND	630	ug/kg	130
1,1,2-Trichloroethane	ND	630	ug/kg	150
Trichloroethene	ND	630	ug/kg	100
Trichlorofluoromethane	ND	630	ug/kg	140
Vinyl chloride	ND	630	ug/kg	160

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-06-6

GC/MS Volatiles

Lot-Sample #...: C9B180150-003 Work Order #...: K7C5F1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	108	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B180150

Extraction: XXA4BQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-03C-02	96	95	91	94	00
02	BH-SED-03B-2	107	104	102	103	00
03	BH-SED-06-6	108	105	102	106	00
04	METHOD BLK. K7P6J1AA	96	99	95	94	00
05	LCS K7P6J1AC	91	96	94	94	00
06	LCSD K7P6J1AD	98	97	97	95	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B260000

WO #: K7P6J1AC

BATCH: 9057042

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	2000	1830	91	59 - 129	
Trichloroethene	2000	2020	101	76 - 119	
Benzene	2000	1970	98	77 - 120	
Toluene	2000	2080	104	78 - 124	
Chlorobenzene	2000	2140	107	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B260000

WO #: K7P6J1AD

BATCH: 9057042

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	2000	1750	88	59 - 129	
Trichloroethene	2000	1920	96	76 - 119	
Benzene	2000	1920	96	77 - 120	
Toluene	2000	2020	101	78 - 124	
Chlorobenzene	2000	2110	106	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7P6J1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 4022601.D

Lot Number: C9B180150

Date Analyzed: 02/26/09

Time Analyzed: 06:23

Matrix: SOLID

Date Extracted: 02/26/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP4

Level: (low/med) MED

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-03C-02	K7C311AX	4022606.D	02/26/09	08:21
02	BH-SED-03B-2	K7C5C1AX	4022611.D	02/26/09	10:18
03	BH-SED-06-6	K7C5F1AX	4022612.D	02/26/09	10:41
04	CHECK SAMPLE	K7P6J1AC C	4022602.D	02/26/09	06:45
05	DUPLICATE CHECK	K7P6J1AD L	4022603.D	02/26/09	07:09
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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21					
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23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B180150
MB Lot-Sample #: C9B260000-042

Work Order #...: K7P6J1AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 1

Prep Date.....: 02/26/09

Prep Batch #...: 9057042

Analysis Time...: 06:23

Initial Wgt/Vol: 5 g

Final Wgt/Vol...: 5 mL

Analyst ID.....: 010099

Instrument ID...: HP4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	5000	ug/kg	SW846 8260B
Acrylonitrile	ND	5000	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	250	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	250	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	500	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Chloromethane	ND	250	ug/kg	SW846 8260B
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	250	ug/kg	SW846 8260B
Vinyl chloride	ND	250	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	95	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B180150

Work Order #...: K7P6J1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	94	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B180150
 Lab File ID (Standard): CC40226 Date Analyzed: 02/26/09
 Instrument ID: HP4 Time Analyzed: 0458
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	727385	7.68	148445	10.76	248551	13.09
UPPER LIMIT	1454770	7.88	296890	10.96	497102	13.29
LOWER LIMIT	363693	7.48	74223	10.56	124276	12.89
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	793204	7.69	164429	10.76	264324	13.09
02 INTRA-LAB CH	726752	7.68	153110	10.76	260769	13.09
03 INTRA-LAB CH	740946	7.68	154803	10.76	262646	13.09
04 BH-SED-13C-0	694516	7.68	142103	10.76	213005	13.09
05 BH-SED-13B-2	787105	7.68	165385	10.76	266384	13.10
06 BH-SED-06-6	826001	7.68	172260	10.76	270612	13.09
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

GC/MS Semivolatiles

Lot-Sample #...: C9B180150-001 Work Order #...: K7C311AC Matrix.....: SOLID
 Date Sampled...: 02/17/09 10:30 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #...: 9056010 Analysis Time...: 10:43
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 60 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	15000	170	ug/kg	25
2-Methylnaphthalene	37000 E	170	ug/kg	33
Naphthalene	200000 E	170	ug/kg	24
Acenaphthylene	8300	170	ug/kg	33
Acenaphthene	3100	170	ug/kg	27
Fluorene	5500	170	ug/kg	25
Phenanthrene	10000	170	ug/kg	20
Anthracene	3600	830	ug/kg	29
Fluoranthene	12000	170	ug/kg	14
Pyrene	9500	170	ug/kg	44
Benzo (a) anthracene	5700	170	ug/kg	27
Chrysene	4800	170	ug/kg	29
Benzo (b) fluoranthene	7600	170	ug/kg	34
Benzo (k) fluoranthene	1900	170	ug/kg	35
Benzo (a) pyrene	6100	170	ug/kg	47
Indeno (1,2,3-cd) pyrene	3300	170	ug/kg	9.2
Dibenzo (a,h) anthracene	1100	170	ug/kg	37
Benzo (ghi) perylene	3600	170	ug/kg	12

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC: The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-001 Work Order #....: K7C312AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 10:30 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 03/03/09
 Prep Batch #....: 9056010 Analysis Time...: 01:48
 Dilution Factor: 2000 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 60 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	27000 J	34000	ug/kg	5100
2-Methylnaphthalene	66000	34000	ug/kg	6600
Naphthalene	2800000	34000	ug/kg	4900
Acenaphthylene	15000 J	34000	ug/kg	6700
Acenaphthene	ND	34000	ug/kg	5400
Fluorene	ND	34000	ug/kg	5000
Phenanthrene	20000 J	34000	ug/kg	4000
Anthracene	7400 J	170000	ug/kg	5900
Fluoranthene	24000 J	34000	ug/kg	2800
Pyrene	18000 J	34000	ug/kg	8900
Benzo (a) anthracene	11000 J	34000	ug/kg	5300
Chrysene	8000 J	34000	ug/kg	5800
Benzo (b) fluoranthene	14000 J	34000	ug/kg	6800
Benzo (k) fluoranthene	ND	34000	ug/kg	7000
Benzo (a) pyrene	ND	34000	ug/kg	9400
Indeno (1,2,3-cd) pyrene	ND	34000	ug/kg	1800
Dibenzo (a,h) anthracene	ND	34000	ug/kg	7400
Benzo (ghi) perylene	ND	34000	ug/kg	2500

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

GC/MS Semivolatiles

Lot-Sample #...: C9B180150-002 Work Order #...: K7C5C1AC Matrix.....: SOLID
 Date Sampled...: 02/17/09 12:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #...: 9056010 Analysis Time...: 11:04
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 54 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	470	73	ug/kg	11
2-Methylnaphthalene	800	73	ug/kg	14
Naphthalene	28000 E	73	ug/kg	11
Acenaphthylene	380	73	ug/kg	14
Acenaphthene	180	73	ug/kg	12
Fluorene	250	73	ug/kg	11
Phenanthrene	720	73	ug/kg	8.7
Anthracene	500	360	ug/kg	13
Fluoranthene	2500	73	ug/kg	6.1
Pyrene	2000	73	ug/kg	19
Benzo (a) anthracene	1100	73	ug/kg	12
Chrysene	1800	73	ug/kg	13
Benzo (b) fluoranthene	2700	73	ug/kg	15
Benzo (k) fluoranthene	ND	73	ug/kg	15
Benzo (a) pyrene	1400	73	ug/kg	20
Indeno (1, 2, 3-cd) pyrene	1000	73	ug/kg	4.0
Dibenzo (a, h) anthracene	210	73	ug/kg	16
Benzo (ghi) perylene	1100	73	ug/kg	5.3

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(27 - 110)
Terphenyl-d14	69	(21 - 130)
2-Fluorobiphenyl	75	(28 - 108)
2-Fluorophenol	62	(28 - 107)
Phenol-d5	58	(30 - 112)
2,4,6-Tribromophenol	92	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

GC/MS Semivolatiles

Lot-Sample #...: C9B180150-002 Work Order #...: K7C5C2AC Matrix.....: SOLID
 Date Sampled...: 02/17/09 12:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #...: 9056010 Analysis Time...: 09:04
 Dilution Factor: 50 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 54 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	430 J	730	ug/kg	110
2-Methylnaphthalene	750	730	ug/kg	140
Naphthalene	51000	730	ug/kg	110
Acenaphthylene	300 J	730	ug/kg	140
Acenaphthene	150 J	730	ug/kg	120
Fluorene	200 J	730	ug/kg	110
Phenanthrene	640 J	730	ug/kg	87
Anthracene	360 J	3600	ug/kg	130
Fluoranthene	2200	730	ug/kg	61
Pyrene	2000	730	ug/kg	190
Benzo (a) anthracene	1600	730	ug/kg	120
Chrysene	1100	730	ug/kg	130
Benzo (b) fluoranthene	2500	730	ug/kg	150
Benzo (k) fluoranthene	ND	730	ug/kg	150
Benzo (a) pyrene	1700	730	ug/kg	200
Indeno (1, 2, 3-cd) pyrene	1100	730	ug/kg	40
Dibenzo (a, h) anthracene	ND	730	ug/kg	160
Benzo (ghi) perylene	1100	730	ug/kg	53

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2, 4, 6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC: The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J: Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-003 Work Order #....: K7C5F1AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 14:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9056010 Analysis Time...: 11:26
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	9600	160	ug/kg	24
2-Methylnaphthalene	17000	160	ug/kg	32
Naphthalene	100000 E	160	ug/kg	23
Acenaphthylene	4700	160	ug/kg	32
Acenaphthene	28000	160	ug/kg	26
Fluorene	23000	160	ug/kg	24
Phenanthrene	61000 E	160	ug/kg	19
Anthracene	30000	800	ug/kg	28
Fluoranthene	66000 E	160	ug/kg	14
Pyrene	37000 E	160	ug/kg	43
Benzo (a) anthracene	31000	160	ug/kg	26
Chrysene	27000	160	ug/kg	28
Benzo (b) fluoranthene	10000	160	ug/kg	33
Benzo (k) fluoranthene	28000	160	ug/kg	33
Benzo (a) pyrene	25000	160	ug/kg	45
Indeno (1,2,3-cd) pyrene	10000	160	ug/kg	8.8
Dibenzo (a,h) anthracene	3000	160	ug/kg	35
Benzo (ghi) perylene	11000	160	ug/kg	12

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-003 Work Order #....: K7C5F2AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 14:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 09:26
 Dilution Factor: 200 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	17000	3200	ug/kg	490
2-Methylnaphthalene	30000	3200	ug/kg	630
Naphthalene	620000	3200	ug/kg	470
Acenaphthylene	7300	3200	ug/kg	640
Acenaphthene	44000	3200	ug/kg	520
Fluorene	36000	3200	ug/kg	480
Phenanthrene	120000	3200	ug/kg	380
Anthracene	47000	16000	ug/kg	560
Fluoranthene	110000	3200	ug/kg	270
Pyrene	81000	3200	ug/kg	850
Benzo (a) anthracene	48000	3200	ug/kg	510
Chrysene	42000	3200	ug/kg	560
Benzo (b) fluoranthene	55000	3200	ug/kg	650
Benzo (k) fluoranthene	ND	3200	ug/kg	670
Benzo (a) pyrene	37000	3200	ug/kg	900
Indeno (1, 2, 3-cd) pyrene	21000	3200	ug/kg	180
Dibenzo (a, h) anthracene	5000	3200	ug/kg	710
Benzo (ghi) perylene	20000	3200	ug/kg	240

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2, 4, 6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: SRM

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-004	Work Order #....: K7C5J1AA	Matrix.....: SOLID
Date Sampled....: 02/17/09	Date Received...: 02/18/09	MS Run #.....: 9056002
Prep Date.....: 02/25/09	Analysis Date...: 02/27/09	
Prep Batch #....: 9056010	Analysis Time...: 09:48	
Dilution Factor: 30	Initial Wgt/Vol: 5 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....:	Analyst ID.....: 007062	Instrument ID...: 722
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	270	200	ug/kg	30
2-Methylnaphthalene	370	200	ug/kg	39
Naphthalene	780	200	ug/kg	29
Acenaphthylene	850	200	ug/kg	40
Acenaphthene	210	200	ug/kg	32
Fluorene	280	200	ug/kg	30
Phenanthrene	3600	200	ug/kg	24
Anthracene	840 J	990	ug/kg	35
Fluoranthene	6100	200	ug/kg	17
Pyrene	5200	200	ug/kg	53
Benzo (a) anthracene	3300	200	ug/kg	32
Chrysene	3700	200	ug/kg	35
Benzo (b) fluoranthene	3500	200	ug/kg	41
Benzo (k) fluoranthene	1400	200	ug/kg	42
Benzo (a) pyrene	2300	200	ug/kg	56
Indeno (1,2,3-cd) pyrene	1700	200	ug/kg	11
Dibenzo (a,h) anthracene	650	200	ug/kg	44
Benzo (ghi) perylene	2400	200	ug/kg	15

SURROGATE	PERCENT	
	RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(27 - 110)
Terphenyl-d14	73	(21 - 130)
2-Fluorobiphenyl	70	(28 - 108)
2-Fluorophenol	62	(28 - 107)
Phenol-d5	64	(30 - 112)
2,4,6-Tribromophenol	82	(21 - 116)

NOTE(S) :

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B180150

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-03C-02	0 D	0 D	0 D	0 D	0 D	0 D	06
02	BH-SED-03C-02 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
03	BH-SED-03B-2	53	69	75	62	58	92	00
04	BH-SED-03B-2 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
05	BH-SED-06-6	0 D	0 D	0 D	0 D	0 D	0 D	06
06	BH-SED-06-6 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
07	SRM	57	73	70	62	64	82	00
08	INTRA-LAB QC	0 D	0 D	0 D	0 D	0 D	0 D	06
09	METHOD BLK. K7M881AA	82	119	96	91	87	100	00
10	LCS K7M881AC	52	68	58	59	56	81	00
11	LAB MS/MSD D	0 D	0 D	0 D	0 D	0 D	0 D	06
12	LAB MS/MSD S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATESQC LIMITS

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

Lab Name: TestAmerica Laboratories, Inc.

Client: Ea Engineering

Lab Code: STLPIT

SDG No: N/A

Lot #: C9B180150

SOIL SRM 1944

Compound	Certified Value		Units	Quant. Value	Units	% REC
Naphthalene	1650.00	+/- 310	ug/Kg	777.00	ug/Kg	47.09
Phenanthrene	5270.00	+/- 220	ug/Kg	3571.00	ug/Kg	67.76
Anthracene	1770.00	+/- 330	ug/Kg	839.00	ug/Kg	47.40
Fluoranthene	8920.00	+/- 320	ug/Kg	6081.00	ug/Kg	68.17
Pyrene	9700.00	+/- 420	ug/Kg	5242.00	ug/Kg	54.04
Benzo(a)anthracene	4720.00	+/- 110	ug/Kg	3320.00	ug/Kg	70.34
Chrysene	4860.00	+/- 100	ug/Kg	3733.00	ug/Kg	76.81
Benzo(b)fluoranthene	3870.00	+/- 420	ug/Kg	3467.00	ug/Kg	89.59
Benzo(k)fluoranthene	2300.00	+/- 200	ug/Kg	1382.00	ug/Kg	60.09
Benzo(a)pyrene	4300.00	+/- 130	ug/Kg	2261.00	ug/Kg	52.58
Benzo(ghi)perylene	2840.00	+/- 100	ug/Kg	2380.00	ug/Kg	83.80
Indeno(1,2,3-cd)pyrene	2780.00	+/- 100	ug/Kg	1694.00	ug/Kg	60.94

If the certified concentrations are < 10 times the MDL established for the method, the SRM result will not be evaluated.

The results of the SRM are included with the associated analytical data.

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B250000

WO #: K7M881AC

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	158	47	39 - 105	
2-Chlorophenol	333	187	56	40 - 105	
1,4-Dichlorobenzene	333	183	55	41 - 101	
N-Nitrosodi-n-propylamine	333	163	49	42 - 108	
1,2,4-Trichlorobenzene	333	197	59	41 - 105	
4-Chloro-3-methylphenol	333	203	61	43 - 110	
Acenaphthene	333	191	57	42 - 104	
4-Nitrophenol	333	205	61	27 - 131	
2,4-Dinitrotoluene	333	250	75	48 - 118	
Pentachlorophenol	333	171	51	18 - 125	
Pyrene	333	225	68	39 - 113	
4-Methylphenol	667	359	54	43 - 107	
Hexachloroethane	333	176	53	40 - 102	
Naphthalene	333	187	56	42 - 104	
4-Bromophenyl phenyl ethe	333	232	70	43 - 111	
Butyl benzyl phthalate	333	228	68	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B200184

WO #: K7HF71A2

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	662	130		0*	39 - 105	DIL
2-Chlorophenol	662	ND		0*	40 - 105	DIL
1,4-Dichlorobenzene	662	ND		0*	41 - 101	DIL
N-Nitrosodi-n-propylamine	662	ND		0*	42 - 108	DIL
1,2,4-Trichlorobenzene	662	ND		0*	41 - 105	DIL
4-Chloro-3-methylphenol	662	ND		0*	43 - 110	DIL
Acenaphthene	662	1100		0*	42 - 104	DIL
4-Nitrophenol	662	ND		0*	27 - 131	DIL
2,4-Dinitrotoluene	662	ND		0*	48 - 118	DIL
Pentachlorophenol	662	ND		0*	18 - 125	DIL
Pyrene	662	6800		0*	39 - 113	DIL
4-Methylphenol	1320	ND		0*	43 - 107	DIL
Hexachloroethane	662	ND		0*	40 - 102	DIL
Naphthalene	662	75000		0*	42 - 104	DIL
4-Bromophenyl phenyl ethe	662	ND		0*	43 - 111	DIL
Butyl benzyl phthalate	662	ND		0*	40 - 117	DIL

NOTES(S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B200184

WO #: K7HF71A3

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	662		0*	0.0	40	39 - 105	DIL
2-Chlorophenol	662		0*	0.0	37	40 - 105	DIL
1,4-Dichlorobenzene	662		0*	0.0	32	41 - 101	DIL
N-Nitrosodi-n-propylamine	662		0*	0.0	32	42 - 108	DIL
1,2,4-Trichlorobenzene	662		0*	0.0	36	41 - 105	DIL
4-Chloro-3-methylphenol	662		0*	0.0	31	43 - 110	DIL
Acenaphthene	662		0*	0.0	34	42 - 104	DIL
4-Nitrophenol	662		0*	0.0	33	27 - 131	DIL
2,4-Dinitrotoluene	662		0*	0.0	33	48 - 118	DIL
Pentachlorophenol	662		0*	0.0	34	18 - 125	DIL
Pyrene	662		0*	0.0	28	39 - 113	DIL
4-Methylphenol	1320		0*	0.0	36	43 - 107	DIL
Hexachloroethane	662		0*	0.0	34	40 - 102	DIL
Naphthalene	662		0*	0.0	25	42 - 104	DIL
4-Bromophenyl phenyl ethe	662		0*	0.0	20	43 - 111	DIL
Butyl benzyl phthalate	662		0*	0.0	34	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

K7M881AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0225020.

Lot Number: C9B180150

Date Analyzed: 02/26/09

Time Analyzed: 08:53

Matrix: SOLID

Date Extracted:02/25/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-03C-02	K7C311AC	F0226017.	02/27/09	08:42
02	BH-SED-03C-02	K7C312AC	F0302007.	03/03/09	01:48
03	BH-SED-03B-2	K7C5C1AC	F0225026.	02/26/09	11:04
04	BH-SED-03B-2	K7C5C2AC	F0226018.	02/27/09	09:04
05	BH-SED-06-6	K7C5F1AC	F0225027.	02/26/09	11:26
06	BH-SED-06-6	K7C5F2AC	F0226019.	02/27/09	09:26
07	SRM	K7C5J1AA	F0226020.	02/27/09	09:48
08	INTRA-LAB QC	K7HF71AC	F0225022.	02/26/09	09:37
09	LAB MS/MSD	K7HF71A2 S	F0225023.	02/26/09	09:59
10	LAB MS/MSD	K7HF71A3 D	F0225024.	02/26/09	10:21
11	CHECK SAMPLE	K7M881AC C	F0226015.	02/27/09	07:58
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B180150
MB Lot-Sample #: C9B250000-010

Work Order #...: K7M881AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 0.5

Prep Date.....: 02/25/09
Prep Batch #...: 9056010
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 08:53
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo(a,h)anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	82	(27 - 110)
Terphenyl-d14	119	(21 - 130)
2-Fluorobiphenyl	96	(28 - 108)
2-Fluorophenol	91	(28 - 107)
Phenol-d5	87	(30 - 112)
2,4,6-Tribromophenol	100	(21 - 116)

NOTE(S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B180150

Lab File ID (Standard): F02250C2

Date Analyzed: 02/26/09

Instrument ID: 722

Time Analyzed: 0046

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	85600	4.27	297996	5.26	183384	6.61
UPPER LIMIT	171200	4.77	595992	5.76	366768	7.11
LOWER LIMIT	42800	3.77	148998	4.76	91692	6.11
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	68564	4.28	257053	5.26	147817	6.61
02 BH-SED-03B-2	91839	4.28	350370	5.27	182833	6.61
03 BH-SED-06-6	94719	4.28	418566	5.27	216142	6.61
04						
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IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B180150
 Lab File ID (Standard): F02250C2 Date Analyzed: 02/26/09
 Instrument ID: 722 Time Analyzed: 0046

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	278236	7.76	228190	10.08	172747	11.65
UPPER LIMIT	556472	8.26	456380	10.58	345494	12.15
LOWER LIMIT	139118	7.26	114095	9.58	86374	11.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	278674	7.76	202740	10.06	155577	11.64
02 BH-SED-03B-2	285936	7.76	267672	10.11	211137	11.75
03 BH-SED-06-6	332265	7.76	283978	10.09	249920	11.71
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IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B180150

Lab File ID (Standard): F02260C2

Date Analyzed: 02/27/09

Instrument ID: 722

Time Analyzed: 0223

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	79117	4.27	290136	5.26	161094	6.62
UPPER LIMIT	158234	4.77	580272	5.76	322188	7.12
LOWER LIMIT	39559	3.77	145068	4.76	80547	6.12
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	88850	4.27	342118	5.26	202723	6.61
02 BH-SED-03C-0	84618	4.26	328284	5.26	187853	6.61
03 BH-SED-03B-2	98088	4.26	368372	5.26	219431	6.61
04 BH-SED-06-6	67934	4.27	258325	5.26	150967	6.61
05 SRM	64039	4.27	231747	5.25	134914	6.61
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IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B180150
 Lab File ID (Standard): F02260C2 Date Analyzed: 02/27/09
 Instrument ID: 722 Time Analyzed: 0223

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	261312	7.77	199767	10.11	158164	11.76
UPPER LIMIT	522624	8.27	399534	10.61	316328	12.26
LOWER LIMIT	130656	7.27	99884	9.61	79082	11.26
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	329357	7.77	245402	10.09	174755	11.66
02 BH-SED-03C-0	315340	7.76	243597	10.08	188212	11.65
03 BH-SED-03B-2	356042	7.76	247554	10.07	207676	11.64
04 BH-SED-06-6	241899	7.76	157802	10.08	144132	11.65
05 SRM	213712	7.76	191640	10.08	193217	11.64
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IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B180150
 Lab File ID (Standard): F03020C1 Date Analyzed: 03/02/09
 Instrument ID: 722 Time Analyzed: 2317

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	82852	4.26	293115	5.25	158491	6.60
UPPER LIMIT	165704	4.76	586230	5.75	316982	7.10
LOWER LIMIT	41426	3.76	146558	4.75	79246	6.10
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-03C-0	80887	4.26	296048	5.25	172972	6.60
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B180150
 Lab File ID (Standard): F03020C1 Date Analyzed: 03/02/09
 Instrument ID: 722 Time Analyzed: 2317

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	275992	7.75	167465	10.06	147224	11.65
UPPER LIMIT	551984	8.25	334930	10.56	294448	12.15
LOWER LIMIT	137996	7.25	83733	9.56	73612	11.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-03C-0	257451	7.75	207967	10.06	150098	11.66
02						
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IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

METALS SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

TOTAL Metals

Lot-Sample #...: C9B180150-001

Date Sampled...: 02/17/09

Date Received...: 02/18/09

Matrix.....: SOLID

% Moisture.....: 60

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9062016						
Mercury	1.1	0.041	mg/kg	SW846 7471A	03/03/09	K7C311AR
		Dilution Factor: 0.5		Analysis Time...: 08:08	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0031	
Prep Batch #...: 9063430						
Silver	1.2	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AQ
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0030	
Arsenic	43.8	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AD
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.021	
Beryllium	1.1	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AE
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0046	
Cadmium	3.3	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AF
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	182 J	0.25	mg/kg	SW846 6020	03/04-03/05/09	K7C311AG
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Copper	120	0.25	mg/kg	SW846 6020	03/04-03/05/09	K7C311AH
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Nickel	32.8	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AJ
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0085	
Lead	780 J	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AK
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0043	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

TOTAL Metals

Lot-Sample #....: C9B180150-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.3	0.25	mg/kg	SW846 6020	03/04-03/05/09	K7C311AL
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	
Selenium	5.6	0.63	mg/kg	SW846 6020	03/04-03/05/09	K7C311AM
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.051	
Thallium	0.53	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AN
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0025	
Zinc	954	0.63	mg/kg	SW846 6020	03/04-03/05/09	K7C311AP
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.015	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

TOTAL Metals

Lot-Sample #...: C9B180150-002

Date Sampled...: 02/17/09

Date Received...: 02/18/09

Matrix.....: SOLID

% Moisture.....: 54

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9062016						
Mercury	0.48	0.036	mg/kg	SW846 7471A	03/03/09	K7C5C1AR
		Dilution Factor: 0.5		Analysis Time...: 08:10	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0027	
Prep Batch #...: 9063430						
Silver	0.67	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0026	
Arsenic	33.7	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AD
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Beryllium	1.3	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AE
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Cadmium	2.7	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AF
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0099	
Chromium	130 J	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AG
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0087	
Copper	84.5	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AH
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0093	
Nickel	33.8	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Lead	601 J	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AK
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

TOTAL Metals

Lot-Sample #...: C9B180150-002

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	1.0	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AL
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.0036	
Selenium	5.7	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AM
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.044	
Thallium	0.39	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AN
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.0022	
Zinc	701	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AP
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9053236	MDL.....: 0.013	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

TOTAL Metals

Lot-Sample #...: C9B180150-003

Date Sampled...: 02/17/09

Date Received...: 02/18/09

Matrix.....: SOLID

% Moisture.....: 58

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9062016						
Mercury	1.3	0.040	mg/kg	SW846 7471A	03/03/09	K7C5F1AR
		Dilution Factor: 0.5		Analysis Time...: 08:11	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0030	
Prep Batch #...: 9063430						
Silver	2.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0029	
Arsenic	45.0	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AD
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AE
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Cadmium	4.0	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AF
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	330 J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AG
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0096	
Copper	403	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AH
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	44.9	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0082	
Lead	604 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AK
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

TOTAL Metals

Lot-Sample #...: C9B180150-003

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	1.7	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AL
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Selenium	7.9	0.60	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AM
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.049	
Thallium	0.70	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AN
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Zinc	1400	0.60	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AP
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #...: C9B180150-004

Date Sampled...: 02/17/09

% Moisture.....

Date Received...: 02/18/09

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9062016						
Mercury	0.015 B	0.033	mg/kg	SW846 7471A	03/03/09	K7C5J1AQ
		Dilution Factor: 1		Analysis Time...: 08:13	Analyst ID.....: 401509	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0025	
Prep Batch #...: 9063430						
Silver	0.038 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AP
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	3.4	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AC
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	0.30	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AD
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Cadmium	0.20	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AE
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0091	
Chromium	17.7 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AF
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0080	
Copper	7.8	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AG
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0085	
Nickel	15.2	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AH
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0068	
Lead	7.9 J	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AJ
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0034	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #...: C9B180150-004

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	0.065 B	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AK
		Dilution Factor: 1		Analysis Time..: 19:38	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	0.082 B	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AL
		Dilution Factor: 1		Analysis Time..: 19:38	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	
Thallium	0.086 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AM
		Dilution Factor: 1		Analysis Time..: 19:38	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	24.6	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AN
		Dilution Factor: 1		Analysis Time..: 19:38	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S) :

B Estimated result. Result is less than RL.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C030000-016 Prep Batch #...: 9062016						
Mercury	ND	0.016	mg/kg	SW846 7471A	03/03/09	K7XWJ1AA
		Dilution Factor: 0.5				
		Analysis Time...: 08:01		Analyst ID.....: 031043		Instrument ID...: HGH
MB Lot-Sample #: C9C040000-430 Prep Batch #...: 9063430						
Antimony	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Arsenic	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AA
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Beryllium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AC
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Cadmium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AD
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Chromium	0.035 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AE
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Copper	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AF
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Lead	0.0047 B	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AH
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Nickel	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AG
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Selenium	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AK
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Silver	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AN
Dilution Factor: 0.5						
Analysis Time...: 18:06						
Analyst ID.....: 401509						
Instrument ID...: ICP						
Thallium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AL
Dilution Factor: 0.5						
Analysis Time...: 18:06						
Analyst ID.....: 401509						
Instrument ID...: ICP						
Zinc	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AM
Dilution Factor: 0.5						
Analysis Time...: 18:06						
Analyst ID.....: 401509						
Instrument ID...: ICP						

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #... : 9062016					
Mercury	97	(80 - 120)	SW846 7471A	03/03/09	K7XWJ1AC
		Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-430 Prep Batch #... : 9063430					
Arsenic	88	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AP
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Beryllium	95	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AQ
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Cadmium	91	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AR
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Chromium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AT
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Copper	99	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AU
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Nickel	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AV
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Lead	102	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AW
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Antimony	87	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AX
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Selenium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A0
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	92	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A1
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Zinc	84	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A2
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Silver	104	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A3
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #... : 9062016							
Mercury	0.208	0.203	mg/kg	97	SW846 7471A	03/03/09	K7XWJ1AC
				Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043	
				Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-430 Prep Batch #... : 9063430							
Arsenic	2.00	1.76	mg/kg	88	SW846 6020	03/04-03/05/09	K727R1AP
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Beryllium	2.50	2.38	mg/kg	95	SW846 6020	03/04-03/05/09	K727R1AQ
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Cadmium	2.50	2.29	mg/kg	91	SW846 6020	03/04-03/05/09	K727R1AR
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Chromium	10.0	9.77	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AT
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Copper	12.5	12.4	mg/kg	99	SW846 6020	03/04-03/05/09	K727R1AU
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Nickel	25.0	24.4	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AV
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Lead	1.00	1.02	mg/kg	102	SW846 6020	03/04-03/05/09	K727R1AW
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Antimony	25.0	21.8	mg/kg	87	SW846 6020	03/04-03/05/09	K727R1AX
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Selenium	0.500	0.491	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1A0
				Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	2.50	2.30	mg/kg	92	SW846 6020	03/04-03/05/09	K727R1A1
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Zinc	25.0	21.1	mg/kg	84	SW846 6020	03/04-03/05/09	K727R1A2
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Silver	2.50	2.60	mg/kg	104	SW846 6020	03/04-03/05/09	K727R1A3
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B250192-001 Prep Batch #...: 9063430						
Antimony	32 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1CE
	32 N	(75 - 125)	0.27 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Arsenic	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1AX
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Beryllium	84	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A1
	86	(75 - 125)	1.1 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Cadmium	69 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A3
	64 N	(75 - 125)	2.4 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Chromium	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A5
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Copper	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A7
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Lead	NC	(75 - 125)		SW846 6020	03/04-03/09/09	K7N2P1CC
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CD
Dilution Factor: 5						
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B180150

Matrix.....: SOLID

Date Sampled....: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	89	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1A9
	90	(75 - 125)	0.68	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CA
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Selenium	NC	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CG
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CH
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Silver	85	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CN
	90	(75 - 125)	3.4	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CP
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Thallium	87	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CJ
	87	(75 - 125)	0.18	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CK
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Zinc	NC	(75 - 125)			SW846 6020	03/04-03/09/09	K7N2P1CL
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CM
Dilution Factor: 5							
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B250192-001 Prep Batch #...: 9063430									
% Moisture.....: 59									
Antimony									
	2.5	61.0	22.1 N	mg/kg	32		SW846 6020	03/04-03/05/09	K7N2P1CE
	2.5	61.0	22.2 N	mg/kg	32	0.27	SW846 6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									
Arsenic									
	102	4.88	108 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1AX
	102	4.88	115 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									
Beryllium									
	1.6	6.10	6.76	mg/kg	84		SW846 6020	03/04-03/05/09	K7N2P1A1
	1.6	6.10	6.83	mg/kg	86	1.1	SW846 6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									
Cadmium									
	8.6	6.10	12.9 N	mg/kg	69		SW846 6020	03/04-03/05/09	K7N2P1A3
	8.6	6.10	12.6 N	mg/kg	64	2.4	SW846 6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									
Chromium									
	362	24.4	388 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A5
	362	24.4	397 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									
Copper									
	226	30.5	256 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A7
	226	30.5	264 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5									
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9063236									

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Lead									
	2990	2.44	3070 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CC
	2990	2.44	3260 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CD
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Nickel									
	47.2	61.0	102	mg/kg	89		SW846 6020	03/04-03/05/09	K7N2P1A9
	47.2	61.0	102	mg/kg	90	0.68	SW846 6020	03/04-03/05/09	K7N2P1CA
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Selenium									
	14.8	1.22	15.9 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CG
	14.8	1.22	16.5 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CH
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Silver									
	4.2	6.10	9.37	mg/kg	85		SW846 6020	03/04-03/05/09	K7N2P1CN
	4.2	6.10	9.70	mg/kg	90	3.4	SW846 6020	03/04-03/05/09	K7N2P1CP
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Thallium									
	1.2	6.10	6.52	mg/kg	87		SW846 6020	03/04-03/05/09	K7N2P1CJ
	1.2	6.10	6.50	mg/kg	87	0.18	SW846 6020	03/04-03/05/09	K7N2P1CK
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Zinc									
	3730	30.5	3900 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CL
	3730	30.5	3930 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CM
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						

NOTE(S):

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
-----------	---------------------	--------------------	---------------	--------	-------------------------------	-----------------

MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury	93	(75 - 125)		SW846 7471A	03/03/09	K7RJ81AV
	89	(75 - 125)	2.7 (0-20)	SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B180150

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury

0.056	0.103	0.152	mg/kg	93			SW846 7471A	03/03/09	K7RJ81AV
0.056	0.103	0.148	mg/kg	89	2.7		SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY SUMMARY

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method:

SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B180150

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03C-02	C9B180150 001	K7C311AT	5.9	mg/kg	0.24	1.3	1	2/20/2009 - 2/24/2009 09:28	9051081
BH-SED-03B-2	C9B180150 002	K7C5C1AT	ND	mg/kg	0.21	1.1	1	2/20/2009 - 2/24/2009 09:31	9051081
BH-SED-06-6	C9B180150 003	K7C5F1AT	18.4	mg/kg	0.23	1.2	1	2/20/2009 - 2/24/2009 09:31	9051081

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method:

SM20

2540G

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B180150

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03C-02	C9B180150 001	K7C311AA	39.9	%	0.0	1.0	1	2/23/2009 - 2/24/2009 05:03	9054037
BH-SED-03B-2	C9B180150 002	K7C5C1AA	45.9	%	0.0	1.0	1	2/23/2009 - 2/24/2009 05:03	9054037
BH-SED-06-6	C9B180150 003	K7C5F1AA	41.5	%	0.0	1.0	1	2/23/2009 - 2/24/2009 05:03	9054037

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B180150

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03C-02	C9B180150 001	K7C311AU	73900	mg/kg	1140	4980	3.97	2/26/2009 - 2/26/2009 12:53	9056120
BH-SED-03B-2	C9B180150 002	K7C5C1AU	43000	mg/kg	851	3700	3.4	2/26/2009 - 2/26/2009 13:03	9056120
BH-SED-06-6	C9B180150 003	K7C5F1AU	77300	mg/kg	1080	4670	3.88	2/26/2009 - 2/26/2009 13:14	9056120

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Report ID: C9B180150

Matrix: SOLID

Date/Time Received: 2/18/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B200000081B	081 MB	K7GNM1AA	ND	mg/kg	0.50	2/20/2009 - 2/24/2009 09:20	9051081	

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Report ID: C9B180150

Matrix: SOLID

Date/Time Received: 2/17/2009 9:20:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K7AM21A0	49.1	%	1.0	2/23/2009 - 2/24/2009 05:03	9054037	5.2 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: EA Engineering, Science and Technology
Matrix: SOLID

Method: EPA Lloyd Kahn
Report ID: C9B180150
Date/Time Received: 2/17/2009 9:20:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B250000120B	120 MB	K7NEK1AA	ND	mg/kg	500	2/26/2009 - 2/26/2009 12:21	9056120	

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B200000

Matrix: SOLID

Date/Time Received: 2/18/2009 10:00:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7GNM1AC	103	41 - 159	2/20/2009 - 2/24/2009 09:20	9051081	
LAB MS/MSD	MS	K673C1CA	102	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	3.9 / 20
BH-SED-03C-02	MS	K7C311A0	100	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	7.3 / 20
LAB MS/MSD	MSD	K673C1CC	106	75 - 125	2/20/2009 - 2/24/2009 09:28	9051081	3.9 / 20
BH-SED-03C-02	MSD	K7C311A1	112	75 - 125	2/20/2009 - 2/24/2009 09:31	9051081	7.3 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: EA Engineering, Science and Technology
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9B230164
 Date/Time Received: 2/23/2009 10:21:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
LAB MS/MSD	MSD	K7K6J1A3	105	75 - 125	2/26/2009 - 2/26/2009 15:36	9056120	6.2 / 20
LAB MS/MSD	MS	K7K6J1A2	107	75 - 125	2/26/2009 - 2/26/2009 15:26	9056120	6.2 / 20
CHECK SAMPLE	LCS	K7NEK1AC	103	75 - 125	2/26/2009 - 2/26/2009 12:32	9056120	0.95 / 20
DUPLICATE CHECK	LCSD	K7NEK1AD	102	75 - 125	2/26/2009 - 2/26/2009 12:42	9056120	0.95 / 20

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9B180150



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-13B-2

Lab Name: TestAmerica Burlington

Contract: C9B180150

SDG No.: 9B180150

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784998

Matrix: SOLID

Client: STLPAP

Date Received: 02/19/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/20/09		%	1	0.0	118.5	

Printed on: 02/26/09 08:41 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-06-6

Lab Name: TestAmerica Burlington

Contract: C9B180150

SDG No.: 9B180150

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 784999

Matrix: SOLID

Client: STLPAP

Date Received: 02/19/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	D.F.	RL	Conc.	Qual.
D2216	Moisture Content	02/20/09		%	1	0.0	156.6	

Printed on: 02/26/09 08:41 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130173
SDG: 9B180150

Start Date: 2/20/2009
Start Time: 2240
End Date: 2/21/2009
Analyst: MAP

[illegible]

Particle Size of Soils by ASTM D422

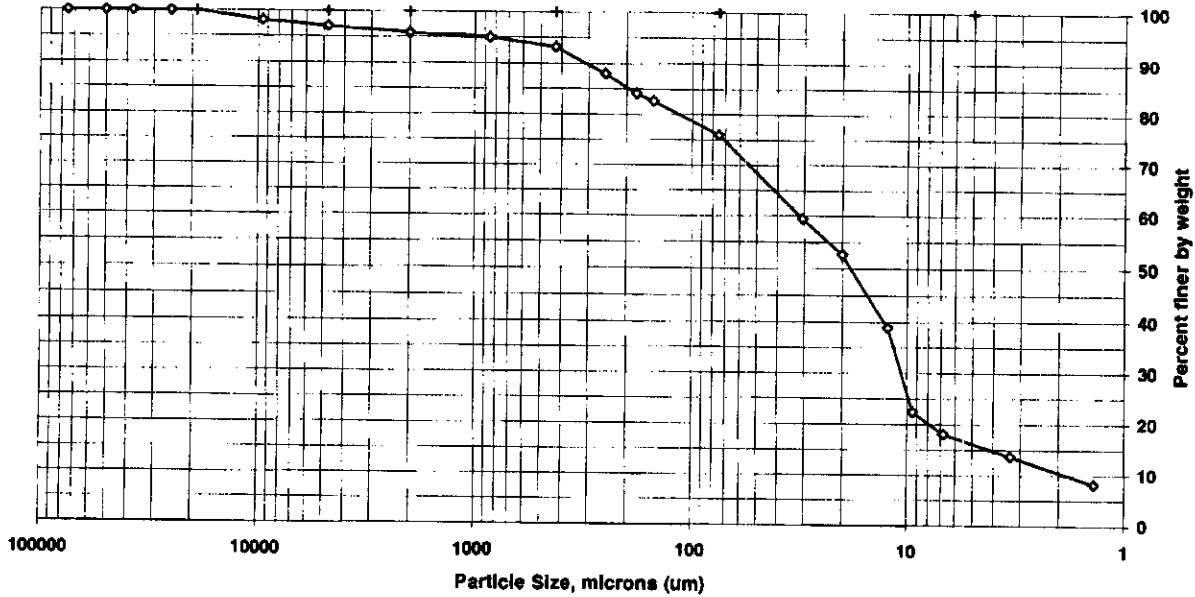
Client Code: STLPAP
 Sample ID: BH-SED-13C-02
 Lab ID: 784997

SDG: 9B180150
 ETR(s): 130173

Date Received: 2/19/2009
 Start Date: 2/19/2009
 End Date: 2/26/2009

Percent Solids: 42.9%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: n/a
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	98.1	1.9
#4	4750	97.0	1.1
#10	2000	95.8	1.2
#20	850	94.9	0.9
#40	425	93.2	1.7
#60	250	87.9	5.3
#80	180	84.2	3.7
#100	150	82.7	1.5
#200	75	75.9	6.8
Hydrometer	30.6	59.5	16.4
	20.0	52.6	6.9
	12.3	38.9	13.7
	9.4	22.4	16.5
	6.8	18.1	4.3
	3.3	13.7	4.3
V	1.4	8.2	5.5

Soil Classification	Percent of Total Sample
Gravel	3.0
Sand	21.0
Coarse Sand	1.2
Medium Sand	2.6
Fine Sand	17.3
Silt	57.9
Clay	18.1

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

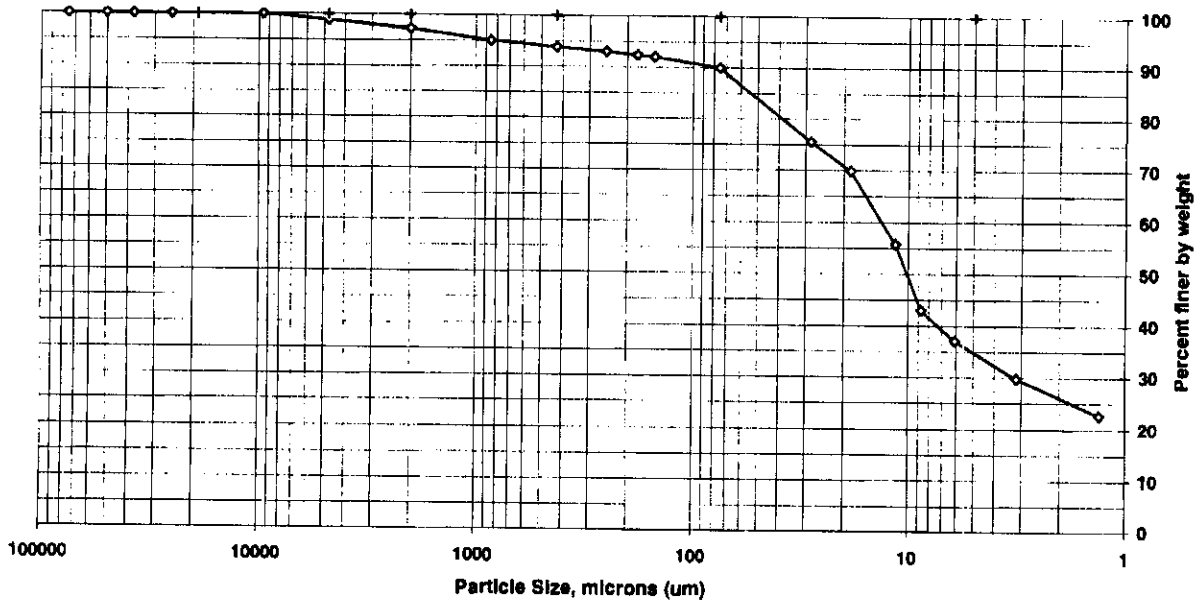
Client Code: STLPAP
 Sample ID: BH-SED-13B-2
 Lab ID: 784998

SDG: 9B180150
 ETR(s): 130173

Date Received: 2/19/2009
 Start Date: 2/19/2009
 End Date: 2/26/2009

Percent Solids: 45.8%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: n/a
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	98.8	1.2
#10	2000	97.3	1.5
#20	850	95.0	2.3
#40	425	93.8	1.3
#60	250	93.0	0.8
#80	180	92.4	0.6
#100	150	92.0	0.4
#200	75	89.9	2.1
Hydrometer	28.4	75.5	14.4
	18.5	69.9	5.7
	11.5	55.7	14.2
	8.7	43.0	12.7
	6.1	37.1	5.9
	3.2	29.7	7.3
V	1.3	22.7	7.1

Soil Classification	Percent of Total Sample
Gravel	1.2
Sand	8.9
Coarse Sand	1.5
Medium Sand	3.5
Fine Sand	3.9
Silt	52.8
Clay	37.1

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

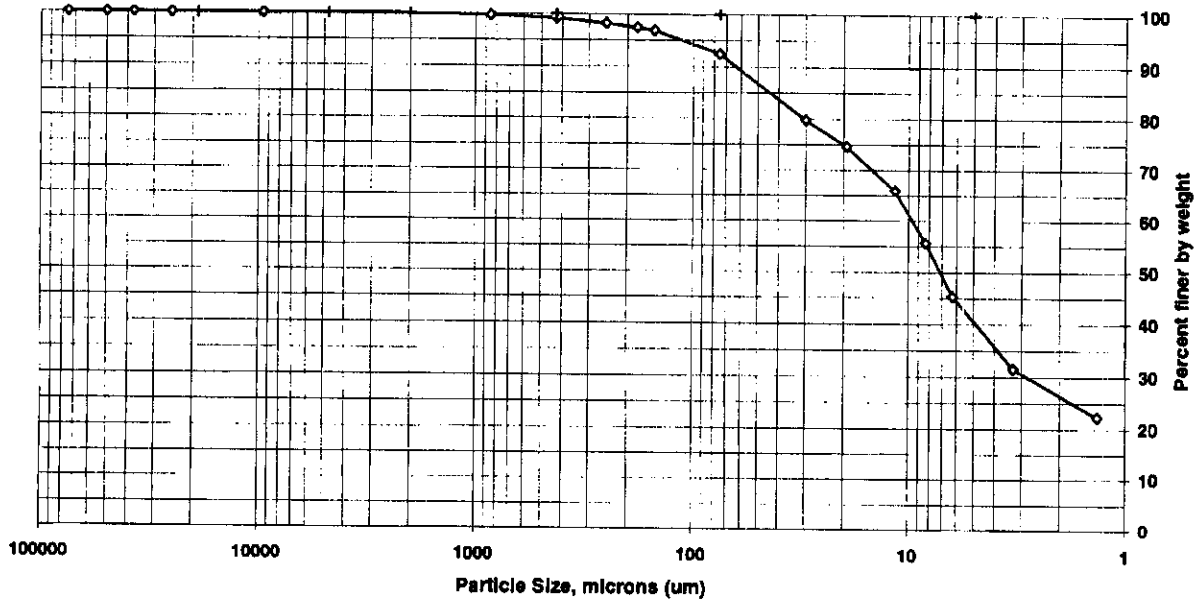
Client Code: STLPAP
 Sample ID: BH-SED-06-6
 Lab ID: 784999

SDG: 9B180150
 ETR(s): 130173

Date Received: 2/19/2009
 Start Date: 2/19/2009
 End Date: 2/26/2009

Percent Solids: 39.0%
 Specific Gravity: 2.650
 Maximum Particle Size: Med sand

Non-soil material: n/a
 Shape (> #10): n/a
 Hardness (> #10): n/a



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.7	0.3
#40	425	99.2	0.5
#60	250	98.3	0.9
#80	180	97.5	0.8
#100	150	97.0	0.5
#200	75	92.5	4.5
Hydrometer	29.9	79.8	12.7
	19.3	74.6	5.2
	11.5	68.0	8.6
	8.3	55.7	10.3
	6.3	45.3	10.3
	3.3	31.6	13.8
V	1.3	22.4	9.2

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	7.5
Coarse Sand	0.0
Medium Sand	0.8
Fine Sand	6.8
Silt	47.1
Clay	45.3

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B180150

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03C-02	C9B180150-001	Soil
1MS*	BH-SED-03C-02MS	C9B180150-001MS	Soil
1MSD*	BH-SED-03C-02MSD	C9B180150-001MSD	Soil
2	BH-SED-03B-2	C9B180150-002	Soil
3	BH-SED-06-6	C9B180150-003	Soil

* MS/MSD - Cyanide only

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited the following contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values.

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

EA/MES Sparrows Point 18001868

Cyanide, Total

12.3

Lab Name: TESTAMERICA PITTSBURGH

Method:

SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B180150

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03C-02	C9B180150 001	K7C311AT	5.9	mg/kg	0.24	1.3	1	2/20/2009 - 2/24/2009 09:28	9051081
BH-SED-03B-2	C9B180150 002	K7C5C1AT	ND	mg/kg	0.21	1.1	1	2/20/2009 - 2/24/2009 09:31	9051081
BH-SED-06-6	C9B180150 003	K7C5F1AT	18.4	mg/kg	0.23	1.2	1	2/20/2009 - 2/24/2009 09:31	9051081

EA/MES Sparrows Point 18001868

1,2,3

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B180150

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03C-02	C9B180150 001	K7C311AU	73900	mg/kg	1140	4980	3.97	2/26/2009 - 2/26/2009 12:53	9056120
BH-SED-03B-2	C9B180150 002	K7C5C1AU	43000	mg/kg	851	3700	3.4	2/26/2009 - 2/26/2009 13:03	9056120
BH-SED-06-6	C9B180150 003	K7C5F1AU	77300	mg/kg	1080	4670	3.88	2/26/2009 - 2/26/2009 13:14	9056120

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B180150

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03C-02	C9B180150-001	Soil
2	BH-SED-03B-2	C9B180150-002	Soil
3	BH-SED-06-6	C9B180150-003	Soil
4	SRM	C9B180150-004	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following:

MS Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
Reference	Antimony	32%/32%/Ok	L/UL	All samples
	Cadmium	69%/64%/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - ICP serial dilution samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

TOTAL Metals

Lot-Sample #....: C9B180150-001

Matrix.....: SOLID

Date Sampled....: 02/17/09

Date Received...: 02/18/09

% Moisture.....: 60

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	1.1	0.041	mg/kg	SW846 7471A	03/03/09	K7C311AR
		Dilution Factor: 0.5		Analysis Time...: 08:08	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0031	
Prep Batch #....: 9063430						
Silver	1.2	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AQ
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0030	
Arsenic	43.8	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AD
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.021	
Beryllium	1.1	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AE
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0046	
Cadmium	3.3 L	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AF
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	182 J	0.25	mg/kg	SW846 6020	03/04-03/05/09	K7C311AG
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Copper	120	0.25	mg/kg	SW846 6020	03/04-03/05/09	K7C311AH
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Nickel	32.8	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AJ
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0085	
Lead	780 J	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AK
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0043	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-03C-02

TOTAL Metals

Lot-Sample #....: C9B180150-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.3 L	0.25	mg/kg	SW846 6020	03/04-03/05/09	K7C311AL
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	
Selenium	5.6	0.63	mg/kg	SW846 6020	03/04-03/05/09	K7C311AM
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.051	
Thallium	0.53	0.13	mg/kg	SW846 6020	03/04-03/05/09	K7C311AN
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0025	
Zinc	954	0.63	mg/kg	SW846 6020	03/04-03/05/09	K7C311AP
		Dilution Factor: 0.5		Analysis Time...: 19:25	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.015	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

New
4/29/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

TOTAL Metals

Lot-Sample #...: C9B180150-002

Matrix.....: SOLID

Date Sampled...: 02/17/09

Date Received...: 02/18/09

% Moisture.....: 54

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9062016						
Mercury	0.48	0.036	mg/kg	SW846 7471A	03/03/09	K7C5C1AR
		Dilution Factor: 0.5		Analysis Time...: 08:10	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9052012	MDL.....: 0.0027	
Prep Batch #...: 9063430						
Silver	0.67	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0026	
Arsenic	33.7	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AD
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Beryllium	1.3	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AE
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Cadmium	2.7 L	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AF
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0099	
Chromium	130 J	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AG
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0087	
Copper	84.5	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AH
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0093	
Nickel	33.8	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Lead	601 J	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AK
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	

(Continued on next page)

Client Sample ID: BH-SED-03B-2

TOTAL Metals

Lot-Sample #....: C9B180150-002

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.0 L	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AL
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	
Selenium	5.7	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AM
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.044	
Thallium	0.39	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AN
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0022	
Zinc	701	0.54	mg/kg	SW846 6020	03/04-03/05/09	K7C5C1AP
		Dilution Factor: 0.5		Analysis Time...: 19:30	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.013	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

LW
4/29/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

TOTAL Metals

Lot-Sample #....: C9B180150-003

Matrix.....: SOLID

Date Sampled....: 02/17/09

Date Received...: 02/18/09

% Moisture.....: 58

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	1.3	0.040	mg/kg	SW846 7471A	03/03/09	K7C5F1AR
		Dilution Factor: 0.5		Analysis Time...: 08:11	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9052012	MDL.....: 0.0030	
Prep Batch #....: 9063430						
Silver	2.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AQ
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0029	
Arsenic	45.0	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AD
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AE
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Cadmium	4.0 L	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AF
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	330 /	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AG
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0096	
Copper	403	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AH
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	44.9	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AJ
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0082	
Lead	604 /	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AK
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0041	

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

TOTAL Metals

Lot-Sample #....: C9B180150-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.7 L	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AL
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Selenium	7.9	0.60	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AM
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.049	
Thallium	0.70	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AN
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Zinc	1400	0.60	mg/kg	SW846 6020	03/04-03/05/09	K7C5F1AP
		Dilution Factor: 0.5		Analysis Time...: 19:34	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.014	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

LW
4/29/09

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #...: C9B180150-004

Matrix.....: SOLID

Date Sampled...: 02/17/09

Date Received...: 02/18/09

% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	0.015 <i>h</i>	0.033	mg/kg	SW846 7471A	03/03/09	K7C5J1AQ
		Dilution Factor: 1		Analysis Time...: 08:13	Analyst ID.....: 401509	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0025	
Prep Batch #....: 9063430						
Silver	0.038 <i>h</i>	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AP
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	3.4	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AC
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	0.30	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AD
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Cadmium	0.20 <i>L</i>	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AE
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0091	
Chromium	17.7 <i>h</i>	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AF
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0080	
Copper	7.8	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AG
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0085	
Nickel	15.2	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AH
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0068	
Lead	7.9 <i>h</i>	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AJ
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0034	

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hw
4/29/09

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #....: C9B180150-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.065 <i>B L</i>	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AK
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	0.082 <i>B J</i>	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AL
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	
Thallium	0.086 <i>B J</i>	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AM
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	24.6	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7C5J1AN
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S):

B Estimated result. Result is less than RL.

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

muw
4/29/09

POLYNUCLEAR AROMATIC HYDROCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B180150

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03C-02	C9B180150-001	Soil
1DL	BH-SED-03C-02DL	C9B180150-001DL	Soil
2	BH-SED-03B-2	C9B180150-002	Soil
2DL	BH-SED-03B-2DL	C9B180150-002DL	Soil
3	BH-SED-06-6	C9B180150-003	Soil
3DL	BH-SED-06-6DL	C9B180150-003DL	Soil
4	SRM	C9B180150-004	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - Several samples exhibited high concentrations of target compounds which exceeded the instrument calibration range and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-001 Work Order #....: K7C311AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 10:30 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9056010 Analysis Time...: 10:43
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 60 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	15000	170	ug/kg	25
2-Methylnaphthalene	66000 37000 34000	170	ug/kg	6600 23
Naphthalene	2800000 200000 34000	170	ug/kg	4900 24
Acenaphthylene	8300	170	ug/kg	33
Acenaphthene	3100	170	ug/kg	27
Fluorene	5500	170	ug/kg	25
Phenanthrene	10000	170	ug/kg	20
Anthracene	3600	830	ug/kg	29
Fluoranthene	12000	170	ug/kg	14
Pyrene	9500	170	ug/kg	44
Benzo (a) anthracene	5700	170	ug/kg	27
Chrysene	4800	170	ug/kg	29
Benzo (b) fluoranthene	7600	170	ug/kg	34
Benzo (k) fluoranthene	1900	170	ug/kg	35
Benzo (a) pyrene	6100	170	ug/kg	47
Indeno (1,2,3-cd) pyrene	3300	170	ug/kg	9.2
Dibenzo (a,h) anthracene	1100	170	ug/kg	37
Benzo (ghi) perylene	3600	170	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

LW
 4/29/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

GC/MS Semivolatiles

Use original

Lot-Sample #...: C9B180150-001 Work Order #...: K7C312AC Matrix.....: SOLID
 Date Sampled...: 02/17/09 10:30 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 03/03/09
 Prep Batch #...: 9056010 Analysis Time...: 01:48
 Dilution Factor: 2000 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 60 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	27000 J	34000	ug/kg	5100
2-Methylnaphthalene	66000	34000	ug/kg	6600
Naphthalene	2800000	34000	ug/kg	4900
Acenaphthylene	15000 J	34000	ug/kg	6700
Acenaphthene	ND	34000	ug/kg	5400
Fluorene	ND	34000	ug/kg	5000
Phenanthrene	20000 J	34000	ug/kg	4000
Anthracene	7400 J	170000	ug/kg	5900
Fluoranthene	24000 J	34000	ug/kg	2800
Pyrene	18000 J	34000	ug/kg	8900
Benzo(a)anthracene	11000 J	34000	ug/kg	5300
Chrysene	8000 J	34000	ug/kg	5800
Benzo(b)fluoranthene	14000 J	34000	ug/kg	6800
Benzo(k)fluoranthene	ND	34000	ug/kg	7000
Benzo(a)pyrene	ND	34000	ug/kg	9400
Indeno(1,2,3-cd)pyrene	ND	34000	ug/kg	1800
Dibenzo(a,h)anthracene	ND	34000	ug/kg	7400
Benzo(ghi)perylene	ND	34000	ug/kg	2500
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Nitrobenzene-d5	NC, DIL	(27 - 110)		
Terphenyl-d14	NC, DIL	(21 - 130)		
2-Fluorobiphenyl	NC, DIL	(28 - 108)		
2-Fluorophenol	NC, DIL	(28 - 107)		
Phenol-d5	NC, DIL	(30 - 112)		
2,4,6-Tribromophenol	NC, DIL	(21 - 116)		

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

aw
4/29/09

Client Sample ID: BH-SED-03B-2

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-002 Work Order #....: K7C5C1AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 12:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9056010 Analysis Time...: 11:04
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 54 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	470	73	ug/kg	11
2-Methylnaphthalene	800	73	ug/kg	14
Naphthalene	51060 28000 E 730 73	73	ug/kg	110 11
Acenaphthylene	380	73	ug/kg	14
Acenaphthene	180	73	ug/kg	12
Fluorene	250	73	ug/kg	11
Phenanthrene	720	73	ug/kg	8.7
Anthracene	500	360	ug/kg	13
Fluoranthene	2500	73	ug/kg	6.1
Pyrene	2000	73	ug/kg	19
Benzo (a) anthracene	1100	73	ug/kg	12
Chrysene	1800	73	ug/kg	13
Benzo (b) fluoranthene	2700	73	ug/kg	15
Benzo (k) fluoranthene	ND	73	ug/kg	15
Benzo (a) pyrene	1400	73	ug/kg	20
Indeno (1,2,3-cd) pyrene	1000	73	ug/kg	4.0
Dibenzo (a,h) anthracene	210	73	ug/kg	16
Benzo (ghi) perylene	1100	73	ug/kg	5.3

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(27 - 110)
Terphenyl-d14	69	(21 - 130)
2-Fluorobiphenyl	75	(28 - 108)
2-Fluorophenol	62	(28 - 107)
Phenol-d5	58	(30 - 112)
2,4,6-Tribromophenol	92	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-03B-2

GC/MS Semivolatiles

Use original

Lot-Sample #....: C9B180150-002 Work Order #....: K7C5C2AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 12:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 09:04
 Dilution Factor: 50 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 54 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	430 J	730	ug/kg	110
2-Methylnaphthalene	750	730	ug/kg	140
Naphthalene	51000	730	ug/kg	110
Acenaphthylene	300 J	730	ug/kg	140
Acenaphthene	150 J	730	ug/kg	120
Fluorene	200 J	730	ug/kg	110
Phenanthrene	640 J	730	ug/kg	87
Anthracene	360 J	3600	ug/kg	130
Fluoranthene	2200	730	ug/kg	61
Pyrene	2000	730	ug/kg	190
Benzo(a) anthracene	1600	730	ug/kg	120
Chrysene	1100	730	ug/kg	130
Benzo(b) fluoranthene	2500	730	ug/kg	150
Benzo(k) fluoranthene	ND	730	ug/kg	150
Benzo(a) pyrene	1700	730	ug/kg	200
Indeno(1,2,3-cd)pyrene	1100	730	ug/kg	40
Dibenzo(a,h) anthracene	ND	730	ug/kg	160
Benzo(ghi) perylene	1100	730	ug/kg	53

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-003 Work Order #....: K7C5F1AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 14:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9056010 Analysis Time...: 11:26
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	9600	160	ug/kg	24
2-Methylnaphthalene	17000	160	ug/kg	32
Naphthalene	620000 100000 E 3200	160	ug/kg	470 22
Acenaphthylene	4700	160	ug/kg	32
Acenaphthene	28000	160	ug/kg	26
Fluorene	23000	160	ug/kg	24
Phenanthrene	120600 61000 E 3200	160	ug/kg	380 19
Anthracene	30000	800	ug/kg	28
Fluoranthene	110000 66000 E 3200	160	ug/kg	270 14
Pyrene	81000 37000 E 3200	160	ug/kg	950 43
Benzo(a)anthracene	31000	160	ug/kg	26
Chrysene	27000	160	ug/kg	28
Benzo(b)fluoranthene	10000	160	ug/kg	33
Benzo(k)fluoranthene	28000	160	ug/kg	33
Benzo(a)pyrene	25000	160	ug/kg	45
Indeno(1,2,3-cd)pyrene	10000	160	ug/kg	8.8
Dibenzo(a,h)anthracene	3000	160	ug/kg	35
Benzo(ghi)perylene	11000	160	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

3DL

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Client Sample ID: BH-SED-06-6

GC/MS Semivolatiles

Lot-Sample #....: C9B180150-003 Work Order #....: K7C5F2AC Matrix.....: SOLID
 Date Sampled....: 02/17/09 14:50 Date Received...: 02/18/09 10:00 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 09:26
 Dilution Factor: 200 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

use original

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	17000	3200	ug/kg	490
2-Methylnaphthalene	30000	3200	ug/kg	630
Naphthalene	620000	3200	ug/kg	470
Acenaphthylene	7300	3200	ug/kg	640
Acenaphthene	44000	3200	ug/kg	520
Fluorene	36000	3200	ug/kg	480
Phenanthrene	120000	3200	ug/kg	380
Anthracene	47000	3200	ug/kg	560
Fluoranthene	110000	3200	ug/kg	270
Pyrene	81000	3200	ug/kg	850
Benzo (a) anthracene	48000	3200	ug/kg	510
Chrysene	42000	3200	ug/kg	560
Benzo (b) fluoranthene	55000	3200	ug/kg	650
Benzo (k) fluoranthene	ND	3200	ug/kg	670
Benzo (a) pyrene	37000	3200	ug/kg	900
Indeno (1,2,3-cd) pyrene	21000	3200	ug/kg	180
Dibenzo (a,h) anthracene	5000	3200	ug/kg	710
Benzo (ghi) perylene	20000	3200	ug/kg	240

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

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Client Sample ID: SRM

GC/MS Semivolatiles


Lot-Sample #....: C9B180150-004 Work Order #....: K7C5J1AA Matrix.....: SOLID
 Date Sampled....: 02/17/09 Date Received...: 02/18/09 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 09:48
 Dilution Factor: 30 Initial Wgt/Vol: 5 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	270	200	ug/kg	30
2-Methylnaphthalene	370	200	ug/kg	39
Naphthalene	780	200	ug/kg	29
Acenaphthylene	850	200	ug/kg	40
Acenaphthene	210	200	ug/kg	32
Fluorene	280	200	ug/kg	30
Phenanthrene	3600	200	ug/kg	24
Anthracene	840 J	990	ug/kg	35
Fluoranthene	6100	200	ug/kg	17
Pyrene	5200	200	ug/kg	53
Benzo (a) anthracene	3300	200	ug/kg	32
Chrysene	3700	200	ug/kg	35
Benzo (b) fluoranthene	3500	200	ug/kg	41
Benzo (k) fluoranthene	1400	200	ug/kg	42
Benzo (a) pyrene	2300	200	ug/kg	56
Indeno (1,2,3-cd) pyrene	1700	200	ug/kg	11
Dibenzo (a,h) anthracene	650	200	ug/kg	44
Benzo (ghi) perylene	2400	200	ug/kg	15

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(27 - 110)
Terphenyl-d14	73	(21 - 130)
2-Fluorobiphenyl	70	(28 - 108)
2-Fluorophenol	62	(28 - 107)
Phenol-d5	64	(30 - 112)
2,4,6-Tribromophenol	82	(21 - 116)

NOTE (S) :

J Estimated result. Result is less than RL.


 4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B180150

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03C-02	C9B180150-001	Soil
2	BH-SED-03B-2	C9B180150-002	Soil
3	BH-SED-06-6	C9B180150-003	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
11/08/08	Acrolein	0.039 RRF	L/R	All samples

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
02/26/09	Acrolein	0.022 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-03C-02

GC/MS Volatiles

Lot-Sample #....: C9B180150-001	Work Order #....: K7C311AX	Matrix.....: SOLID
Date Sampled....: 02/17/09	Date Received...: 02/18/09	MS Run #.....:
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057042	Analysis Time...: 08:21	
Dilution Factor: 1.17	Initial Wgt/Vol: 4.27 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 60	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	15000	ug/kg	2300
Acrylonitrile	ND	15000	ug/kg	1200
Benzene	720 J	730	ug/kg	150
Bromodichloromethane	ND	730	ug/kg	140
Bromoform	ND	730	ug/kg	160
Bromomethane	ND	730	ug/kg	230
2-Butanone (MEK)	ND	730	ug/kg	160
Carbon tetrachloride	ND	730	ug/kg	160
Chloroethane	ND	730	ug/kg	110
2-Chloroethyl vinyl ether	ND	1500	ug/kg	160
Chloroform	ND	730	ug/kg	150
Chloromethane	ND	730	ug/kg	200
Dibromochloromethane	ND	730	ug/kg	95
1,2-Dichlorobenzene	ND	730	ug/kg	100
1,3-Dichlorobenzene	ND	730	ug/kg	74
1,4-Dichlorobenzene	ND	730	ug/kg	77
trans-1,2-Dichloroethene	ND	730	ug/kg	110
Dichlorodifluoromethane	ND	730	ug/kg	93
1,1-Dichloroethane	ND	730	ug/kg	150
1,2-Dichloroethane	ND	730	ug/kg	140
1,1-Dichloroethene	ND	730	ug/kg	160
1,2-Dichloropropane	ND	730	ug/kg	190
cis-1,3-Dichloropropene	ND	730	ug/kg	110
trans-1,3-Dichloropropene	ND	730	ug/kg	85
Ethylbenzene	4000	730	ug/kg	91
Methylene chloride	ND	730	ug/kg	160
1,1,2,2-Tetrachloroethane	ND	730	ug/kg	140
Tetrachloroethene	ND	730	ug/kg	120
Toluene	3600	730	ug/kg	120
1,1,1-Trichloroethane	ND	730	ug/kg	150
1,1,2-Trichloroethane	ND	730	ug/kg	170
Trichloroethene	ND	730	ug/kg	120
Trichlorofluoromethane	ND	730	ug/kg	160
Vinyl chloride	ND	730	ug/kg	190

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EA Engineering, Science and Technology

Client Sample ID: BH-SKD-03C-02

GC/MS Volatiles

Lot-Sample #....: C9B180150-001 Work Order #....: K7C311AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	95	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	94	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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11

Client Sample ID: BH-SED-03B-2

GC/MS Volatiles

Lot-Sample #....: C9B180150-002 Work Order #....: K7C5C1AX Matrix.....: SOLID
 Date Sampled....: 02/17/09 Date Received...: 02/18/09 MS Run #.....:
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057042 Analysis Time...: 10:18
 Dilution Factor: 1.03 Initial Wgt/Vol: 4.85 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 54 Analyst ID.....: 010099 Instrument ID...: HP4
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	11000	ug/kg	1800
Acrylonitrile	ND	11000	ug/kg	910
Benzene	200 J	560	ug/kg	110
Bromodichloromethane	ND	560	ug/kg	100
Bromoform	ND	560	ug/kg	120
Bromomethane	ND	560	ug/kg	180
2-Butanone (MEK)	ND	560	ug/kg	120
Carbon tetrachloride	ND	560	ug/kg	120
Chloroethane	ND	560	ug/kg	84
2-Chloroethyl vinyl ether	ND	1100	ug/kg	120
Chloroform	ND	560	ug/kg	110
Chloromethane	ND	560	ug/kg	160
Dibromochloromethane	ND	560	ug/kg	73
1,2-Dichlorobenzene	ND	560	ug/kg	76
1,3-Dichlorobenzene	ND	560	ug/kg	57
1,4-Dichlorobenzene	ND	560	ug/kg	59
trans-1,2-Dichloroethene	ND	560	ug/kg	84
Dichlorodifluoromethane	ND	560	ug/kg	71
1,1-Dichloroethane	ND	560	ug/kg	110
1,2-Dichloroethane	ND	560	ug/kg	110
1,1-Dichloroethene	ND	560	ug/kg	120
1,2-Dichloropropane	ND	560	ug/kg	140
cis-1,3-Dichloropropene	ND	560	ug/kg	81
trans-1,3-Dichloropropene	ND	560	ug/kg	65
Ethylbenzene	200 J	560	ug/kg	70
Methylene chloride	ND	560	ug/kg	120
1,1,2,2-Tetrachloroethane	ND	560	ug/kg	100
Tetrachloroethene	ND	560	ug/kg	93
Toluene	ND	560	ug/kg	95
1,1,1-Trichloroethane	ND	560	ug/kg	120
1,1,2-Trichloroethane	ND	560	ug/kg	130
Trichloroethene	ND	560	ug/kg	90
Trichlorofluoromethane	ND	560	ug/kg	130
Vinyl chloride	ND	560	ug/kg	140

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Client Sample ID: BH-SKD-03B-2

GC/MS Volatiles

Lot-Sample #....: C9B180150-002 Work Order #....: K7C5C1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	107	(52 - 124)
Toluene-d8	104	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	103	(68 - 121)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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4/29/09

3

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-06-6

GC/MS Volatiles

Lot-Sample #....: C9B180150-003 Work Order #....: K7C5F1AX Matrix.....: SOLID
 Date Sampled....: 02/17/09 Date Received...: 02/18/09 MS Run #.....:
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057042 Analysis Time...: 10:41
 Dilution Factor: 1.04 Initial Wgt/Vol: 4.79 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 58 Analyst ID.....: 010099 Instrument ID...: HP4
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	13000	ug/kg	2000
Acrylonitrile	ND	13000	ug/kg	1000
Benzene	ND	630	ug/kg	120
Bromodichloromethane	ND	630	ug/kg	120
Bromoform	ND	630	ug/kg	130
Bromomethane	ND	630	ug/kg	200
2-Butanone (MEK)	ND	630	ug/kg	140
Carbon tetrachloride	ND	630	ug/kg	140
Chloroethane	ND	630	ug/kg	94
2-Chloroethyl vinyl ether	ND	1300	ug/kg	140
Chloroform	ND	630	ug/kg	130
Chloromethane	ND	630	ug/kg	170
Dibromochloromethane	ND	630	ug/kg	81
1,2-Dichlorobenzene	ND	630	ug/kg	85
1,3-Dichlorobenzene	ND	630	ug/kg	63
1,4-Dichlorobenzene	ND	630	ug/kg	66
trans-1,2-Dichloroethene	ND	630	ug/kg	94
Dichlorodifluoromethane	ND	630	ug/kg	80
1,1-Dichloroethane	ND	630	ug/kg	130
1,2-Dichloroethane	ND	630	ug/kg	120
1,1-Dichloroethene	ND	630	ug/kg	130
1,2-Dichloropropane	ND	630	ug/kg	160
cis-1,3-Dichloropropene	ND	630	ug/kg	91
trans-1,3-Dichloropropene	ND	630	ug/kg	73
Ethylbenzene	ND	630	ug/kg	78
Methylene chloride	ND	630	ug/kg	140
1,1,2,2-Tetrachloroethane	ND	630	ug/kg	120
Tetrachloroethene	ND	630	ug/kg	100
Toluene	ND	630	ug/kg	110
1,1,1-Trichloroethane	ND	630	ug/kg	130
1,1,2-Trichloroethane	ND	630	ug/kg	150
Trichloroethene	ND	630	ug/kg	100
Trichlorofluoromethane	ND	630	ug/kg	140
Vinyl chloride	ND	630	ug/kg	160

(Continued on next page)

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-06-6

GC/MS Volatiles

Lot-Sample #....: C9B180150-003 Work Order #....: K7C5F1AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	108	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	106	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

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4/29/09

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

EA/MES Sparrows Point 18001868

Lot #: C9B200184

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 24, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NA	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Ptsburgh.doc

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B200184

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 20, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard 1C40226; but were within expected performance range for these compounds: 2-chloroethyl-vinyl ether 32.1%, and acrolein 42.5%.

The following compounds had the %D > 25% in the calibration verification standard CC40226; but were within expected performance range for these compounds: 1,1,1,2-tetrachloroethane 30.5%, 1,2,3-trichlorobenzene 31.5%, 2-butanone 42.3%, 2-hexanone 31.6%, dichlorodifluoromethane 28.9%, and naphthalene 26.7%.

Due to the concentration of target compounds detected, sample BH-SED-02-4 was analyzed undiluted and at a 10X dilution. Both sets of data are reported.

GC/MS Semivolatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard F022509C2; but were within expected performance range for these compounds: benzo(b)fluoranthene 31%, 2-nitroaniline 27%, benzoic acid 40%, benzyl alcohol 28%,

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B200184

GC/MS Semivolatiles cont.:

n-nitrosodi-n-propylamine 27%, 2,2-oxybis (1-chloropropane) 32% and benzo(k)fluoranthene 28%.

The following compounds had the %D > 25% in the calibration verification standard F022609C2; but were within expected performance range for these compounds: 4,6-dinitro-2-methylphenol 31%, benzoic acid 32%, benzyl alcohol 34%, 2,2-oxybis (1-chloropropane) 26% and pyridine 25%.

Due to the concentration of target compounds detected, sample BH-SED-02-4 was analyzed at a 20X and at a 400X dilution. The surrogates were diluted out in both analyses.

The matrix spike and matrix spike duplicate recoveries were diluted out.

Metals:

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

General Chemistry:

There were no problems associated with the analysis.

Grain Size and Moisture:

TestAmerica's Burlington laboratory performed the analysis. Their report is attached.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

February 26, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS: SDG: 9B200184

Dear Ms. Gamber:

Enclosed are the analytical results for the sample that was received by TestAmerica Burlington on February 21st, 2009. A laboratory identification number was assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/21/09 ETR No: 130248			
785413	BH-SED-02-4	02/19/09	SOLID

Documentation of the condition of the sample at the time of its receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The sample was analyzed for particle size by ASTM D422 and moisture content by ASTM D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the sample presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Dusek for

Ron Pentkowski
Project Manager

METHODS SUMMARY

C9B200184

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
SM20	"STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B200184

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K7HF7	001	BH-SED-02-4	02/19/09	11:50
K7HGC	002	BH-SED-02-TOC	02/19/09	11:55

NOTE (S) :

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

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA Project: 2/20/9 Quote: 82013
 Cooler Rec'd & Opened for Temp. Check on: 2/20/9
 Coolers Opened and Unpacked on: 2/20/9 By: JG
 (Signature)
 TestAmerica Pittsburgh Lot Number: C9B 200184

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

Explain any discrepancies: _____

Level 2 Review _____
 Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

UP: Unpreserved

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

Comments:

[illegible]

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

Sodium Hydroxide

216

500

FedEx *US Airbill*
ExpressFedEx
Tracking
Number

8565 6932 6628

1 From This portion can be removed for Recipient's records.

Date 2/19/09

FedEx Tracking Number

856569326628

Sender's
Name

TODD WARD

Phone 410 746-1250Company E A ENGINEERING SCIENCE & TECHAddress 15 LOVETON CIR

Dept./Floor/Suite/Room

City SPARKS GLENCOEState MDZIP 21152

2 Your Internal Billing Reference

1453406

3 To

Recipient's
Name

SAMPLE MANAGEMENT

Phone 412 963-2428

Company

TEST AMERICA - PITTSBURGH

Recipient's
Address

301 ALPHA DRIVE

We cannot deliver to P.O. boxes or P.D. ZIP codes.

Dept./Floor/Suite/Room

Address

RIDC PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City

PITTSBURGH

State PAZIP 15238

0326961324



8565 6932 6628

Recipient's Copy

4a Express Package Service

☒ FedEx Priority Overnight
Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.**Packages up to 150 lbs.**
☐ FedEx First Overnight
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.☐ FedEx 2Day
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service

☐ FedEx 1Day Freight*
Next business day** Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ FedEx 2Day Freight
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.**Packages over 150 lbs.**
☐ FedEx 3Day Freight
Third business day.**
Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging

☐ FedEx
Envelope*☐ FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.☐ FedEx
Box☐ FedEx
Tube☒ Other

* Declared value limit \$500.

6 Special Handling

☐ SATURDAY Delivery
Not available for
FedEx First Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.☐ HOLD Weekday
at FedEx Location
Not available for
FedEx First Overnight.☐ HOLD Saturday
at FedEx Location
Available ONLY for FedEx Priority
Overnight and FedEx 2Day
to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No☐ YesAs per attached
Shipper's Declaration.☐ YesShipper's Declaration
not required.☐ Dry Ice

Dry ice, 9, UN 1845 x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender
Acct. No. in Section
1 will be billed.☐ Recipient☐ Third Party☐ Credit CardObtain Recip.
Acct. No.
☐ Cash/Check

Total Packages

Total Weight

Total Charges

Credit Card Auth.

Your liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

☐ No Signature
Required
Package may be left with-
out obtaining a signature
for delivery.☐ Direct Signature
Anyone at recipient's
address may sign for delivery.
Fee applies.☐ Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

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C9B200184

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EA/MES SPARROW EA/MES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-20
Analytical Due Date: 2009-03-18
Report Due Date: 2009-03-19

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-02-4 DATE SAMPLED: 20090219 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7HF71AV

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7HF71AU

METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY:  DATE: 2 20 9
RECEIVED FOR LAB BY:  DATE: 2/21/09 0925

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Volatiles

Lot-Sample #....: C9B200184-001	Work Order #....: K7HF71AX	Matrix.....: SOLID
Date Sampled...: 02/19/09	Date Received...: 02/20/09	MS Run #.....:
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057042	Analysis Time...: 11:05	
Dilution Factor: 1	Initial Wgt/Vol: 5.02 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 15	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	5900	ug/kg	930
Acrylonitrile	ND	5900	ug/kg	480
Benzene	28000 E	290	ug/kg	58
Bromodichloromethane	ND	290	ug/kg	55
Bromoform	ND	290	ug/kg	63
Bromomethane	ND	290	ug/kg	92
2-Butanone (MEK)	ND	290	ug/kg	63
Carbon tetrachloride	ND	290	ug/kg	63
Chloroethane	ND	290	ug/kg	44
2-Chloroethyl vinyl ether	ND	590	ug/kg	65
Chloroform	ND	290	ug/kg	59
Chloromethane	ND	290	ug/kg	81
Dibromochloromethane	ND	290	ug/kg	38
1,2-Dichlorobenzene	ND	290	ug/kg	40
1,3-Dichlorobenzene	ND	290	ug/kg	30
1,4-Dichlorobenzene	ND	290	ug/kg	31
trans-1,2-Dichloroethene	ND	290	ug/kg	44
Dichlorodifluoromethane	ND	290	ug/kg	37
1,1-Dichloroethane	ND	290	ug/kg	59
1,2-Dichloroethane	ND	290	ug/kg	56
1,1-Dichloroethene	ND	290	ug/kg	62
1,2-Dichloropropane	ND	290	ug/kg	75
cis-1,3-Dichloropropene	ND	290	ug/kg	43
trans-1,3-Dichloropropene	ND	290	ug/kg	34
Ethylbenzene	87 J	290	ug/kg	36
Methylene chloride	ND	290	ug/kg	64
1,1,2,2-Tetrachloroethane	ND	290	ug/kg	55
Tetrachloroethene	ND	290	ug/kg	48
Toluene	500	290	ug/kg	49
1,1,1-Trichloroethane	ND	290	ug/kg	60
1,1,2-Trichloroethane	ND	290	ug/kg	68
Trichloroethene	ND	290	ug/kg	47
Trichlorofluoromethane	ND	290	ug/kg	66
Vinyl chloride	ND	290	ug/kg	76

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Volatiles

Lot-Sample #...: C9B200184-001 Work Order #...: K7HF71AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	83	(72 - 127)
4-Bromofluorobenzene	82	(63 - 120)
Dibromofluoromethane	85	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-02-4

GC/MS Volatiles

Lot-Sample #....: C9B200184-001	Work Order #....: K7HF72AX	Matrix.....: SOLID
Date Sampled...: 02/19/09	Date Received...: 02/20/09	MS Run #.....:
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057042	Analysis Time...: 11:54	
Dilution Factor: 10	Initial Wgt/Vol: 5.02 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 15	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	59000	ug/kg	9300
Acrylonitrile	ND	59000	ug/kg	4800
Benzene	36000	2900	ug/kg	580
Bromodichloromethane	ND	2900	ug/kg	550
Bromoform	ND	2900	ug/kg	630
Bromomethane	ND	2900	ug/kg	920
2-Butanone (MEK)	ND	2900	ug/kg	630
Carbon tetrachloride	ND	2900	ug/kg	630
Chloroethane	ND	2900	ug/kg	440
2-Chloroethyl vinyl ether	ND	5900	ug/kg	650
Chloroform	ND	2900	ug/kg	590
Chloromethane	ND	2900	ug/kg	810
Dibromochloromethane	ND	2900	ug/kg	380
1,2-Dichlorobenzene	ND	2900	ug/kg	400
1,3-Dichlorobenzene	ND	2900	ug/kg	300
1,4-Dichlorobenzene	ND	2900	ug/kg	310
trans-1,2-Dichloroethene	ND	2900	ug/kg	440
Dichlorodifluoromethane	ND	2900	ug/kg	370
1,1-Dichloroethane	ND	2900	ug/kg	590
1,2-Dichloroethane	ND	2900	ug/kg	560
1,1-Dichloroethene	ND	2900	ug/kg	620
1,2-Dichloropropane	ND	2900	ug/kg	750
cis-1,3-Dichloropropene	ND	2900	ug/kg	430
trans-1,3-Dichloropropene	ND	2900	ug/kg	340
Ethylbenzene	ND	2900	ug/kg	360
Methylene chloride	ND	2900	ug/kg	640
1,1,2,2-Tetrachloroethane	ND	2900	ug/kg	550
Tetrachloroethene	ND	2900	ug/kg	480
Toluene	570 J	2900	ug/kg	490
1,1,1-Trichloroethane	ND	2900	ug/kg	600
1,1,2-Trichloroethane	ND	2900	ug/kg	680
Trichloroethene	ND	2900	ug/kg	470
Trichlorofluoromethane	ND	2900	ug/kg	660
Vinyl chloride	ND	2900	ug/kg	760

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-02-4

GC/MS Volatiles

Lot-Sample #...: C9B200184-001 Work Order #...: K7HF72AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	76	(52 - 124)
Toluene-d8	73	(72 - 127)
4-Bromofluorobenzene	70	(63 - 120)
Dibromofluoromethane	72	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B200184

Extraction: XXA4BQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-02-4	86	83	82	85	00
02	BH-SED-02-4 RE-1	76	73	70	72	00
03	METHOD BLK. K7P6J1AA	96	99	95	94	00
04	LCS K7P6J1AC	91	96	94	94	00
05	LCSD K7P6J1AD	98	97	97	95	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B260000

WO #: K7P6J1AC

BATCH: 9057042

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	2000	1830	91	59 - 129	
Trichloroethene	2000	2020	101	76 - 119	
Benzene	2000	1970	98	77 - 120	
Toluene	2000	2080	104	78 - 124	
Chlorobenzene	2000	2140	107	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B260000

WO #: K7P6J1AD

BATCH: 9057042

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	2000	1750	88	59- 129	
Trichloroethene	2000	1920	96	76- 119	
Benzene	2000	1920	96	77- 120	
Toluene	2000	2020	101	78- 124	
Chlorobenzene	2000	2110	106	79- 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7P6J1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 4022601.D

Lot Number: C9B200184

Date Analyzed: 02/26/09

Time Analyzed: 06:23

Matrix: SOLID

Date Extracted: 02/26/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP4

Level: (low/med) MED

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-02-4	K7HF71AX	4022613.D	02/26/09	11:05
02	BH-SED-02-4	K7HF72AX	4022615.D	02/26/09	11:54
03	CHECK SAMPLE	K7P6J1AC C	4022602.D	02/26/09	06:45
04	DUPLICATE CHECK	K7P6J1AD L	4022603.D	02/26/09	07:09
05					
06					
07					
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COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B200184
MB Lot-Sample #: C9B260000-042

Work Order #...: K7P6J1AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 1

Prep Date.....: 02/26/09

Prep Batch #...: 9057042

Initial Wgt/Vol: 5 g

Analyst ID.....: 010099

Analysis Time...: 06:23

Final Wgt/Vol...: 5 mL

Instrument ID...: HP4

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acrolein	ND	5000	ug/kg	SW846	8260B
Acrylonitrile	ND	5000	ug/kg	SW846	8260B
Benzene	ND	250	ug/kg	SW846	8260B
Bromodichloromethane	ND	250	ug/kg	SW846	8260B
Bromoform	ND	250	ug/kg	SW846	8260B
Bromomethane	ND	250	ug/kg	SW846	8260B
2-Butanone (MEK)	ND	250	ug/kg	SW846	8260B
Carbon tetrachloride	ND	250	ug/kg	SW846	8260B
Chloroethane	ND	250	ug/kg	SW846	8260B
2-Chloroethyl vinyl ether	ND	500	ug/kg	SW846	8260B
Chloroform	ND	250	ug/kg	SW846	8260B
Chloromethane	ND	250	ug/kg	SW846	8260B
Dibromochloromethane	ND	250	ug/kg	SW846	8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846	8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846	8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846	8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846	8260B
Dichlorodifluoromethane	ND	250	ug/kg	SW846	8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846	8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846	8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846	8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846	8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846	8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846	8260B
Ethylbenzene	ND	250	ug/kg	SW846	8260B
Methylene chloride	ND	250	ug/kg	SW846	8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846	8260B
Tetrachloroethene	ND	250	ug/kg	SW846	8260B
Toluene	ND	250	ug/kg	SW846	8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846	8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846	8260B
Trichloroethene	ND	250	ug/kg	SW846	8260B
Trichlorofluoromethane	ND	250	ug/kg	SW846	8260B
Vinyl chloride	ND	250	ug/kg	SW846	8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	95	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B200184

Work Order #...: K7P6J1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromofluoromethane	94	(68 - 121)		

NOTE(S):

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B200184
 Lab File ID (Standard): CC40226 Date Analyzed: 02/26/09
 Instrument ID: HP4 Time Analyzed: 0458
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	727385	7.68	148445	10.76	248551	13.09
UPPER LIMIT	1454770	7.88	296890	10.96	497102	13.29
LOWER LIMIT	363693	7.48	74223	10.56	124276	12.89
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	793204	7.69	164429	10.76	264324	13.09
02 INTRA-LAB CH	726752	7.68	153110	10.76	260769	13.09
03 INTRA-LAB CH	740946	7.68	154803	10.76	262646	13.09
04 BH-SED-02-4	786873	7.68	167276	10.76	269756	13.10
05 BH-SED-02-4	885842	7.68	184734	10.77	284482	13.10
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IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Semivolatiles

Lot-Sample #...: C9B200184-001 Work Order #...: K7HF71AC Matrix.....: SOLID
 Date Sampled...: 02/19/09 11:50 Date Received...: 02/20/09 09:50 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #...: 9056010 Analysis Time...: 09:37
 Dilution Factor: 16.95 Initial Wgt/Vol: 17.7 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 15 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	2400	130	ug/kg	20
2-Methylnaphthalene	6700	130	ug/kg	26
Naphthalene	75000 E	130	ug/kg	19
Acenaphthylene	4400	130	ug/kg	26
Acenaphthene	1100	130	ug/kg	21
Fluorene	4900	130	ug/kg	20
Phenanthrene	15000	130	ug/kg	16
Anthracene	4000	660	ug/kg	23
Fluoranthene	10000	130	ug/kg	11
Pyrene	6800	130	ug/kg	35
Benzo (a) anthracene	2800	130	ug/kg	21
Chrysene	2300	130	ug/kg	23
Benzo (b) fluoranthene	3600	130	ug/kg	27
Benzo (k) fluoranthene	ND	130	ug/kg	28
Benzo (a) pyrene	2500	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	1000	130	ug/kg	7.3
Dibenzo (a,h) anthracene	160	130	ug/kg	29
Benzo (ghi) perylene	1200	130	ug/kg	9.7

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Semivolatiles

Lot-Sample #....: C9B200184-001 Work Order #....: K7HF72AC Matrix.....: SOLID
 Date Sampled....: 02/19/09 11:50 Date Received...: 02/20/09 09:50 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 08:20
 Dilution Factor: 338 Initial Wgt/Vol: 17.7 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 15 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	2900	2700	ug/kg	400
2-Methylnaphthalene	8400	2700	ug/kg	520
Naphthalene	290000	2700	ug/kg	380
Acenaphthylene	5000	2700	ug/kg	530
Acenaphthene	1200 J	2700	ug/kg	420
Fluorene	5100	2700	ug/kg	400
Phenanthrene	18000	2700	ug/kg	320
Anthracene	4600 J	13000	ug/kg	460
Fluoranthene	11000	2700	ug/kg	220
Pyrene	10000	2700	ug/kg	700
Benzo (a) anthracene	3700	2700	ug/kg	420
Chrysene	3500	2700	ug/kg	460
Benzo (b) fluoranthene	3000	2700	ug/kg	530
Benzo (k) fluoranthene	1500 J	2700	ug/kg	550
Benzo (a) pyrene	3100	2700	ug/kg	740
Indeno (1,2,3-cd) pyrene	1500 J	2700	ug/kg	150
Dibenzo (a,h) anthracene	ND	2700	ug/kg	580
Benzo (ghi) perylene	1700 J	2700	ug/kg	190

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B200184

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-02-4	0 D	0 D	0 D	0 D	0 D	0 D	06
02	BH-SED-02-4 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
03	METHOD BLK. K7M881AA	82	119	96	91	87	100	00
04	LCS K7M881AC	52	68	58	59	56	81	00
05	BH-SED-02-4 D	0 D	0 D	0 D	0 D	0 D	0 D	06
06	BH-SED-02-4 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B250000

WO #: K7M881AC

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	158	47	39 - 105	
2-Chlorophenol	333	187	56	40 - 105	
1,4-Dichlorobenzene	333	183	55	41 - 101	
N-Nitrosodi-n-propylamine	333	163	49	42 - 108	
1,2,4-Trichlorobenzene	333	197	59	41 - 105	
4-Chloro-3-methylphenol	333	203	61	43 - 110	
Acenaphthene	333	191	57	42 - 104	
4-Nitrophenol	333	205	61	27 - 131	
2,4-Dinitrotoluene	333	250	75	48 - 118	
Pentachlorophenol	333	171	51	18 - 125	
Pyrene	333	225	68	39 - 113	
4-Methylphenol	667	359	54	43 - 107	
Hexachloroethane	333	176	53	40 - 102	
Naphthalene	333	187	56	42 - 104	
4-Bromophenyl phenyl ethe	333	232	70	43 - 111	
Butyl benzyl phthalate	333	228	68	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-02-4

Level: (low/med) LOW

Lot #: C9B200184

WO #: K7HF71A2

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	662	130		0*	39 - 105	DIL
2-Chlorophenol	662	ND		0*	40 - 105	DIL
1,4-Dichlorobenzene	662	ND		0*	41 - 101	DIL
N-Nitrosodi-n-propylamine	662	ND		0*	42 - 108	DIL
1,2,4-Trichlorobenzene	662	ND		0*	41 - 105	DIL
4-Chloro-3-methylphenol	662	ND		0*	43 - 110	DIL
Acenaphthene	662	1100		0*	42 - 104	DIL
4-Nitrophenol	662	ND		0*	27 - 131	DIL
2,4-Dinitrotoluene	662	ND		0*	48 - 118	DIL
Pentachlorophenol	662	ND		0*	18 - 125	DIL
Pyrene	662	6800		0*	39 - 113	DIL
4-Methylphenol	1320	ND		0*	43 - 107	DIL
Hexachloroethane	662	ND		0*	40 - 102	DIL
Naphthalene	662	75000		0*	42 - 104	DIL
4-Bromophenyl phenyl ethe	662	ND		0*	43 - 111	DIL
Butyl benzyl phthalate	662	ND		0*	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-02-4

Level: (low/med) LOW

Lot #: C9B200184

WO #: K7HF71A3

BATCH: 9056010

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	662		0*	0.0	40	39 - 105	DIL
2-Chlorophenol	662		0*	0.0	37	40 - 105	DIL
1,4-Dichlorobenzene	662		0*	0.0	32	41 - 101	DIL
N-Nitrosodi-n-propylamine	662		0*	0.0	32	42 - 108	DIL
1,2,4-Trichlorobenzene	662		0*	0.0	36	41 - 105	DIL
4-Chloro-3-methylphenol	662		0*	0.0	31	43 - 110	DIL
Acenaphthene	662		0*	0.0	34	42 - 104	DIL
4-Nitrophenol	662		0*	0.0	33	27 - 131	DIL
2,4-Dinitrotoluene	662		0*	0.0	33	48 - 118	DIL
Pentachlorophenol	662		0*	0.0	34	18 - 125	DIL
Pyrene	662		0*	0.0	28	39 - 113	DIL
4-Methylphenol	1320		0*	0.0	36	43 - 107	DIL
Hexachloroethane	662		0*	0.0	34	40 - 102	DIL
Naphthalene	662		0*	0.0	25	42 - 104	DIL
4-Bromophenyl phenyl ethe	662		0*	0.0	20	43 - 111	DIL
Butyl benzyl phthalate	662		0*	0.0	34	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

K7M881AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0225020.

Lot Number: C9B200184

Date Analyzed: 02/26/09

Time Analyzed: 08:53

Matrix: SOLID

Date Extracted:02/25/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	BH-SED-02-4	K7HF71AC	F0225022.	02/26/09	09:37
02	BH-SED-02-4	K7HF71A2 S	F0225023.	02/26/09	09:59
03	BH-SED-02-4	K7HF71A3 D	F0225024.	02/26/09	10:21
04	BH-SED-02-4	K7HF72AC	F0226016.	02/27/09	08:20
05	CHECK SAMPLE	K7M881AC C	F0226015.	02/27/09	07:58
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COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B200184
MB Lot-Sample #: C9B250000-010

Work Order #...: K7M881AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 0.5

Prep Date.....: 02/25/09
Prep Batch #...: 9056010
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 08:53
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo(a,h)anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	82	(27 - 110)
Terphenyl-d14	119	(21 - 130)
2-Fluorobiphenyl	96	(28 - 108)
2-Fluorophenol	91	(28 - 107)
Phenol-d5	87	(30 - 112)
2,4,6-Tribromophenol	100	(21 - 116)

NOTE(S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B200184

Lab File ID (Standard): F02250C2

Date Analyzed: 02/26/09

Instrument ID: 722

Time Analyzed: 0046

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	85600	4.27	297996	5.26	183384	6.61
UPPER LIMIT	171200	4.77	595992	5.76	366768	7.11
LOWER LIMIT	42800	3.77	148998	4.76	91692	6.11
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	68564	4.28	257053	5.26	147817	6.61
02 BH-SED-02-4	78285	4.28	328563	5.27	192740	6.61
03 BH-SED-02-4	84336	4.28	369567	5.28	216401	6.61
04 BH-SED-02-4	95731	4.27	406391	5.27	219795	6.61
05						
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22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B200184

Lab File ID (Standard): F02250C2

Date Analyzed: 02/26/09

Instrument ID: 722

Time Analyzed: 0046

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	278236	7.76	228190	10.08	172747	11.65
UPPER LIMIT	556472	8.26	456380	10.58	345494	12.15
LOWER LIMIT	139118	7.26	114095	9.58	86374	11.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	278674	7.76	202740	10.06	155577	11.64
02 BH-SED-02-4	304033	7.76	239319	10.08	174338	11.68
03 BH-SED-02-4	312683	7.75	262600	10.07	192640	11.63
04 BH-SED-02-4	329762	7.76	270776	10.06	211961	11.63
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11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B200184
 Lab File ID (Standard): F02260C2 Date Analyzed: 02/27/09
 Instrument ID: 722 Time Analyzed: 0223

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	79117	4.27	290136	5.26	161094	6.62
UPPER LIMIT	158234	4.77	580272	5.76	322188	7.12
LOWER LIMIT	39559	3.77	145068	4.76	80547	6.12
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	88850	4.27	342118	5.26	202723	6.61
02 BH-SED-02-4	80586	4.27	300340	5.26	182865	6.61
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
Lab Code: TA Case No.: SAS No.: SDG No.: C9B200184
Lab File ID (Standard): F02260C2 Date Analyzed: 02/27/09
Instrument ID: 722 Time Analyzed: 0223

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	261312	7.77	199767	10.11	158164	11.76
UPPER LIMIT	522624	8.27	399534	10.61	316328	12.26
LOWER LIMIT	130656	7.27	99884	9.61	79082	11.26
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB CH	329357	7.77	245402	10.09	174755	11.66
02 BH-SED-02-4	293826	7.76	194908	10.08	163138	11.65
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

METALS SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

TOTAL Metals

Lot-Sample #....: C9B200184-001

Matrix.....: SOLID

Date Sampled....: 02/19/09

Date Received...: 02/20/09

% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Prep Batch #....: 9062141						
Mercury	0.12	0.032	mg/kg	SW846 7471A	03/03/09	K7HF71AR
		Dilution Factor: 0.84		Analysis Time...: 12:50	Analyst ID.....: 400149	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062084	MDL.....: 0.0025	
Prep Batch #....: 9066079						
Silver	0.11	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AQ
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Arsenic	5.5	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AD
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.016	
Beryllium	0.26	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AE
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0037	
Cadmium	0.29	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AF
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0091	
Chromium	17.9 J	0.20	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AG
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0080	
Copper	14.6	0.20	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AH
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0085	
Nickel	5.1	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AJ
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0068	
Lead	50.9 J	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AK
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0034	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

TOTAL Metals

Lot-Sample #....: C9B200184-001

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Antimony	0.20 J	0.20	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AL
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0033	
Selenium	0.27 B	0.50	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AM
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.040	
Thallium	0.085 B	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AN
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0020	
Zinc	92.4 J	0.50	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AP
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

REPORTING				PREPARATION-	WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
MB Lot-Sample #: C9C030000-141 Prep Batch #....: 9062141						
Mercury	ND	0.028	mg/kg	SW846 7471A	03/03/09	K7X311AA
		Dilution Factor: 0.84				
		Analysis Time...: 12:43		Analyst ID.....: 403938	Instrument ID...: HGH	
MB Lot-Sample #: C9C070000-079 Prep Batch #....: 9066079						
Antimony	0.020 B	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Arsenic	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AA
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Beryllium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AC
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Cadmium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AD
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Chromium	0.056 B	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AE
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Copper	ND	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AF
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Lead	0.0086 B	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AH
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Nickel	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AG
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Selenium	ND	0.25	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AK
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Silver	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AN
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AL
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Zinc	0.015 B	0.25	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AM
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-141 Prep Batch #....: 9062141					
Mercury	105	(80 - 120)	SW846 7471A	03/03/09	K7X311AC
		Dilution Factor: 0.84	Analysis Time...: 12:45	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C070000-079 Prep Batch #....: 9066079					
Arsenic	91	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AP
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Beryllium	93	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AQ
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Cadmium	96	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AR
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Chromium	110	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AT
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Copper	112	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AU
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Nickel	112	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AV
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Lead	104	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AW
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Antimony	91	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AX
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Selenium	87	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1AO
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	96	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1A1
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Zinc	97	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1A2
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Silver	108	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1A3
		Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-141 Prep Batch #....: 9062141							
Mercury	0.352	0.369	mg/kg	105	SW846 7471A	03/03/09	K7X311AC
				Dilution Factor: 0.84	Analysis Time...: 12:45	Analyst ID.....: 403938	
				Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C070000-079 Prep Batch #....: 9066079							
Arsenic	2.00	1.83	mg/kg	91	SW846 6020	03/07-03/10/09	K77LQ1AP
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Beryllium	2.50	2.31	mg/kg	93	SW846 6020	03/07-03/10/09	K77LQ1AQ
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Cadmium	2.50	2.39	mg/kg	96	SW846 6020	03/07-03/10/09	K77LQ1AR
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Chromium	10.0	11.0	mg/kg	110	SW846 6020	03/07-03/10/09	K77LQ1AT
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Copper	12.5	14.0	mg/kg	112	SW846 6020	03/07-03/10/09	K77LQ1AU
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Nickel	25.0	28.0	mg/kg	112	SW846 6020	03/07-03/10/09	K77LQ1AV
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Lead	1.00	1.04	mg/kg	104	SW846 6020	03/07-03/10/09	K77LQ1AW
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Antimony	25.0	22.8	mg/kg	91	SW846 6020	03/07-03/10/09	K77LQ1AX
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			
Selenium	0.500	0.434	mg/kg	87	SW846 6020	03/07-03/10/09	K77LQ1A0
				Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149	
				Instrument ID...: ICPMS2			

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	2.50	2.40	mg/kg	96	SW846 6020	03/07-03/10/09	K77LQ1A1
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Zinc	25.0	24.2	mg/kg	97	SW846 6020	03/07-03/10/09	K77LQ1A2
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Silver	2.50	2.70	mg/kg	108	SW846 6020	03/07-03/10/09	K77LQ1A3
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B200184

Matrix.....: SOLID

Date Sampled...: 02/19/09

Date Received...: 02/20/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
-----------	---------------------	--------------------	---------------	--------	-------------------------------	-----------------

MS Lot-Sample #: C9B200184-001 Prep Batch #...: 9062141

% Moisture.....: 15

Mercury	94	(75 - 125)		SW846 7471A	03/03/09	K7HF71A4
	79	(75 - 125)	9.3 (0-20)	SW846 7471A	03/03/09	K7HF71A5

Dilution Factor: 0.84

Analysis Time...: 12:51

Instrument ID...: HGHYDRA

Analyst ID.....: 403938

MS Run #.....: 9062084

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B200184

Matrix.....: SOLID

Date Sampled...: 02/19/09

Date Received...: 02/20/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
-----------	--------	-----	------------------	-------	------------------	-----	--------	-------------------------------	-----------------

MS Lot-Sample #: C9B200184-001 Prep Batch #...: 9062141

% Moisture.....: 15

Mercury

0.12	0.165	0.279	mg/kg	94		SW846	7471A	03/03/09	K7HF71A4
0.12	0.165	0.254	mg/kg	79	9.3	SW846	7471A	03/03/09	K7HF71A5

Dilution Factor: 0.84

Analysis Time...: 12:51

Instrument ID...: HGHYDRA

Analyst ID.....: 403938

MS Run #.....: 9062084

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C050210-003 Prep Batch #....: 9066079							
						% Moisture.....: 46	
Antimony	52 N	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CG
	52 N	(75 - 125)	1.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1CH
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Arsenic	101	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A1
	82	(75 - 125)	6.2	(0-20)	SW846 6020	03/07-03/10/09	K737M1A2
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Beryllium	100	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A3
	103	(75 - 125)	2.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1A4
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Cadmium	98	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A5
	96	(75 - 125)	2.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1A6
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Chromium	175 N	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A7
	133 N	(75 - 125)	10	(0-20)	SW846 6020	03/07-03/10/09	K737M1A8
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Copper	120	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A9
	87	(75 - 125)	12	(0-20)	SW846 6020	03/07-03/10/09	K737M1CA
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Lead	NC	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CE
	NC	(75 - 125)		(0-20)	SW846 6020	03/07-03/10/09	K737M1CF
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B200184

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	104	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CC
	108	(75 - 125)	2.0 (0-20)	SW846 6020	03/07-03/10/09	K737M1CD
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Selenium	71 N	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CJ
	63 N	(75 - 125)	3.7 (0-20)	SW846 6020	03/07-03/10/09	K737M1CK
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Silver	106	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CQ
	107	(75 - 125)	0.61 (0-20)	SW846 6020	03/07-03/10/09	K737M1CR
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Thallium	95	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CL
	95	(75 - 125)	0.07 (0-20)	SW846 6020	03/07-03/10/09	K737M1CM
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Zinc	NC	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CN
	NC	(75 - 125)	(0-20)	SW846 6020	03/07-03/10/09	K737M1CP
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						

NOTE (S) :

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

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B200184

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C050210-003 Prep Batch #....: 9066079

% Moisture.....: 46

Antimony

0.35	50.6	26.9 N	mg/kg	52		SW846 6020	03/07-03/10/09	K737M1CG
0.35	50.6	26.5 N	mg/kg	52	1.1	SW846 6020	03/07-03/10/09	K737M1CH
Dilution Factor: 0.55								
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9066025								

Arsenic

8.6	4.05	12.7	mg/kg	101		SW846 6020	03/07-03/10/09	K737M1A1
8.6	4.05	11.9	mg/kg	82	6.2	SW846 6020	03/07-03/10/09	K737M1A2
Dilution Factor: 0.55								
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9066025								

Beryllium

1.8	5.06	6.82	mg/kg	100		SW846 6020	03/07-03/10/09	K737M1A3
1.8	5.06	6.97	mg/kg	103	2.1	SW846 6020	03/07-03/10/09	K737M1A4
Dilution Factor: 0.55								
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9066025								

Cadmium

1.6	5.06	6.58	mg/kg	98		SW846 6020	03/07-03/10/09	K737M1A5
1.6	5.06	6.45	mg/kg	96	2.1	SW846 6020	03/07-03/10/09	K737M1A6
Dilution Factor: 0.55								
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9066025								

Chromium

51.6	20.3	87.0 N	mg/kg	175		SW846 6020	03/07-03/10/09	K737M1A7
51.6	20.3	78.4 N	mg/kg	133	10	SW846 6020	03/07-03/10/09	K737M1A8
Dilution Factor: 0.55								
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9066025								

Copper

41.3	25.3	71.6	mg/kg	120		SW846 6020	03/07-03/10/09	K737M1A9
41.3	25.3	63.3	mg/kg	87	12	SW846 6020	03/07-03/10/09	K737M1CA
Dilution Factor: 0.55								
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9066025								

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B200184

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

	SAMPLE	SPIKE	MEASRD		PERCNT			PREPARATION-	WORK
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	ANALYSIS DATE	ORDER #
Lead									
	115	2.03	129 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CE
	115	2.03	102 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CF
			Dilution Factor: 0.55						
			Analysis Time...: 22:36		Instrument ID...: ICPMS2		Analyst ID.....: 400149		
			MS Run #.....: 9066025						
Nickel									
	44.0	50.6	96.9	mg/kg	104		SW846 6020	03/07-03/10/09	K737M1CC
	44.0	50.6	98.9	mg/kg	108	2.0	SW846 6020	03/07-03/10/09	K737M1CD
			Dilution Factor: 0.55						
			Analysis Time...: 22:36		Instrument ID...: ICPMS2		Analyst ID.....: 400149		
			MS Run #.....: 9066025						
Selenium									
	1.4	1.01	2.12 N	mg/kg	71		SW846 6020	03/07-03/10/09	K737M1CJ
	1.4	1.01	2.04 N	mg/kg	63	3.7	SW846 6020	03/07-03/10/09	K737M1CK
			Dilution Factor: 0.55						
			Analysis Time...: 22:36		Instrument ID...: ICPMS2		Analyst ID.....: 400149		
			MS Run #.....: 9066025						
Silver									
	0.35	5.06	5.71	mg/kg	106		SW846 6020	03/07-03/10/09	K737M1CQ
	0.35	5.06	5.75	mg/kg	107	0.61	SW846 6020	03/07-03/10/09	K737M1CR
			Dilution Factor: 0.55						
			Analysis Time...: 22:36		Instrument ID...: ICPMS2		Analyst ID.....: 400149		
			MS Run #.....: 9066025						
Thallium									
	0.45	5.06	5.27	mg/kg	95		SW846 6020	03/07-03/10/09	K737M1CL
	0.45	5.06	5.28	mg/kg	95	0.07	SW846 6020	03/07-03/10/09	K737M1CM
			Dilution Factor: 0.55						
			Analysis Time...: 22:36		Instrument ID...: ICPMS2		Analyst ID.....: 400149		
			MS Run #.....: 9066025						
Zinc									
	548	50.6	625 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CN
	548	50.6	596 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CP
			Dilution Factor: 0.55						
			Analysis Time...: 22:36		Instrument ID...: ICPMS2		Analyst ID.....: 400149		
			MS Run #.....: 9066025						

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

GENERAL CHEMISTRY SUMMARY

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B200184

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-02-4	C9B200184 001	K7HF71AT	0.77	mg/kg	0.11	0.59	1	2/23/2009 - 2/24/2009 10:23	9054110

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Lot Number: C9B200184

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-02-4	C9B200184 001	K7HF71AA	85.4	%	0.0	1.0	1	2/23/2009 - 2/24/2009 00:00	9054356
BH-SED-02-TOC	C9B200184 002	K7HGC1AC	85.3	%	0.0	1.0	1	3/20/2009 - 3/21/2009 09:00	9079337

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B200184

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-02-TOC	C9B200184 002	K7HGC1AA	216 B	mg/kg	64.7	281	0.48	2/27/2009 - 2/27/2009 14:11	9058136

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Report ID: C9B200184

Matrix: SOLID

Date/Time Received: 2/20/2009 9:50:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B230000110B	110 MB	K7KGR1AA	ND	mg/kg	0.50	2/23/2009 - 2/24/2009 10:23	9054110	

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Report ID: C9B200184

Matrix: SOLID

Date/Time Received: 2/13/2009 10:20:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K66971AL	79.2	%	1.0	2/23/2009 - 2/24/2009 00:00	9054356	0.64 / 20
INTRA-LAB QC	005 DUP	K67AG1D1	83.9	%	1.0	2/23/2009 - 2/24/2009 00:00	9054356	1.9 / 20
BH-SED-02-TOC DUP	002 DUP	K7HGC1AD	85.2	%	1.0	3/20/2009 - 3/21/2009 09:00	9079337	0.15 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Report ID: C9B200184

Matrix: SOLID

Date/Time Received: 2/20/2009 9:50:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B270000136B	136 MB	K7R811AA	ND	mg/kg	1250	2/27/2009 - 2/27/2009 13:40	9058136	

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B230000

Matrix: SOLID

Date/Time Received: 2/20/2009 9:50:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7KGR1AC	121	41 - 159	2/23/2009 - 2/24/2009 10:23	9054110	
BH-SED-02-4	MS	K7HF71A0	77	75 - 125	2/23/2009 - 2/24/2009 10:23	9054110	4.9 / 20
BH-SED-02-4	MSD	K7HF71A1	82	75 - 125	2/23/2009 - 2/24/2009 10:44	9054110	4.9 / 20

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B270000

Matrix: SOLID

Date/Time Received:

2/20/2009 9:50:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7R811AC	105	75 - 125	2/27/2009 - 2/27/2009 13:51	9058136	1.2 / 20
DUPLICATE CHECK	LCSD	K7R811AD	103	75 - 125	2/27/2009 - 2/27/2009 14:01	9058136	1.2 / 20

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9B200184



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-02-4

Lab Name: TestAmerica Burlington

Contract: C9B200184

SDG No.: 9B200184

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 785413

Matrix: SOLID

Client: STLPAP

Date Received: 02/21/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	02/23/09		%	1	0.0	25.6	

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130248
SDG: 9B200184

Start Date:	<u>2/23/2009</u>
Start Time:	<u>20:05</u>
End Date:	<u>2/24/2009</u>
Analyst:	<u>TPB</u>

[illegible]

Particle Size of Soils by ASTM D422

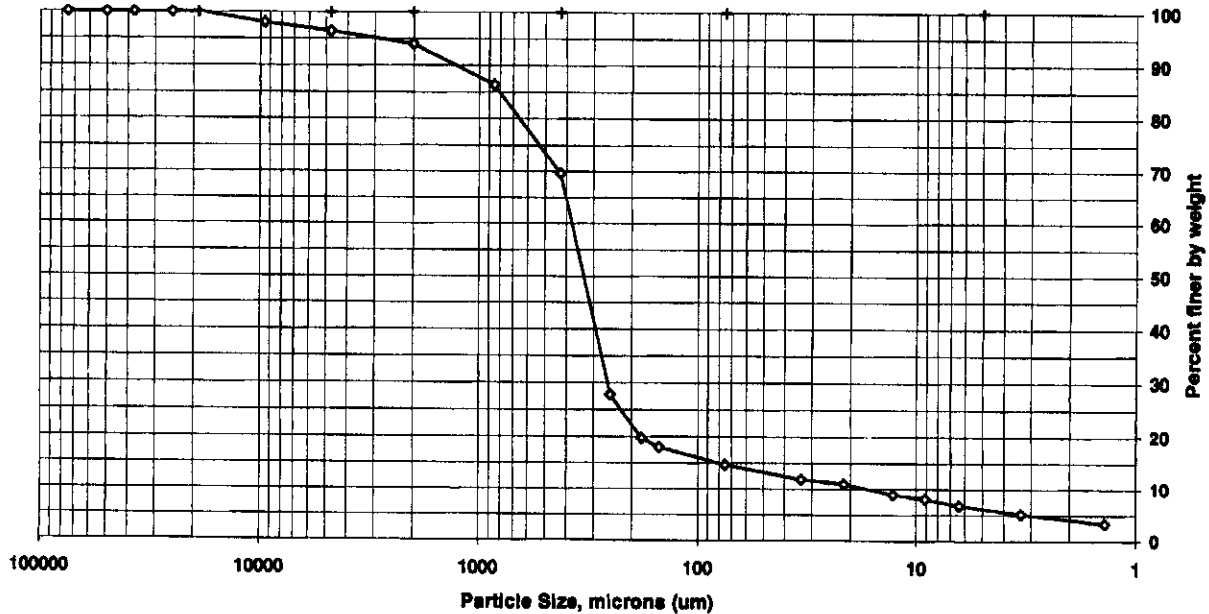
Client Code: STLPAP
 Sample ID: BH-SED-02-4
 Lab ID: 785413

SDG: 9B200184
 ETR(s): 130248

Date Received: 2/21/2009
 Start Date: 2/23/2009
 End Date: 2/26/2009

Percent Solids: 79.6%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: shell
 Shape (> #10): subrounded
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 Inch	75000	100.0	0.0
2 Inch	50000	100.0	0.0
1.5 Inch	37500	100.0	0.0
1 Inch	25000	100.0	0.0
3/4 Inch	19000	100.0	0.0
3/8 Inch	9500	98.0	2.0
#4	4750	96.4	1.6
#10	2000	94.0	2.3
#20	850	86.4	7.7
#40	425	69.6	16.7
#60	250	27.8	41.8
#80	180	19.7	8.1
#100	150	18.0	1.7
#200	75	14.6	3.4
Hydrometer	33.6	11.9	2.7
	21.5	11.1	0.8
	12.7	9.0	2.1
	9.1	8.1	0.8
	6.4	6.9	1.3
	3.3	5.2	1.7
V	1.4	3.4	1.8

Soil Classification	Percent of Total Sample
Gravel	3.8
Sand	81.7
Coarse Sand	2.3
Medium Sand	24.4
Fine Sand	55.0
Silt	7.8
Clay	6.9

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B200184

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-02-4	C9B200184-001	Soil
1MS*	BH-SED-02-4MS	C9B200184-001MS	Soil
1MSD*	BH-SED-02-4MSD	C9B200184-001MSD	Soil

* MS/MSD - Cyanide only

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not analyzed.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values.

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
Client Name: EA Engineering, Science and Technology
Matrix: SOLID

Method: SW846 9012A
Lot Number: C9B200184

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-02-4	C9B200184 001	K7HF71AT	0.77	mg/kg	0.11	0.59	1	2/23/2009 - 2/24/2009 10:23	9054110

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B200184

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-02-TOC	C9B200184 002	K7HGC1AA	216	mg/kg	64.7	281	0.48	2/27/2009 - 2/27/2009 14:11	9058136

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B200184

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-02-4	C9B200184-001	Soil
1MS*	BH-SED-02-4MS	C9B200184-001MS	Soil
1MSD*	BH-SED-02-4MSD	C9B200184-001MSD	Soil

* MS/MSD - Mercury Only

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following:

MS Sample ID	Compound	MS/MSD%R/RPD	Qualifier	Affected Samples
Reference	Antimony	52%/52%/Ok	L/UL	All Samples
	Chromium	175%/133%/Ok	K	
	Selenium	71%/63%/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample exhibited acceptable %D values.

Field Duplicates - Field duplicate samples were not analyzed.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

TOTAL Metals

Lot-Sample #....: C9B200184-001

Matrix.....: SOLID

Date Sampled....: 02/19/09

Date Received...: 02/20/09

% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062141						
Mercury	0.12	0.032	mg/kg	SW846 7471A	03/03/09	K7HF71AR
		Dilution Factor: 0.84		Analysis Time...: 12:50	Analyst ID.....: 403938	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062084	MDL.....: 0.0025	
Prep Batch #....: 9066079						
Silver	0.11	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AQ
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Arsenic	5.5	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AD
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.016	
Beryllium	0.26	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AE
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0037	
Cadmium	0.29	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AF
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0091	
Chromium	17.9 <i>PK</i>	0.20	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AG
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0080	
Copper	14.6	0.20	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AH
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0085	
Nickel	5.1	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AJ
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0068	
Lead	50.9 <i>✓</i>	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AK
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0034	

(Continued on next page)

hw
4/29/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

TOTAL Metals

Lot-Sample #....: C9B200184-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.20 B L	0.20	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AL
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0033	
Selenium	0.27 B L	0.50	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AM
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.040	
Thallium	0.085 B J	0.10	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AN
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0020	
Zinc	92.4 B J	0.50	mg/kg	SW846 6020	03/07-03/10/09	K7HF71AP
		Dilution Factor: 0.85		Analysis Time...: 22:19	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.012	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

lw
4/29/09

POLYNUCLEAR AROMATIC HYDROCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B200184

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-02-4	C9B200184-001	Soil
1MS	BH-SED-02-4MS	C9B200184-001MS	Soil
1MSD	BH-SED-02-4MSD	C9B200184-001MSD	Soil
1DL	BH-SED-02-4DL	C9B200184-001DL	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - EDS Sample ID #1 exhibited a high concentration of naphthalene which exceeded the instrument calibration range and was flagged (E) by the laboratory. The sample was diluted and reanalyzed and the dilution result for naphthalene should be used for reporting.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Semivolatiles

Lot-Sample #....: C9B200184-001 Work Order #....: K7HF71AC Matrix.....: SOLID
 Date Sampled....: 02/19/09 11:50 Date Received...: 02/20/09 09:50 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9056010 Analysis Time...: 09:37
 Dilution Factor: 16.95 Initial Wgt/Vol: 17.7 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 15 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2400	130	ug/kg	20
2-Methylnaphthalene	6700	130	ug/kg	26
Naphthalene	290000 25000-E 2700	130	ug/kg	380 19
Acenaphthylene	4400	130	ug/kg	26
Acenaphthene	1100	130	ug/kg	21
Fluorene	4900	130	ug/kg	20
Phenanthrene	15000	130	ug/kg	16
Anthracene	4000	660	ug/kg	23
Fluoranthene	10000	130	ug/kg	11
Pyrene	6800	130	ug/kg	35
Benzo (a) anthracene	2800	130	ug/kg	21
Chrysene	2300	130	ug/kg	23
Benzo (b) fluoranthene	3600	130	ug/kg	27
Benzo (k) fluoranthene	ND	130	ug/kg	28
Benzo (a) pyrene	2500	130	ug/kg	37
Indeno (1,2,3-cd) pyrene	1000	130	ug/kg	7.3
Dibenzo (a,h) anthracene	160	130	ug/kg	29
Benzo (ghi) perylene	1200	130	ug/kg	9.7

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Client Sample ID: BH-SED-02-4

GC/MS Semivolatiles

Use
original

Lot-Sample #....: C9B200184-001 Work Order #....: K7HF72AC Matrix.....: SOLID
 Date Sampled....: 02/19/09 11:50 Date Received...: 02/20/09 09:50 MS Run #.....: 9056002
 Prep Date.....: 02/25/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9056010 Analysis Time...: 08:20
 Dilution Factor: 338 Initial Wgt/Vol: 17.7 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 15 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2900	2700	ug/kg	400
2-Methylnaphthalene	8400	2700	ug/kg	520
Naphthalene	290000	2700	ug/kg	380
Acenaphthylene	5000	2700	ug/kg	530
Acenaphthene	1200 J	2700	ug/kg	420
Fluorene	5100	2700	ug/kg	400
Phenanthrene	18000	2700	ug/kg	320
Anthracene	4600 J	13000	ug/kg	460
Fluoranthene	11000	2700	ug/kg	220
Pyrene	10000	2700	ug/kg	700
Benzo(a)anthracene	3700	2700	ug/kg	420
Chrysene	3500	2700	ug/kg	460
Benzo(b)fluoranthene	3000	2700	ug/kg	530
Benzo(k)fluoranthene	1500 J	2700	ug/kg	550
Benzo(a)pyrene	3100	2700	ug/kg	740
Indeno(1,2,3-cd)pyrene	1500 J	2700	ug/kg	150
Dibenzo(a,h)anthracene	ND	2700	ug/kg	580
Benzo(ghi)perylene	1700 J	2700	ug/kg	190

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

 GW
 4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B200184

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-02-4	C9B200184-001	Soil
1DL	BH-SED-02-4DL	C9B200184-001DL	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - EDS Sample ID #1 exhibited a high concentration of benzene which exceeded the instrument calibration range and was flagged (E) by the laboratory. The sample was diluted and reanalyzed and the dilution result for benzene should be used for reporting.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Volatiles

Lot-Sample #....: C9B200184-001	Work Order #....: K7HF71AX	Matrix.....: SOLID
Date Sampled...: 02/19/09	Date Received...: 02/20/09	MS Run #.....:
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057042	Analysis Time...: 11:05	
Dilution Factor: 1	Initial Wgt/Vol: 5.02 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 15	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	5900	ug/kg	930
Acrylonitrile	ND	5900	ug/kg	480
Benzene	36000 28000 E 2900	290	ug/kg	500-58
Bromodichloromethane	ND	290	ug/kg	55
Bromoform	ND	290	ug/kg	63
Bromomethane	ND	290	ug/kg	92
2-Butanone (MEK)	ND	290	ug/kg	63
Carbon tetrachloride	ND	290	ug/kg	63
Chloroethane	ND	290	ug/kg	44
2-Chloroethyl vinyl ether	ND	590	ug/kg	65
Chloroform	ND	290	ug/kg	59
Chloromethane	ND	290	ug/kg	81
Dibromochloromethane	ND	290	ug/kg	38
1,2-Dichlorobenzene	ND	290	ug/kg	40
1,3-Dichlorobenzene	ND	290	ug/kg	30
1,4-Dichlorobenzene	ND	290	ug/kg	31
trans-1,2-Dichloroethene	ND	290	ug/kg	44
Dichlorodifluoromethane	ND	290	ug/kg	37
1,1-Dichloroethane	ND	290	ug/kg	59
1,2-Dichloroethane	ND	290	ug/kg	56
1,1-Dichloroethene	ND	290	ug/kg	62
1,2-Dichloropropane	ND	290	ug/kg	75
cis-1,3-Dichloropropene	ND	290	ug/kg	43
trans-1,3-Dichloropropene	ND	290	ug/kg	34
Ethylbenzene	87 J	290	ug/kg	36
Methylene chloride	ND	290	ug/kg	64
1,1,2,2-Tetrachloroethane	ND	290	ug/kg	55
Tetrachloroethene	ND	290	ug/kg	48
Toluene	500	290	ug/kg	49
1,1,1-Trichloroethane	ND	290	ug/kg	60
1,1,2-Trichloroethane	ND	290	ug/kg	68
Trichloroethene	ND	290	ug/kg	47
Trichlorofluoromethane	ND	290	ug/kg	66
Vinyl chloride	ND	290	ug/kg	76

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lw
4/29/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Volatiles

Lot-Sample #....: C9B200184-001 Work Order #....: K7HF71AX Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	83	(72 - 127)
4-Bromofluorobenzene	82	(63 - 120)
Dibromofluoromethane	85	(68 - 121)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

11W
4/29/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-02-4

GC/MS Volatiles

Lot-Sample #....: C9B200184-001 Work Order #....: K7HF72AX Matrix.....: SOLID
 Date Sampled....: 02/19/09 Date Received...: 02/20/09 MS Run #.....:
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057042 Analysis Time...: 11:54
 Dilution Factor: 10 Initial Wgt/Vol: 5.02 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 15 Analyst ID.....: 010099 Instrument ID...: HP4
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	59000	ug/kg	9300
Acrylonitrile	ND	59000	ug/kg	4800
Benzene	35000	2900	ug/kg	580
Bromodichloromethane	ND	2900	ug/kg	550
Bromoform	ND	2900	ug/kg	630
Bromomethane	ND	2900	ug/kg	920
2-Butanone (MEK)	ND	2900	ug/kg	630
Carbon tetrachloride	ND	2900	ug/kg	630
Chloroethane	ND	2900	ug/kg	440
2-Chloroethyl vinyl ether	ND	5900	ug/kg	650
Chloroform	ND	2900	ug/kg	590
Chloromethane	ND	2900	ug/kg	810
Dibromochloromethane	ND	2900	ug/kg	380
1,2-Dichlorobenzene	ND	2900	ug/kg	400
1,3-Dichlorobenzene	ND	2900	ug/kg	300
1,4-Dichlorobenzene	ND	2900	ug/kg	310
trans-1,2-Dichloroethene	ND	2900	ug/kg	440
Dichlorodifluoromethane	ND	2900	ug/kg	370
1,1-Dichloroethane	ND	2900	ug/kg	590
1,2-Dichloroethane	ND	2900	ug/kg	560
1,1-Dichloroethene	ND	2900	ug/kg	620
1,2-Dichloropropane	ND	2900	ug/kg	750
cis-1,3-Dichloropropene	ND	2900	ug/kg	430
trans-1,3-Dichloropropene	ND	2900	ug/kg	340
Ethylbenzene	ND	2900	ug/kg	360
Methylene chloride	ND	2900	ug/kg	640
1,1,2,2-Tetrachloroethane	ND	2900	ug/kg	550
Tetrachloroethene	ND	2900	ug/kg	480
Toluene	570 J	2900	ug/kg	490
1,1,1-Trichloroethane	ND	2900	ug/kg	600
1,1,2-Trichloroethane	ND	2900	ug/kg	680
Trichloroethene	ND	2900	ug/kg	470
Trichlorofluoromethane	ND	2900	ug/kg	660
Vinyl chloride	ND	2900	ug/kg	760

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IDL

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-02-4

GC/MS Volatiles

Lot-Sample #....: C9B200184-001 Work Order #....: K7HF72AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	76	(52 - 124)
Toluene-d8	73	(72 - 127)
4-Bromofluorobenzene	70	(63 - 120)
Dibromofluoromethane	72	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Use original

*luh
4/29/09*

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

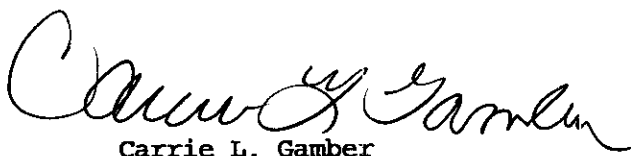
EA/MES Sparrows Point 18001868

Lot #: C9B250192

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.


Carrie L. Gamber
Project Manager

March 18, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Ptsburgh.doc

CASE NARRATIVE
EA Engineering
Sparrows Point

LOT # C9B250192

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 25, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard CC30226; but was within expected performance range for this compound: dichlorodifluoromethane 36.4%.

The following compound had the %D > 25% in the calibration verification standard 1C30226; but was within expected performance range for this compound: acrolein 29.7%.

The following compound was out high by >50% in the calibration verification standard 1C30226 and the compound was ND in the samples: acrylonitrile 55.5%

GC/MS Semivolatiles:

Due to the concentration of target compounds detected, the samples were analyzed at a dilution. The samples had the surrogates diluted out.

The matrix spike and matrix spike duplicate had the surrogates and the spikes diluted out.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B250192

Metals:

Samples BH-SED-10-2 and BH-SED-11-2 were over the instruments linear range for lead and zinc and required a dilution.

The serial dilution of sample BH-SED-10-2 was outside of the percent difference control limits for silver, cadmium, and antimony. The results were flagged with an "E" qualifier.

Sample BH-SED-11-2 was over the instruments' calibration range for mercury and required a dilution.

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

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

For the matrix spike and matrix spike duplicate, arsenic, chromium, copper, lead, selenium, and zinc recoveries were not calculated due to the concentration of analyte in the sample being >4 times the concentration of spike added.

General Chemistry:

The samples were analyzed at a dilution for TOC.

METHODS SUMMARY

C9B250192

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
SM20	"STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B250192

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K7N2P	001	BH-SED-10-2	02/24/09	13:20
K7N2V	002	BH-SED-10-TOC	02/24/09	13:00
K7N2X	003	BH-SED-11-TOC	02/24/09	15:15
K7N20	004	BH-SED-11-2	02/24/09	16:00
K7N3F	005	SRM	02/24/09	

NOTE(S) :

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

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013
 Cooler Rec'd & Opened for Temp. Check on: 2/25/09
 Coolers Opened and Unpacked on: 2/25/09 By: PRF
 (Signature)

TestAmerica Pittsburgh Lot Number: C9B250192

- | | Yes | No | NA |
|--|-----|----|----|
| 1. Were custody seals on the outside of the cooler? _____
If YES, how many and where? Quantity ____ Location _____
Were signatures and date correct? _____ | / | | / |
| 2. Were custody papers included inside the cooler? _____ | / | | |
| 3. Were custody papers properly filled out (ink, signed, match labels)? _____ | / | | |
| 4. Did you sign the custody papers in the appropriate place? _____ | / | | |
| 5. Was shippers packing slip attached to this form? _____ | / | | |
| 6. Were packing materials used? _____
If YES, what type? <u>Bubble Wrap</u> | / | | |
| 7. Were the samples received within the acceptable temperature range? _____ | / | | |
| 8. Were the samples appropriately preserved? _____ | | | / |
| 9. Were all bottles sealed in separate plastic bags? _____ | / | | |
| 10. Did all bottles arrive in good condition (unbroken)? _____ | / | | |
| 11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____ | / | | |
| 12. Did all bottle labels and/or tags agree with custody papers? _____ | / | | |
| 13. Were correct bottles used for tests indicated? _____ | / | | |
| 14. Were all VOA vials checked for the presence of air bubbles? _____ | | | / |
| 15. Was a sufficient amount of sample sent in each bottle? _____ | / | | |
| 16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO | | | |

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved

UP: Unpreserved

[illegible]

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

Comments:

[illegible]

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid

Hydrochloric Acid.

Sulfuric Acid

Sodium Hydroxide

FedEx® US Airbill

Express

Tracking Number 8565 6932 6639

1 From This portion can be removed for Recipient's records.

Date 2/24/09 FedEx Tracking Number

Sender's Name TODD WARD

Phone 410 736-1250

Company E A ENGINEERING SCIENCE & TECH

Address 15 LOVETON CIR

City SPARKS GLENCOE State MD ZIP 21152

2 Your Internal Billing Reference 1453406

3 To

Recipient's Name JAMILE MANAGHEST

Phone 412 963-2428

Company TESTAMERICA-PITTSBURGH

Recipient's Address 301 ALPINA DR

We cannot deliver to PO boxes or P.O. ZIP codes.

Address AIDS PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City PITTSBURGH

State PA ZIP 15238

0326761324



8565 6932 6639

Recipient's Copy

Packages up to 150 lbs.

FedEx First Overnight
Next business day
Saturday Delivery NOT available.

FedEx Standard Overnight
Next business afternoon
Saturday Delivery NOT available.

FedEx Express Saver
Next business day
Saturday Delivery NOT available.

FedEx 2Day
Second business day
Saturday Delivery NOT available.

FedEx 1Day Freight
Next business day
Saturday Delivery NOT available.

FedEx 3Day Freight
Next business day
Saturday Delivery NOT available.

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DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

GC/MS Volatiles

Lot-Sample #... : C9B250192-001	Work Order #... : K7N2P1AU	Matrix..... : SOLID
Date Sampled... : 02/24/09	Date Received... : 02/25/09	MS Run #..... : 9057030
Prep Date..... : 02/26/09	Analysis Date... : 02/26/09	
Prep Batch #... : 9057034	Analysis Time... : 11:27	
Dilution Factor : 0.88	Initial Wgt/Vol : 5.68 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 59	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.95
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.96
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

GC/MS Volatiles

Lot-Sample #...: C9B250192-001 Work Order #...: K7N2P1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	112	(72 - 127)
4-Bromofluorobenzene	100	(63 - 120)
Dibromofluoromethane	102	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-11-2

GC/MS Volatiles

Lot-Sample #... : C9B250192-004	Work Order #... : K7N201AU	Matrix..... : SOLID
Date Sampled... : 02/24/09	Date Received.. : 02/25/09	MS Run #..... : 9057030
Prep Date..... : 02/26/09	Analysis Date... : 02/26/09	
Prep Batch #... : 9057034	Analysis Time... : 11:52	
Dilution Factor : 0.92	Initial Wgt/Vol : 5.41 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 54	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING	LIMIT	UNITS	MDL
Acrolein	ND		200	ug/kg	14
Acrylonitrile	ND		200	ug/kg	21
Benzene	ND		10	ug/kg	1.4
Bromodichloromethane	ND		10	ug/kg	1.1
Bromoform	ND		10	ug/kg	0.89
Bromomethane	ND		10	ug/kg	1.5
2-Butanone (MEK)	ND		10	ug/kg	1.8
Carbon tetrachloride	ND		10	ug/kg	0.90
Chloroethane	ND		10	ug/kg	3.1
2-Chloroethyl vinyl ether	ND		20	ug/kg	1.6
Chloroform	ND		10	ug/kg	1.2
Chloromethane	ND		10	ug/kg	1.7
Dibromochloromethane	ND		10	ug/kg	1.4
1,2-Dichlorobenzene	ND		10	ug/kg	1.6
1,3-Dichlorobenzene	ND		10	ug/kg	1.3
1,4-Dichlorobenzene	ND		10	ug/kg	1.3
trans-1,2-Dichloroethene	ND		10	ug/kg	1.2
Dichlorodifluoromethane	ND		10	ug/kg	1.3
1,1-Dichloroethane	ND		10	ug/kg	1.2
1,2-Dichloroethane	ND		10	ug/kg	1.2
1,1-Dichloroethene	ND		10	ug/kg	1.7
1,2-Dichloropropane	ND		10	ug/kg	1.1
cis-1,3-Dichloropropene	ND		10	ug/kg	1.4
trans-1,3-Dichloropropene	ND		10	ug/kg	1.2
Ethylbenzene	ND		10	ug/kg	1.3
Methylene chloride	ND		10	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND		10	ug/kg	1.4
Tetrachloroethene	ND		10	ug/kg	1.4
Toluene	ND		10	ug/kg	1.5
1,1,1-Trichloroethane	ND		10	ug/kg	0.98
1,1,2-Trichloroethane	ND		10	ug/kg	1.7
Trichloroethene	ND		10	ug/kg	1.3
Trichlorofluoromethane	ND		10	ug/kg	1.8
Vinyl chloride	ND		10	ug/kg	0.94

(Continued on next page)

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-2

GC/MS Volatiles

Lot-Sample #...: C9B250192-004 Work Order #...: K7N201AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	92	(52 - 124)
Toluene-d8	106	(72 - 127)
4-Bromofluorobenzene	105	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B250192

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-10-2	91	112	100	102	00
02	BH-SED-11-2	92	106	105	100	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
SRG02 = Toluene-d8
SRG03 = 4-Bromofluorobenzene
SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
(72-127)
(63-120)
(68-121)

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

FORM II

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B250192

Extraction: XXA4PQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	92	103	85	98	00
02	METHOD BLK. K7P6C1AA	101	96	97	100	00
03	LCS K7P6C1AC	98	108	106	93	00
04	LAB MS/MSD D	99	103	106	98	00
05	LAB MS/MSD S	96	107	108	96	00

SURROGATESQC LIMITS

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B260000

WO #: K7P6C1AC

BATCH: 9057034

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	40.0	36.7	92	59 - 129	
Trichloroethene	40.0	34.1	85	75 - 119	
Benzene	40.0	38.4	96	77 - 120	
Toluene	40.0	41.9	105	73 - 124	
Chlorobenzene	40.0	40.0	100	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B250106

WO #: K7NE21A8

BATCH: 9057034

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	61.8	ND	60.5	98	59 - 129	
Trichloroethene	61.8	ND	54.7	89	76 - 119	
Benzene	61.8	ND	63.0	102	77 - 120	
Toluene	61.8	ND	65.6	106	78 - 124	
Chlorobenzene	61.8	ND	61.6	100	79 - 120	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B250106

WO #: K7NE21A9

BATCH: 9057034

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,1-Dichloroethene	63.4	58.5	92	3.3	25	59 - 129	
Trichloroethene	63.4	56.0	88	2.2	21	76 - 119	
Benzene	63.4	61.9	98	1.7	20	77 - 120	
Toluene	63.4	65.6	103	0.0	21	78 - 124	
Chlorobenzene	63.4	62.4	98	1.2	20	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7P6C1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3022601.D

Lot Number: C9B250192

Date Analyzed: 02/26/09

Time Analyzed: 06:10

Matrix: SOLID

Date Extracted: 02/26/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	K7NE21A7	3022602.D	02/26/09	06:35
02	LAB MS/MSD	K7NE21A8 S	3022605.D	02/26/09	07:48
03	LAB MS/MSD	K7NE21A9 D	3022606.D	02/26/09	08:13
04	BH-SED-10-2	K7N2P1AU	3022614.D	02/26/09	11:27
05	BH-SED-11-2	K7N201AU	3022615.D	02/26/09	11:52
06	CHECK SAMPLE	K7P6C1AC C	3022604.D	02/26/09	07:24
07					
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29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B250192
MB Lot-Sample #: C9B260000-034

Work Order #...: K7P6C1AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 1

Prep Date.....: 02/26/09
Prep Batch #...: 9057034
Initial Wgt/Vol: 5 g
Analyst ID.....: 010099

Analysis Time...: 06:10
Final Wgt/Vol...: 5 mL
Instrument ID...: HP3

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acrolein	ND	100	ug/kg	SW846	8260B
Acrylonitrile	ND	100	ug/kg	SW846	8260B
Benzene	ND	5.0	ug/kg	SW846	8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846	8260B
Bromoform	ND	5.0	ug/kg	SW846	8260B
Bromomethane	ND	5.0	ug/kg	SW846	8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846	8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846	8260B
Chloroethane	ND	5.0	ug/kg	SW846	8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846	8260B
Chloroform	ND	5.0	ug/kg	SW846	8260B
Chloromethane	ND	5.0	ug/kg	SW846	8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846	8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
Ethylbenzene	ND	5.0	ug/kg	SW846	8260B
Methylene chloride	ND	5.0	ug/kg	SW846	8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846	8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846	8260B
Toluene	ND	5.0	ug/kg	SW846	8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
Trichloroethene	ND	5.0	ug/kg	SW846	8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846	8260B
Vinyl chloride	ND	5.0	ug/kg	SW846	8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	101	(52 - 124)
Toluene-d8	96	(72 - 127)
4-Bromofluorobenzene	97	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B250192

Work Order #...: K7P6C1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	100	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B250192
 Lab File ID (Standard): CC30226 Date Analyzed: 02/26/09
 Instrument ID: HP3 Time Analyzed: 0509
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	494717	7.40	111150	10.49	234044	12.81
UPPER LIMIT	989434	7.60	222300	10.69	468088	13.01
LOWER LIMIT	247359	7.20	55575	10.29	117022	12.61
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	510882	7.41	120410	10.49	213108	12.81
02 INTRA-LAB CH	475291	7.40	108074	10.49	233900	12.81
03 BH-SED-10-2	637235	7.41	136580	10.49	205997	12.81
04 BH-SED-11-2	683621	7.41	154096	10.49	255952	12.81
05						
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22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-10-2

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-001 Work Order #....: K7N2P1AC Matrix.....: SOLID
 Date Sampled....: 02/24/09 13:20 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057012 Analysis Time...: 20:12
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	940	160	ug/kg	25
2-Methylnaphthalene	1500	160	ug/kg	32
Naphthalene	33000 E	160	ug/kg	24
Acenaphthylene	2200	160	ug/kg	32
Acenaphthene	1600	160	ug/kg	26
Fluorene	1600	160	ug/kg	25
Phenanthrene	8800	160	ug/kg	19
Anthracene	5000	800	ug/kg	29
Fluoranthene	20000	160	ug/kg	14
Pyrene	12000	160	ug/kg	43
Benzo (a) anthracene	9900	160	ug/kg	26
Chrysene	8000	160	ug/kg	28
Benzo (b) fluoranthene	10000	160	ug/kg	33
Benzo (k) fluoranthene	3700	160	ug/kg	34
Benzo (a) pyrene	8900	160	ug/kg	46
Indeno (1,2,3-cd) pyrene	4000	160	ug/kg	8.9
Dibenzo (a,h) anthracene	1400	160	ug/kg	36
Benzo (ghi) perylene	4200	160	ug/kg	12

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2 DL

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-001 Work Order #....: K7N2P2AC Matrix.....: SOLID
 Date Sampled....: 02/24/09 13:20 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9057012 Analysis Time...: 21:34
 Dilution Factor: 15 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	800	250	ug/kg	37
2-Methylnaphthalene	1300	250	ug/kg	48
Naphthalene	32000	250	ug/kg	35
Acenaphthylene	1800	250	ug/kg	49
Acenaphthene	1400	250	ug/kg	39
Fluorene	1600	250	ug/kg	37
Phenanthrene	7000	250	ug/kg	29
Anthracene	4100	1200	ug/kg	43
Fluoranthene	17000	250	ug/kg	21
Pyrene	12000	250	ug/kg	65
Benzo (a) anthracene	8000	250	ug/kg	39
Chrysene	7200	250	ug/kg	43
Benzo (b) fluoranthene	7900	250	ug/kg	49
Benzo (k) fluoranthene	4300	250	ug/kg	51
Benzo (a) pyrene	7700	250	ug/kg	68
Indeno (1,2,3-cd) pyrene	3700	250	ug/kg	13
Dibenzo (a,h) anthracene	1300	250	ug/kg	54
Benzo (ghi) perylene	4100	250	ug/kg	18

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-11-2

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-004	Work Order #....: K7N201AC	Matrix.....: SOLID
Date Sampled....: 02/24/09 16:00	Date Received...: 02/25/09 09:45	MS Run #.....: 9057003
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057012	Analysis Time...: 21:11	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 54	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	12000	150	ug/kg	22
2-Methylnaphthalene	34000 E	150	ug/kg	29
Naphthalene	280000 E	150	ug/kg	21
Acenaphthylene	2600	150	ug/kg	29
Acenaphthene	17000	150	ug/kg	23
Fluorene	16000	150	ug/kg	22
Phenanthrene	31000 E	150	ug/kg	17
Anthracene	16000	720	ug/kg	26
Fluoranthene	30000 E	150	ug/kg	12
Pyrene	23000	150	ug/kg	39
Benzo (a) anthracene	18000	150	ug/kg	23
Chrysene	16000	150	ug/kg	25
Benzo (b) fluoranthene	14000	150	ug/kg	29
Benzo (k) fluoranthene	6500	150	ug/kg	30
Benzo (a) pyrene	15000	150	ug/kg	41
Indeno (1,2,3-cd) pyrene	6900	150	ug/kg	8.0
Dibenzo (a,h) anthracene	2500	150	ug/kg	32
Benzo (ghi) perylene	7300	150	ug/kg	11

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-2 02

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-004	Work Order #....: K7N202AC	Matrix.....: SOLID
Date Sampled....: 02/24/09 16:00	Date Received...: 02/25/09 09:45	MS Run #.....: 9057003
Prep Date.....: 02/26/09	Analysis Date...: 03/05/09	
Prep Batch #....: 9057012	Analysis Time...: 16:23	
Dilution Factor: 1000	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 54	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	14000 J	15000	ug/kg	2200
2-Methylnaphthalene	41000	15000	ug/kg	2900
Naphthalene	2400000	15000	ug/kg	2100
Acenaphthylene	4200 J	15000	ug/kg	2900
Acenaphthene	40000	15000	ug/kg	2300
Fluorene	34000	15000	ug/kg	2200
Phenanthrene	99000	15000	ug/kg	1700
Anthracene	35000 J	72000	ug/kg	2600
Fluoranthene	85000	15000	ug/kg	1200
Pyrene	66000	15000	ug/kg	3900
Benzo (a) anthracene	37000	15000	ug/kg	2300
Chrysene	33000	15000	ug/kg	2500
Benzo (b) fluoranthene	47000	15000	ug/kg	2900
Benzo (k) fluoranthene	14000 J	15000	ug/kg	3000
Benzo (a) pyrene	29000	15000	ug/kg	4100
Indeno (1,2,3-cd) pyrene	12000 J	15000	ug/kg	800
Dibenzo (a,h) anthracene	ND	15000	ug/kg	3200
Benzo (ghi) perylene	14000 J	15000	ug/kg	1100

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EA Engineering, Science and Technology

Client Sample ID: SRM

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-005 Work Order #....: K7N3F1AA Matrix.....: SOLID
 Date Sampled....: 02/24/09 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057012 Analysis Time...: 21:30
 Dilution Factor: 60 Initial Wgt/Vol: 5 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	240 J	400	ug/kg	61
2-Methylnaphthalene	320 J	400	ug/kg	79
Naphthalene	1300	400	ug/kg	58
Acenaphthylene	940	400	ug/kg	80
Acenaphthene	220 J	400	ug/kg	64
Fluorene	320 J	400	ug/kg	60
Phenanthrene	3100	400	ug/kg	48
Anthracene	830 J	2000	ug/kg	70
Fluoranthene	5600	400	ug/kg	34
Pyrene	5000	400	ug/kg	110
Benzo (a) anthracene	2900	400	ug/kg	64
Chrysene	3500	400	ug/kg	70
Benzo (b) fluoranthene	3300	400	ug/kg	81
Benzo (k) fluoranthene	1400	400	ug/kg	83
Benzo (a) pyrene	2100	400	ug/kg	110
Indeno (1,2,3-cd) pyrene	1300	400	ug/kg	22
Dibenzo (a,h) anthracene	500	400	ug/kg	88
Benzo (ghi) perylene	1700	400	ug/kg	29

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B250192

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-10-2	0 D	0 D	0 D	0 D	0 D	0 D	06
02	BH-SED-10-2 RE-1 DL	0 D	0 D	0 D	0 D	0 D	0 D	06
03	BH-SED-11-2	0 D	0 D	0 D	0 D	0 D	0 D	06
04	BH-SED-11-2 RE-1 DL	0 D	0 D	0 D	0 D	0 D	0 D	06
05	SRM	0 D	0 D	0 D	0 D	0 D	0 D	06
06	METHOD BLK. K7P5A1AA	63	81	62	64	65	65	00
07	LCS K7P5A1AC	70	83	71	71	74	86	00
08	BH-SED-10-2 D	0 D	0 D	0 D	0 D	0 D	0 D	06
09	BH-SED-10-2 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Lot #: C9B260000

WO #: K7P5A1AC

BATCH: 9057012

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
4-Bromophenyl phenyl ethe	333	251	75	43 - 111	
Butyl benzyl phthalate	333	239	72	40 - 117	
Phenol	333	211	63	39 - 105	
2-Chlorophenol	333	227	68	40 - 105	
1,4-Dichlorobenzene	333	225	68	41 - 101	
N-Nitrosodi-n-propylamine	333	244	73	42 - 108	
1,2,4-Trichlorobenzene	333	222	67	41 - 105	
4-Chloro-3-methylphenol	333	242	73	43 - 110	
Acenaphthene	333	233	70	42 - 104	
4-Nitrophenol	333	256	77	27 - 131	
2,4-Dinitrotoluene	333	276	83	48 - 118	
Pentachlorophenol	333	244	73	18 - 125	
Pyrene	333	249	75	39 - 113	
4-Methylphenol	667	445	67	43 - 107	
Hexachloroethane	333	223	67	40 - 102	
Naphthalene	333	223	67	42 - 104	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C SRM RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Battell

Lab Code: TAPIT

SDG No: N/A

Lot #: 9057012.00

SOIL SRM 1944

Compound	Certified Value		Units	Quant. Value	Units	% REC
Naphthalene	1650.00	+/- 310	ug/Kg	1347.80	ug/Kg	81.68
Phenanthrene	5270.00	+/- 220	ug/Kg	3148.80	ug/Kg	59.75
Anthracene	1770.00	+/- 330	ug/Kg	827.27	ug/Kg	46.74
Fluoranthene	8920.00	+/- 320	ug/Kg	5620.20	ug/Kg	63.01
Pyrene	9700.00	+/- 420	ug/Kg	4976.00	ug/Kg	51.30
Benzo(a)anthracene	4720.00	+/- 110	ug/Kg	2937.70	ug/Kg	62.24
Chrysene	4860.00	+/- 100	ug/Kg	3516.40	ug/Kg	72.35
Benzo(b)fluoranthene	3870.00	+/- 420	ug/Kg	3265.80	ug/Kg	84.39
Benzo(k)fluoranthene	2300.00	+/- 200	ug/Kg	1387.00	ug/Kg	60.30
Benzo(a)pyrene	4300.00	+/- 130	ug/Kg	2131.20	ug/Kg	49.56
Benzo(ghi)perylene	2840.00	+/- 100	ug/Kg	1715.50	ug/Kg	60.40
Indeno(1,2,3-cd)pyrene	2780.00	+/- 100	ug/Kg	1342.40	ug/Kg	48.29

If the certified concentrations are < 10 times the MDL established for the method, the SRM result will not be evaluated.

The results of the SRM are included with the associated analytical data.

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-10-2

Level: (low/med) LOW

Lot #: C9B250192

WO #: K7N2P1AV

BATCH: 9057012

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	813	ND		0*	39 - 105	NC DIL
2-Chlorophenol	813	ND		0*	40 - 105	NC DIL
1,4-Dichlorobenzene	813	ND		0*	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	813	ND		0*	42 - 108	NC DIL
1,2,4-Trichlorobenzene	813	ND		0*	41 - 105	NC DIL
4-Chloro-3-methylphenol	813	ND		0*	43 - 110	NC DIL
Acenaphthene	813	1600		0*	42 - 104	NC DIL
4-Nitrophenol	813	ND		0*	27 - 131	NC DIL
2,4-Dinitrotoluene	813	ND		0*	48 - 118	NC DIL
Pentachlorophenol	813	ND		0*	18 - 125	NC DIL
Pyrene	813	12000		0*	39 - 113	NC DIL
4-Methylphenol	1630	150		0*	43 - 107	NC DIL
Hexachloroethane	813	ND		0*	40 - 102	NC DIL
Naphthalene	813	33000		0*	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	813	ND		0*	43 - 111	NC DIL
Butyl benzyl phthalate	813	ND		0*	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: EA Engineering, Science and Technology

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-10-2

Level: (low/med) LOW

Lot #: C9B250192

WO #: K7N2P1AW

BATCH: 9057012

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
Phenol	813		0*		40	39 - 105	NC DIL
2-Chlorophenol	813		0*		37	40 - 105	NC DIL
1,4-Dichlorobenzene	813		0*		32	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	813		0*		32	42 - 108	NC DIL
1,2,4-Trichlorobenzene	813		0*		36	41 - 105	NC DIL
4-Chloro-3-methylphenol	813		0*		31	43 - 110	NC DIL
Acenaphthene	813		0*		34	42 - 104	NC DIL
4-Nitrophenol	813		0*		33	27 - 131	NC DIL
2,4-Dinitrotoluene	813		0*		33	48 - 118	NC DIL
Pentachlorophenol	813		0*		34	18 - 125	NC DIL
Pyrene	813		0*		28	39 - 113	NC DIL
4-Methylphenol	1630		0*		36	43 - 107	NC DIL
Hexachloroethane	813		0*		34	40 - 102	NC DIL
Naphthalene	813		0*		25	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	813		0*		20	43 - 111	NC DIL
Butyl benzyl phthalate	813		0*		34	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7P5A1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: D0226015.

Lot Number: C9B250192

Date Analyzed: 02/26/09

Time Analyzed: 19:33

Matrix: SOLID

Date Extracted: 02/26/09

GC Column: DB5

ID: .32

Extraction Method:

Instrument ID: 732

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	BH-SED-10-2	K7N2P1AC	D0226017.	02/26/09	20:12
02	BH-SED-10-2	K7N2P1AV S	D0226018.	02/26/09	20:32
03	BH-SED-10-2	K7N2P1AW D	D0226019.	02/26/09	20:51
04	BH-SED-10-2 DL	K7N2P2AC	D0227020.	02/27/09	21:34
05	BH-SED-11-2	K7N201AC	D0226020.	02/26/09	21:11
06	BH-SED-11-2 DL	K7N202AC	D0305001.	03/05/09	16:23
07	SRM	K7N3F1AA	D0226021.	02/26/09	21:30
08	CHECK SAMPLE	K7P5A1AC C	D0226016.	02/26/09	19:52
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B250192
MB Lot-Sample #: C9B260000-012

Work Order #...: K7P5A1AA

Matrix.....: SOLID

Analysis Date...: 02/26/09
Dilution Factor: 0.5

Prep Date.....: 02/26/09
Prep Batch #...: 9057012
Initial Wgt/Vol: 30 g
Analyst ID.....: 403801

Analysis Time...: 19:33
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 732

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a,h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	63	(27 - 110)
Terphenyl-d14	81	(21 - 130)
2-Fluorobiphenyl	62	(28 - 108)
2-Fluorophenol	64	(28 - 107)
Phenol-d5	65	(30 - 112)
2,4,6-Tribromophenol	65	(21 - 116)

NOTE (S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SD3 No.: C9B250192
Lab File ID (Standard): D0226CC1 Date Analyzed: 02/26/09
Instrument ID: 732 Time Analyzed: 1416

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	121273	4.25	539708	5.22	400128	6.58
UPPER LIMIT	242546	4.75	1079416	5.72	300256	7.08
LOWER LIMIT	60637	3.75	269854	4.72	200064	6.08
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	132425	4.25	573420	5.23	411257	6.58
02 INTRA-LAB CH	137117	4.25	628482	5.23	441915	6.58
03 BH-SED-10-2	130907	4.25	589509	5.23	462065	6.58
04 BH-SED-10-2	129726	4.25	579888	5.23	462257	6.58
05 BH-SED-10-2	131997	4.25	589460	5.23	465349	6.58
06 BH-SED-11-2	130683	4.25	322306	5.24	462146	6.58
07 SRM	123960	4.25	568567	5.23	433667	6.58
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B250192
Lab File ID (Standard): D0226CC1 Date Analyzed: 02/26/09
Instrument ID: 732 Time Analyzed: 1416

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	729581	7.72	623236	9.76	497793	11.00
UPPER LIMIT	1459162	8.22	1246472	10.26	995586	11.50
LOWER LIMIT	364791	7.22	311618	9.26	248897	10.50
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	746678	7.72	708820	9.77	625911	11.02
02 INTRA-LAB CH	812879	7.72	868528	9.77	621510	11.03
03 BH-SED-10-2	850201	7.72	985584	9.78	392323	11.05
04 BH-SED-10-2	881974	7.72	981048	9.78	946766	11.05
05 BH-SED-10-2	857184	7.73	993421	9.79	987639	11.06
06 BH-SED-11-2	865500	7.73	943206	9.79	975434	11.06
07 SRM	840278	7.72	918978	9.78	354484	11.04
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B250192
Lab File ID (Standard): D0227CC1 Date Analyzed: 02/27/09
Instrument ID: 732 Time Analyzed: 1239

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	137917	4.24	634116	5.22	460175	6.57
UPPER LIMIT	275834	4.74	1268232	5.72	920350	7.07
LOWER LIMIT	68959	3.74	317058	4.72	230088	6.07
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-10-2	147080	4.24	632998	5.22	467222	6.57
02						
03						
04						
05						
06						
07						
08						
09						
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17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B250192
Lab File ID (Standard): D0227CC1 Date Analyzed: 02/27/09
Instrument ID: 732 Time Analyzed: 1239

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
12 HOUR STD	794831	7.71	641521	9.74	555747	10.98
UPPER LIMIT	1589662	8.21	1283042	10.24	1111494	11.48
LOWER LIMIT	397416	7.21	320761	9.24	277874	10.48
CLIENT						
SAMPLE NO.						
01 BH-SED-10-2	911867	7.71	875935	9.76	782961	11.02
02						
03						
04						
05						
06						
07						
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20						
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22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B250192
Lab File ID (Standard): D0305CC1 Date Analyzed: 03/05/09
Instrument ID: 732 Time Analyzed: 1509

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	122852	4.23	551258	5.20	402889	6.54
UPPER LIMIT	245704	4.73	1102516	5.70	805778	7.04
LOWER LIMIT	61426	3.73	275629	4.70	201445	6.04
CLIENT						
SAMPLE NO.						
01 BH-SED-11-2	132383	4.23	587140	5.20	431476	6.53
02						
03						
04						
05						
06						
07						
08						
09						
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19						
20						
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22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B250192
Lab File ID (Standard): D0305CC1 Date Analyzed: 03/05/09
Instrument ID: 732 Time Analyzed: 1509

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	738156	7.67	639183	9.71	533367	10.92
UPPER LIMIT	1476312	8.17	1278366	10.21	1066734	11.42
LOWER LIMIT	369078	7.17	319592	9.21	266684	10.42
CLIENT						
SAMPLE NO.						
01 BH-SED-11-2	811927	7.67	709551	9.71	591368	10.92
02						
03						
04						
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22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

METALS SUMMARY

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

TOTAL Metals

Lot-Sample #...: C9B250192-001

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

% Moisture.....: 59

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	1.3	0.040	mg/kg	SW846 7471A	03/03/09	K7N2P1AR
		Dilution Factor: 0.5		Analysis Time...: 08:15	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0030	
Prep Batch #....: 9063430						
Silver	4.2 E	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AQ
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0029	
Arsenic	102	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AD
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.6	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AE
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Cadmium	8.6 E	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AF
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	362 J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AG
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0098	
Copper	226	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AH
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	47.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AJ
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0083	
Lead	2990 J	1.2	mg/kg	SW846 6020	03/04-03/09/09	K7N2P1AK
		Dilution Factor: 5		Analysis Time...: 10:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

TOTAL Metals

Lot-Sample #...: C9B250192-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	2.5 E	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AL
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Selenium	14.8	0.61	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AM
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.050	
Thallium	1.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AN
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Zinc	3730	6.1	mg/kg	SW846 6020	03/04-03/09/09	K7N2P1AP
		Dilution Factor: 5		Analysis Time...: 10:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.14	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

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

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-2

TOTAL Metals

Lot-Sample #...: C9B250192-004

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

% Moisture.....: 54

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9062016						
Mercury	5.5	0.36	mg/kg	SW846 7471A	03/03/09	K7N201AR
		Dilution Factor: 5		Analysis Time...: 09:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.027	
Prep Batch #...: 9063430						
Silver	1.9	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AQ
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0026	
Arsenic	37.0	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AD
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Beryllium	1.5	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AE
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Cadmium	5.6	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AF
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0099	
Chromium	199 J	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7N201AG
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0087	
Copper	151	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7N201AH
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0093	
Nickel	45.8	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AJ
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Lead	900 J	1.1	mg/kg	SW846 6020	03/04-03/09/09	K7N201AK
		Dilution Factor: 5		Analysis Time...: 10:13	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.037	

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EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-2

TOTAL Metals

Lot-Sample #...: C9B250192-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.8	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7N201AL
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	
Selenium	6.2	0.55	mg/kg	SW846 6020	03/04-03/05/09	K7N201AM
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.044	
Thallium	0.80	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AN
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0022	
Zinc	2020	5.5	mg/kg	SW846 6020	03/04-03/09/09	K7N201AP
		Dilution Factor: 5		Analysis Time...: 10:13	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.13	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #...: C9B250192-005

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

% Moisture.....:

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9062016						
Mercury	0.017 B	0.033	mg/kg	SW846 7471A	03/03/09	K7N3F1AQ
		Dilution Factor: 1		Analysis Time...: 08:21	Analyst ID.....: 401509	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0025	
Prep Batch #...: 9063430						
Silver	0.038 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AP
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	3.4	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AC
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	0.28	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AD
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Cadmium	0.20	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AE
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0091	
Chromium	18.0 J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AF
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0080	
Copper	7.2	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AG
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0085	
Nickel	15.2	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AH
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0068	
Lead	8.1 J	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AJ
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0034	

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EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #...: C9B250192-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Antimony	0.13 B	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AK
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	0.15 B	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AL
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	
Thallium	0.098 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AM
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	22.8	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AN
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S) :

B Estimated result. Result is less than RL.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C030000-016 Prep Batch #...: 9062016						
Mercury	ND	0.016	mg/kg	SW846 7471A	03/03/09	K7XWJ1AA
		Dilution Factor: 0.5				
		Analysis Time...: 08:01		Analyst ID.....: 031043		Instrument ID...: HGH
MB Lot-Sample #: C9C040000-430 Prep Batch #...: 9063430						
Antimony	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Arsenic	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AA
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Beryllium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AC
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Cadmium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AD
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Chromium	0.035 B	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AE
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Copper	ND	0.10	mg/kg	SW846 6020	03/04-03/05/09	K727R1AF
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Lead	0.0047 B	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AH
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Nickel	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AG
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP
Selenium	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AK
		Dilution Factor: 0.5				
		Analysis Time...: 18:06		Analyst ID.....: 401509		Instrument ID...: ICP

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Silver	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AN
Dilution Factor: 0.5						
Analysis Time...: 18:06 Analyst ID.....: 401509 Instrument ID...: ICP						
Thallium	ND	0.050	mg/kg	SW846 6020	03/04-03/05/09	K727R1AL
Dilution Factor: 0.5						
Analysis Time...: 18:06 Analyst ID.....: 401509 Instrument ID...: ICP						
Zinc	ND	0.25	mg/kg	SW846 6020	03/04-03/05/09	K727R1AM
Dilution Factor: 0.5						
Analysis Time...: 18:06 Analyst ID.....: 401509 Instrument ID...: ICP						

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #... : 9062016					
Mercury	97	(80 - 120)	SW846 7471A	03/03/09	K7XWJ1AC
		Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C040000-430 Prep Batch #... : 9063430					
Arsenic	88	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AP
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Beryllium	95	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AQ
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Cadmium	91	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AR
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Chromium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AT
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Copper	99	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AU
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Nickel	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AV
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Lead	102	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AW
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Antimony	87	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1AX
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Selenium	98	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A0
		Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	92	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A1
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509					
Instrument ID...: ICPMS					
Zinc	84	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A2
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509					
Instrument ID...: ICPMS					
Silver	104	(80 - 120)	SW846 6020	03/04-03/05/09	K727R1A3
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509					
Instrument ID...: ICPMS					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C030000-016 Prep Batch #....: 9062016							
Mercury	0.208	0.203	mg/kg	97	SW846 7471A	03/03/09	K7XWJ1AC
					Dilution Factor: 0.5	Analysis Time...: 08:03	Analyst ID.....: 031043
					Instrument ID...: HGHYDRA		
LCS Lot-Sample#: C9C040000-430 Prep Batch #....: 9063430							
Arsenic	2.00	1.76	mg/kg	88	SW846 6020	03/04-03/05/09	K727R1AP
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Beryllium	2.50	2.38	mg/kg	95	SW846 6020	03/04-03/05/09	K727R1AQ
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Cadmium	2.50	2.29	mg/kg	91	SW846 6020	03/04-03/05/09	K727R1AR
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Chromium	10.0	9.77	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AT
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Copper	12.5	12.4	mg/kg	99	SW846 6020	03/04-03/05/09	K727R1AU
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Nickel	25.0	24.4	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AV
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Lead	1.00	1.02	mg/kg	102	SW846 6020	03/04-03/05/09	K727R1AW
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Antimony	25.0	21.8	mg/kg	87	SW846 6020	03/04-03/05/09	K727R1AX
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		
Selenium	0.500	0.491	mg/kg	98	SW846 6020	03/04-03/05/09	K727R1AO
					Dilution Factor: 0.5	Analysis Time...: 18:10	Analyst ID.....: 401509
					Instrument ID...: ICPMS		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	2.50	2.30	mg/kg	92	SW846 6020	03/04-03/05/09	K727R1A1
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Zinc	25.0	21.1	mg/kg	84	SW846 6020	03/04-03/05/09	K727R1A2
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Silver	2.50	2.60	mg/kg	104	SW846 6020	03/04-03/05/09	K727R1A3
Dilution Factor: 0.5 Analysis Time...: 18:10 Analyst ID.....: 401509							
Instrument ID...: ICPMS							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B250192

Matrix.....: SOLID

Date Sampled....: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B250192-001 Prep Batch #....: 9063430						
					% Moisture.....: 59	
Antimony	32 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1CE
	32 N	(75 - 125)	0.27 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Arsenic	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1AX
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Beryllium	84	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A1
	86	(75 - 125)	1.1 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Cadmium	69 N	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A3
	64 N	(75 - 125)	2.4 (0-20)	SW846 6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Chromium	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A5
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Copper	NC	(75 - 125)		SW846 6020	03/04-03/05/09	K7N2P1A7
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5						
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						
Lead	NC	(75 - 125)		SW846 6020	03/04-03/09/09	K7N2P1CC
	NC	(75 - 125)	(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CD
Dilution Factor: 5						
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9063236						

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	89	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1A9
	90	(75 - 125)	0.68	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CA
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Selenium	NC	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CG
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CH
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Silver	85	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CN
	90	(75 - 125)	3.4	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CP
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Thallium	87	(75 - 125)			SW846 6020	03/04-03/05/09	K7N2P1CJ
	87	(75 - 125)	0.18	(0-20)	SW846 6020	03/04-03/05/09	K7N2P1CK
Dilution Factor: 0.5							
Analysis Time...: 20:10 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							
Zinc	NC	(75 - 125)			SW846 6020	03/04-03/09/09	K7N2P1CL
	NC	(75 - 125)		(0-20)	SW846 6020	03/04-03/09/09	K7N2P1CM
Dilution Factor: 5							
Analysis Time...: 10:26 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9063236							

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B250192

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B250192-001 Prep Batch #....: 9063430

% Moisture.....: 59

Antimony

2.5	61.0	22.1 N	mg/kg	32		SW846 6020	03/04-03/05/09	K7N2P1CE
2.5	61.0	22.2 N	mg/kg	32	0.27	SW846 6020	03/04-03/05/09	K7N2P1CF
Dilution Factor: 0.5								
Analysis Time...: 20:10			Instrument ID...: ICPMS			Analyst ID.....: 401509		
MS Run #.....: 9063236								

Arsenic

102	4.88	108 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1AX
102	4.88	115 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A0
Dilution Factor: 5								
Analysis Time...: 20:10			Instrument ID...: ICPMS			Analyst ID.....: 401509		
MS Run #.....: 9063236								

Beryllium

1.6	6.10	6.76	mg/kg	84		SW846 6020	03/04-03/05/09	K7N2P1A1
1.6	6.10	6.83	mg/kg	86	1.1	SW846 6020	03/04-03/05/09	K7N2P1A2
Dilution Factor: 0.5								
Analysis Time...: 20:10			Instrument ID...: ICPMS			Analyst ID.....: 401509		
MS Run #.....: 9063236								

Cadmium

8.6	6.10	12.9 N	mg/kg	69		SW846 6020	03/04-03/05/09	K7N2P1A3
8.6	6.10	12.6 N	mg/kg	64	2.4	SW846 6020	03/04-03/05/09	K7N2P1A4
Dilution Factor: 0.5								
Analysis Time...: 20:10			Instrument ID...: ICPMS			Analyst ID.....: 401509		
MS Run #.....: 9063236								

Chromium

362	24.4	388 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A5
362	24.4	397 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A6
Dilution Factor: 0.5								
Analysis Time...: 20:10			Instrument ID...: ICPMS			Analyst ID.....: 401509		
MS Run #.....: 9063236								

Copper

226	30.5	256 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A7
226	30.5	264 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1A8
Dilution Factor: 0.5								
Analysis Time...: 20:10			Instrument ID...: ICPMS			Analyst ID.....: 401509		
MS Run #.....: 9063236								

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B250192

Matrix.....: SOLID

Date Sampled...: 02/24/09

Date Received...: 02/25/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Lead									
	2990	2.44	3070 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CC
	2990	2.44	3260 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CD
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Nickel									
	47.2	61.0	102	mg/kg	89		SW846 6020	03/04-03/05/09	K7N2P1A9
	47.2	61.0	102	mg/kg	90	0.68	SW846 6020	03/04-03/05/09	K7N2P1CA
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Selenium									
	14.8	1.22	15.9 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CG
	14.8	1.22	16.5 NC	mg/kg			SW846 6020	03/04-03/05/09	K7N2P1CH
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Silver									
	4.2	6.10	9.37	mg/kg	85		SW846 6020	03/04-03/05/09	K7N2P1CN
	4.2	6.10	9.70	mg/kg	90	3.4	SW846 6020	03/04-03/05/09	K7N2P1CP
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Thallium									
	1.2	6.10	6.52	mg/kg	87		SW846 6020	03/04-03/05/09	K7N2P1CJ
	1.2	6.10	6.50	mg/kg	87	0.18	SW846 6020	03/04-03/05/09	K7N2P1CK
			Dilution Factor: 0.5						
			Analysis Time...: 20:10		Instrument ID...: ICFMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						
Zinc									
	3730	30.5	3900 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CL
	3730	30.5	3930 NC	mg/kg			SW846 6020	03/04-03/09/09	K7N2P1CM
			Dilution Factor: 5						
			Analysis Time...: 10:26		Instrument ID...: ICPMS		Analyst ID.....: 401509		
			MS Run #.....: 9063236						

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9B250192

Matrix.....: SOLID

Date Sampled....: 02/25/09

Date Received...: 02/26/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #....: 9062016

% Moisture.....: 19

Mercury	93	(75 - 125)		SW846 7471A	03/03/09	K7RJ81AV
	89	(75 - 125) 2.7 (0-20)		SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26 Instrument ID...: HGHYDRA Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE (S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B250192

Matrix.....: SOLID

Date Sampled....: 02/25/09

Date Received...: 02/26/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #....: 9062016

% Moisture.....: 19

Mercury

0.056	0.103	0.152	mg/kg	93		SW846 7471A	03/03/09	K7RJ81AV
0.056	0.103	0.148	mg/kg	89	2.7	SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY SUMMARY

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B250192

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-10-2	C9B250192 001	K7N2P1AT	6.8	mg/kg	0.23	1.2	1	2/27/2009 - 2/27/2009 12:44	9058118
BH-SED-11-2	C9B250192 004	K7N201AT	9.3	mg/kg	0.21	1.1	1	2/27/2009 - 2/27/2009 12:44	9058118

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Lot Number: C9B250192

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-10-2	C9B250192 001	K7N2P1AA	41.0	%	0.0	1.0	1	2/26/2009 - 2/27/2009 07:31	9057283
BH-SED-10-TOC	C9B250192 002	K7N2V1AA	50.8	%	0.0	1.0	1	2/26/2009 - 2/27/2009 07:31	9057283
BH-SED-11-TOC	C9B250192 003	K7N2X1AA	46.4	%	0.0	1.0	1	2/26/2009 - 2/27/2009 07:31	9057283
BH-SED-11-2	C9B250192 004	K7N201AA	45.8	%	0.0	1.0	1	2/26/2009 - 2/27/2009 07:31	9057283

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B250192

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-10-TOC	C9B250192 002	K7N2V1AC	14800	mg/kg	448	1950	1.98	2/26/2009 - 2/26/2009 15:56	9056120
BH-SED-11-TOC	C9B250192 003	K7N2X1AC	14900	mg/kg	387	1680	1.56	2/26/2009 - 2/26/2009 16:06	9056120

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Report ID: C9B250192

Matrix: SOLID

Date/Time Received: 2/23/2009 10:21:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B270000118B	118 MB	K7R691AA	ND	mg/kg	0.50	2/27/2009 - 2/27/2009 12:29	9058118	

EA/MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: EA Engineering, Science and Technology

Report ID: C9B250192

Matrix: SOLID

Date/Time Received: 2/25/2009 3:53:00PM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K7PLW1AD	98.4	%	1.0	2/26/2009 - 2/27/2009 07:31	9057283	0.12 / 20

EA/MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Report ID: C9B250192

Matrix: SOLID

Date/Time Received: 2/17/2009 9:20:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B250000120B	120 MB	K7NEK1AA	ND	mg/kg	500	2/26/2009 - 2/26/2009 12:21	9056120	

EA/MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B270000

Matrix: SOLID

Date/Time Received: 2/23/2009 10:21:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7R691AC	101	41 - 159	2/27/2009 - 2/27/2009 12:29	9058118	
LAB MS/MSD	MS	K7K6J1A5	102	75 - 125	2/27/2009 - 2/27/2009 13:10	9058118	2.1 / 20
LAB MS/MSD	MS	K7NE21A5	109	75 - 125	2/27/2009 - 2/27/2009 12:37	9058118	4.7 / 20
LAB MS/MSD	MSD	K7K6J1A6	100	75 - 125	2/27/2009 - 2/27/2009 13:10	9058118	2.1 / 20
LAB MS/MSD	MSD	K7NE21A6	114	75 - 125	2/27/2009 - 2/27/2009 12:37	9058118	4.7 / 20

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number: C9B250000

Matrix: SOLID

Date/Time Received: 2/17/2009 9:20:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7NEK1AC	103	75 - 125	2/26/2009 - 2/26/2009 12:32	9056120	0.95 / 20
LAB MS/MSD	MSD	K7K6J1A3	105	75 - 125	2/26/2009 - 2/26/2009 15:36	9056120	6.2 / 20
LAB MS/MSD	MS	K7K6J1A2	107	75 - 125	2/26/2009 - 2/26/2009 15:26	9056120	6.2 / 20
DUPLICATE CHECK	LCSD	K7NEK1AD	102	75 - 125	2/26/2009 - 2/26/2009 12:42	9056120	0.95 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B250192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-10-2	C9B250192-001	Soil
2	BH-SED-11-2	C9B250192-004	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values.

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

EA/MES Sparrows Point 18001868

1 + 2

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: EA Engineering, Science and Technology

Lot Number: C9B250192

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-10-2	C9B250192 001	K7N2P1AT	6.8	mg/kg	0.23	1.2	1	2/27/2009 - 2/27/2009 12:44	9058118
BH-SED-11-2	C9B250192 004	K7N201AT	9.3	mg/kg	0.21	1.1	1	2/27/2009 - 2/27/2009 12:44	9058118

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5/1/09

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: EA Engineering, Science and Technology

Lot Number:

C9B250192

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-10-TOC	C9B250192 002	K7N2V1AC	14800	mg/kg	448	1950	1.98	2/26/2009 - 2/26/2009 15:56	9056120
BH-SED-11-TOC	C9B250192 003	K7N2X1AC	14900	mg/kg	387	1680	1.56	2/26/2009 - 2/26/2009 16:06	9056120

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B250192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-10-2	C9B250192-001	Soil
1MS	BH-SED-10-2MS	C9B250192-001MS	Soil
1MSD	BH-SED-10-2MSD	C9B250192-001MSD	Soil
2	BH-SED-11-2	C9B250192-004	Soil
3	SRM	C9B250192-005	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
1	Antimony	32%/32%/Ok	None	See ICP SD
	Cadmium	69%/64%/Ok	None	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample exhibited acceptable %D values except the following.

ICP Sample ID	Compound	%D	Qualifier	Affected Samples
1	Antimony	46.2%	J	All samples
	Cadmium	39.3%	J	
	Silver	163%	J	

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were not identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

TOTAL Metals

Lot-Sample #....: C9B250192-001

Matrix.....: SOLID

Date Sampled....: 02/24/09

Date Received...: 02/25/09

% Moisture.....: 59

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	1.3	0.040	mg/kg	SW846 7471A	03/03/09	K7N2P1AR
		Dilution Factor: 0.5		Analysis Time...: 08:15	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0030	
Prep Batch #....: 9063430						
Silver	4.2 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AQ
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0029	
Arsenic	102	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AD
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.020	
Beryllium	1.6	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AE
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0045	
Cadmium	8.6 J	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AF
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.011	
Chromium	362 J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AG
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0098	
Copper	226	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AH
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.010	
Nickel	47.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AJ
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0083	
Lead	2990 J	1.2	mg/kg	SW846 6020	03/04-03/09/09	K7N2P1AK
		Dilution Factor: 5		Analysis Time...: 10:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	

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new
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

TOTAL Metals

Lot-Sample #....: C9B250192-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	2.5 E J	0.24	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AL
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Selenium	14.8	0.61	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AM
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.050	
Thallium	1.2	0.12	mg/kg	SW846 6020	03/04-03/05/09	K7N2P1AN
		Dilution Factor: 0.5		Analysis Time...: 20:02	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Zinc	3730	6.1	mg/kg	SW846 6020	03/04-03/09/09	K7N2P1AP
		Dilution Factor: 5		Analysis Time...: 10:17	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.14	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

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

LW
5/1/09

EA Engineering, Science and Technology

2

Client Sample ID: BH-SKD-11-2

TOTAL Metals

Lot-Sample #....: C9B250192-004

Matrix.....: SOLID

Date Sampled....: 02/24/09

Date Received...: 02/25/09

% Moisture.....: 54

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	5.5	0.36	mg/kg	SW846 7471A	03/03/09	K7N201AR
		Dilution Factor: 5		Analysis Time...: 09:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9052012	MDL.....: 0.027	
Prep Batch #....: 9063430						
Silver	1.9 J	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AQ
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0026	
Arsenic	37.0	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AD
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.018	
Beryllium	1.5	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AE
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0040	
Cadmium	5.6 J	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AF
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0099	
Chromium	199 J	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7N201AG
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0087	
Copper	151	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7N201AH
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0093	
Nickel	45.8	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AJ
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0074	
Lead	900 J	1.1	mg/kg	SW846 6020	03/04-03/09/09	K7N201AK
		Dilution Factor: 5		Analysis Time...: 10:13	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.037	

(Continued on next page)

JW
5/1/09

EA Engineering, Science and Technology

2

Client Sample ID: BH-SKD-11-2

TOTAL Metals

Lot-Sample #....: C9B250192-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	1.8 J	0.22	mg/kg	SW846 6020	03/04-03/05/09	K7N201AL
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0036	
Selenium	6.2	0.55	mg/kg	SW846 6020	03/04-03/05/09	K7N201AM
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.044	
Thallium	0.80	0.11	mg/kg	SW846 6020	03/04-03/05/09	K7N201AN
		Dilution Factor: 0.5		Analysis Time...: 19:43	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0022	
Zinc	2020	5.5	mg/kg	SW846 6020	03/04-03/09/09	K7N201AP
		Dilution Factor: 5		Analysis Time...: 10:13	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.13	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

lew
5/1/09

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #....: C9B250192-005

Matrix.....: SOLID

Date Sampled....: 02/24/09

Date Received...: 02/25/09

% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9062016						
Mercury	0.017 <i>J</i>	0.033	mg/kg	SW846 7471A	03/03/09	K7N3F1AQ
		Dilution Factor: 1		Analysis Time...: 08:21	Analyst ID.....: 401509	
		Instrument ID...: HGHYDRA		MS Run #.....: 9063236	MDL.....: 0.0025	
Prep Batch #....: 9063430						
Silver	0.038 <i>J</i>	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AP
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0024	
Arsenic	3.4	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AC
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.016	
Beryllium	0.28	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AD
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0037	
Cadmium	0.20 <i>J</i>	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AE
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0091	
Chromium	18.0 <i>J</i>	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AF
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0080	
Copper	7.2	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AG
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0085	
Nickel	15.2	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AH
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0068	
Lead	8.1 <i>J</i>	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AJ
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0034	

(Continued on next page)

new
5/1/09

EA Engineering, Science and Technology

Client Sample ID: SRM

TOTAL Metals

Lot-Sample #....: C9B250192-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Antimony	0.13 B J	0.20	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AK
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0033	
Selenium	0.15 B J	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AL
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.041	
Thallium	0.098 B J	0.10	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AM
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.0020	
Zinc	22.8	0.50	mg/kg	SW846 6020	03/04-03/05/09	K7N3F1AN
		Dilution Factor: 1		Analysis Time...: 20:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9063236	MDL.....: 0.012	

NOTE(S):

B Estimated result. Result is less than RL.

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

lew

5/10/09

POLYNUCLEAR AROMATIC HYDRCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B250192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-10-2	C9B250192-001	Soil
1MS	BH-SED-10-2MS	C9B250192-001MS	Soil
1MSD	BH-SED-10-2MSD	C9B250192-001MSD	Soil
1DL	BH-SED-10-2DL	C9B250192-001DL	Soil
2	BH-SED-11-2	C9B250192-004	Soil
2DL	BH-SED-11-2DL	C9B250192-004DL	Soil
3	SRM	C9B250192-005	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - Two samples exhibited high concentrations of target compounds and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-001 Work Order #....: K7N2P1AC Matrix.....: SOLID
 Date Sampled....: 02/24/09 13:20 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057012 Analysis Time...: 20:12
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	940	160	ug/kg	25
2-Methylnaphthalene	1500	160	ug/kg	32
Naphthalene	32000 33000 E	160	ug/kg	24
Acenaphthylene	2200	160	ug/kg	32
Acenaphthene	1600	160	ug/kg	26
Fluorene	1600	160	ug/kg	25
Phenanthrene	8800	160	ug/kg	19
Anthracene	5000	800	ug/kg	29
Fluoranthene	20000	160	ug/kg	14
Pyrene	12000	160	ug/kg	43
Benzo (a) anthracene	9900	160	ug/kg	26
Chrysene	8000	160	ug/kg	28
Benzo (b) fluoranthene	10000	160	ug/kg	33
Benzo (k) fluoranthene	3700	160	ug/kg	34
Benzo (a) pyrene	8900	160	ug/kg	46
Indeno (1,2,3-cd) pyrene	4000	160	ug/kg	8.9
Dibenzo (a,h) anthracene	1400	160	ug/kg	36
Benzo (ghi) perylene	4200	160	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

less
51,109

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2 DL

GC/MS Semivolatiles

Use original

Lot-Sample #....: C9B250192-001 Work Order #....: K7N2P2AC Matrix.....: SOLID
 Date Sampled....: 02/24/09 13:20 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9057012 Analysis Time...: 21:34
 Dilution Factor: 15 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	800	250	ug/kg	37
2-Methylnaphthalene	1300	250	ug/kg	48
Naphthalene	32000	250	ug/kg	35
Acenaphthylene	1800	250	ug/kg	49
Acenaphthene	1400	250	ug/kg	39
Fluorene	1600	250	ug/kg	37
Phenanthrene	7000	250	ug/kg	29
Anthracene	4100	1200	ug/kg	43
Fluoranthene	17000	250	ug/kg	21
Pyrene	12000	250	ug/kg	65
Benzo (a) anthracene	8000	250	ug/kg	39
Chrysene	7200	250	ug/kg	43
Benzo (b) fluoranthene	7900	250	ug/kg	49
Benzo (k) fluoranthene	4300	250	ug/kg	51
Benzo (a) pyrene	7700	250	ug/kg	68
Indeno (1,2,3-cd) pyrene	3700	250	ug/kg	13
Dibenzo (a,h) anthracene	1300	250	ug/kg	54
Benzo (ghi) perylene	4100	250	ug/kg	18

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

*See
5/1/09*

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-11-2

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-004 Work Order #....: K7N201AC Matrix.....: SOLID
 Date Sampled....: 02/24/09 16:00 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057012 Analysis Time...: 21:11
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 54 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	12000	150	ug/kg	22
2-Methylnaphthalene	41000 34000 E	150	ug/kg	29
Naphthalene	2400000 280000 E	150	ug/kg	21
Acenaphthylene	2600	150	ug/kg	29
Acenaphthene	17000	150	ug/kg	23
Fluorene	16000	150	ug/kg	22
Phenanthrene	99000 31000 E	150	ug/kg	17
Anthracene	16000	720	ug/kg	26
Fluoranthene	8500 30000 E	150	ug/kg	12
Pyrene	23000	150	ug/kg	39
Benzo (a) anthracene	18000	150	ug/kg	23
Chrysene	16000	150	ug/kg	25
Benzo (b) fluoranthene	14000	150	ug/kg	29
Benzo (k) fluoranthene	6500	150	ug/kg	30
Benzo (a) pyrene	15000	150	ug/kg	41
Indeno (1,2,3-cd) pyrene	6900	150	ug/kg	8.0
Dibenzo (a,h) anthracene	2500	150	ug/kg	32
Benzo (ghi) perylene	7300	150	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

lw
 5/1/09

Client Sample ID: BH-SED-11-2 02

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-004 Work Order #....: K7N202AC Matrix.....: SOLID
 Date Sampled....: 02/24/09 16:00 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 03/05/09
 Prep Batch #....: 9057012 Analysis Time...: 16:23
 Dilution Factor: 1000 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 54 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

use original

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	14000 J	15000	ug/kg	2200
2-Methylnaphthalene	41000	15000	ug/kg	2900
Naphthalene	2400000	15000	ug/kg	2100
Acenaphthylene	4200 J	15000	ug/kg	2900
Acenaphthene	40000	15000	ug/kg	2300
Fluorene	34000	15000	ug/kg	2200
Phenanthrene	99000	15000	ug/kg	1700
Anthracene	35000 J	72000	ug/kg	2600
Fluoranthene	85000	15000	ug/kg	1200
Pyrene	66000	15000	ug/kg	3900
Benzo (a) anthracene	37000	15000	ug/kg	2300
Chrysene	33000	15000	ug/kg	2500
Benzo (b) fluoranthene	47000	15000	ug/kg	2900
Benzo (k) fluoranthene	14000 J	15000	ug/kg	3000
Benzo (a) pyrene	29000	15000	ug/kg	4100
Indeno (1,2,3-cd) pyrene	12000 J	15000	ug/kg	800
Dibenzo (a,h) anthracene	ND	15000	ug/kg	3200
Benzo (ghi) perylene	14000 J	15000	ug/kg	1100

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

 C9B250192
 20
 5/1/09

EA Engineering, Science and Technology

Client Sample ID: SRM

GC/MS Semivolatiles

Lot-Sample #....: C9B250192-005 Work Order #....: K7N3F1AA Matrix.....: SOLID
 Date Sampled....: 02/24/09 Date Received...: 02/25/09 09:45 MS Run #.....: 9057003
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057012 Analysis Time...: 21:30
 Dilution Factor: 60 Initial Wgt/Vol: 5 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	240 J	400	ug/kg	61
2-Methylnaphthalene	320 J	400	ug/kg	79
Naphthalene	1300	400	ug/kg	58
Acenaphthylene	940	400	ug/kg	80
Acenaphthene	220 J	400	ug/kg	64
Fluorene	320 J	400	ug/kg	60
Phenanthrene	3100	400	ug/kg	48
Anthracene	830 J	2000	ug/kg	70
Fluoranthene	5600	400	ug/kg	34
Pyrene	5000	400	ug/kg	110
Benzo (a) anthracene	2900	400	ug/kg	64
Chrysene	3500	400	ug/kg	70
Benzo (b) fluoranthene	3300	400	ug/kg	81
Benzo (k) fluoranthene	1400	400	ug/kg	83
Benzo (a) pyrene	2100	400	ug/kg	110
Indeno (1,2,3-cd) pyrene	1300	400	ug/kg	22
Dibenzo (a, h) anthracene	500	400	ug/kg	88
Benzo (ghi) perylene	1700	400	ug/kg	29

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

J Estimated result. Result is less than RL.

less
 5/11/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B250192

Client: Maryland Environmental Service, Millersville, MD Date: May 1, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-10-2	C9B250192-001	Soil
2	BH-SED-11-2	C9B250192-004	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.043 RRF	L/R	All samples

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

EA Engineering, Science and Technology

Client Sample ID: BH-SED-10-2

GC/MS Volatiles

Lot-Sample #....: C9B250192-001 Work Order #....: K7N2P1AU Matrix.....: SOLID
 Date Sampled....: 02/24/09 Date Received...: 02/25/09 MS Run #.....: 9057030
 Prep Date.....: 02/26/09 Analysis Date...: 02/26/09
 Prep Batch #....: 9057034 Analysis Time...: 11:27
 Dilution Factor: 0.88 Initial Wgt/Vol: 5.68 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 59 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.95
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.96
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

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 5/11/09

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-10-2

GC/MS Volatiles

Lot-Sample #...: C9B250192-001 Work Order #...: K7N2P1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	112	(72 - 127)
4-Bromofluorobenzene	100	(63 - 120)
Dibromofluoromethane	102	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

aw
Slilo9

EA Engineering, Science and Technology

Client Sample ID: BH-SKD-11-2

GC/MS Volatiles

Lot-Sample #....: C9B250192-004	Work Order #....: K7N201AU	Matrix.....: SOLID
Date Sampled....: 02/24/09	Date Received...: 02/25/09	MS Run #.....: 9057030
Prep Date.....: 02/26/09	Analysis Date...: 02/26/09	
Prep Batch #....: 9057034	Analysis Time...: 11:52	
Dilution Factor: 0.92	Initial Wgt/Vol: 5.41 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 54	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	200	ug/kg	14
Acrylonitrile	ND	200	ug/kg	21
Benzene	ND	10	ug/kg	1.4
Bromodichloromethane	ND	10	ug/kg	1.1
Bromoform	ND	10	ug/kg	0.89
Bromomethane	ND	10	ug/kg	1.5
2-Butanone (MEK)	ND	10	ug/kg	1.8
Carbon tetrachloride	ND	10	ug/kg	0.90
Chloroethane	ND	10	ug/kg	3.1
2-Chloroethyl vinyl ether	ND	20	ug/kg	1.6
Chloroform	ND	10	ug/kg	1.2
Chloromethane	ND	10	ug/kg	1.7
Dibromochloromethane	ND	10	ug/kg	1.4
1,2-Dichlorobenzene	ND	10	ug/kg	1.6
1,3-Dichlorobenzene	ND	10	ug/kg	1.3
1,4-Dichlorobenzene	ND	10	ug/kg	1.3
trans-1,2-Dichloroethene	ND	10	ug/kg	1.2
Dichlorodifluoromethane	ND	10	ug/kg	1.3
1,1-Dichloroethane	ND	10	ug/kg	1.2
1,2-Dichloroethane	ND	10	ug/kg	1.2
1,1-Dichloroethene	ND	10	ug/kg	1.7
1,2-Dichloropropane	ND	10	ug/kg	1.1
cis-1,3-Dichloropropene	ND	10	ug/kg	1.4
trans-1,3-Dichloropropene	ND	10	ug/kg	1.2
Ethylbenzene	ND	10	ug/kg	1.3
Methylene chloride	ND	10	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	10	ug/kg	1.4
Tetrachloroethene	ND	10	ug/kg	1.4
Toluene	ND	10	ug/kg	1.5
1,1,1-Trichloroethane	ND	10	ug/kg	0.98
1,1,2-Trichloroethane	ND	10	ug/kg	1.7
Trichloroethene	ND	10	ug/kg	1.3
Trichlorofluoromethane	ND	10	ug/kg	1.8
Vinyl chloride	ND	10	ug/kg	0.94

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lew
5/1/09

EA Engineering, Science and Technology

Client Sample ID: BH-SED-11-2

GC/MS Volatiles

Lot-Sample #...: C9B250192-004 Work Order #...: K7N201AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	92	(52 - 124)
Toluene-d8	106	(72 - 127)
4-Bromofluorobenzene	105	(63 - 120)
Dibromofluoromethane	100	(68 - 121)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ew
5/1/09

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. EA/MES SPARROWS

EA/MES Sparrows Point 18001868

Lot #: C9B250196

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 20, 2009

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B250196

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 25, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

March 18, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9B250196

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on February 26th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
	Received: 02/26/09 ETR No: 130355		
786279	BH-SED-10-2	02/24/09	SOLID
786280	BH-SED-11-2	02/24/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

There were no exceptions to the method quality control criteria during the analyses of these samples.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, reading "Ron Pentkowski". The signature is written in a cursive, flowing style.

Ron Pentkowski
Project Manager

Enclosure

Cooler Receipt Form
TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013
Cooler Rec'd & Opened for Temp. Check on: 2/25/09
Coolers Opened and Unpacked on: 2/25/09 By: PRF
TestAmerica Pittsburgh Lot Number: C9 B250196 (Signature)

- | | | | |
|---|-------------------------------------|----|-------------------------------------|
| | Yes | No | NA |
| 1. Were custody seals on the outside of the cooler? _____ | | | <input checked="" type="checkbox"/> |
| If YES, how many and where? Quantity _____ Location _____ | | | |
| Were signatures and date correct? _____ | | | <input checked="" type="checkbox"/> |
| 2. Were custody papers included inside the cooler? _____ | <input checked="" type="checkbox"/> | | |
| 3. Were custody papers properly filled out (ink, signed, match labels)? _____ | <input checked="" type="checkbox"/> | | |
| 4. Did you sign the custody papers in the appropriate place? _____ | <input checked="" type="checkbox"/> | | |
| 5. Was shippers packing slip attached to this form? _____ | <input checked="" type="checkbox"/> | | |
| 6. Were packing materials used? _____ | <input checked="" type="checkbox"/> | | |
| If YES, what type? <u>Bubble Wrap</u> | | | |
| 7. Were the samples received within the acceptable temperature range? _____ | <input checked="" type="checkbox"/> | | |
| 8. Were the samples appropriately preserved? _____ | | | <input checked="" type="checkbox"/> |
| 9. Were all bottles sealed in separate plastic bags? _____ | <input checked="" type="checkbox"/> | | |
| 10. Did all bottles arrive in good condition (unbroken)? _____ | <input checked="" type="checkbox"/> | | |
| 11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____ | <input checked="" type="checkbox"/> | | |
| 12. Did all bottle labels and/or tags agree with custody papers? _____ | <input checked="" type="checkbox"/> | | |
| 13. Were correct bottles used for tests indicated? _____ | <input checked="" type="checkbox"/> | | |
| 14. Were all VOA vials checked for the presence of air bubbles? _____ | | | <input checked="" type="checkbox"/> |
| 15. Was a sufficient amount of sample sent in each bottle? _____ | <input checked="" type="checkbox"/> | | |
| 16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO | | | |

Explain any discrepancies: _____

Level 2 Review _____
Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved

UP: Unpreserved

[illegible]

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

Comments:

[illegible]

* Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid

Hydrochloric Acid.

Sulfuric Acid

Sodium Hydroxide

FedEx[®] US Airbill[™]

Express

FedEx
Tracking
Number

8565 6932 6639

1 From This portion can be removed for Recipient's records.

Date 7/24/07 FedEx Tracking Number

856569326639

Sender's
Name

TOOZ USA

Phone

410-611-150

Company

E A ENGINEERING SCIENCE & TECH

Address

15 LOVETON CIR

Dept./Floor/Suite/Room

City

SPARKS GLENCOE

State

MD

ZIP 21152

2 Your Internal Billing Reference

853106

3 To

Recipient's
Name

DAVID H. HARRIS JR.

Phone

913-961-7322

Company

TRITAMERICA ENGINEERING

Recipient's
Address

101 BROADWAY

Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

SPARKS GLENCOE

To request a package be held at a specific FedEx location, print FedEx address here.

City

SPARKS GLENCOE

State

MD

ZIP 21152

0026961324



8565 6932 6639

Recipient's Copy

4a Express Package Service

Packages up to 150 lbs.

☒ FedEx Priority Overnight
Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.

☐ FedEx First Overnight
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.

☐ FedEx 2Day
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.
FedEx Envelope rate not available. Minimum charge: One-pound rate.

☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

* To most locations.

4b Express Freight Service

Packages over 150 lbs.

☐ FedEx 1Day Freight[™]
Next business day.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ FedEx 2Day Freight
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ FedEx 3Day Freight
Third business day.*
Saturday Delivery NOT available.

** To most locations.

* Call for Confirmation.

5 Packaging

☐ FedEx Envelope*

☐ FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.

☐ FedEx Box

☐ FedEx Tube

☐ Other
* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3.

☐ SATURDAY Delivery
Not available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.

☐ HOLD Weekday
at FedEx Location
Not available for
FedEx First Overnight.

☐ HOLD Saturday
at FedEx Location
Available ONLY for FedEx Priority
Overnight and FedEx 2Day
to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes
As per attached
Shipper's Declaration.

☐ Yes
Shipper's Declaration
not required.

☐ Dry Ice
Dry ice, 9 UN 1845
☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment

Bill to: Enter FedEx Acct. No. or Credit Card No. below.

Utility Recip.
Acct. No.

☐ Sender
Acct. No. in Section
1 will be billed.

☐ Recipient

☐ Third Party

☐ Credit Card

☐ Cash/Check

Total Packages

Total Weight

Total Charges

Credit Card Auth.

Your liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ No Signature
Required
Package may be left with-
out obtaining a signature
for delivery.

☐ Direct Signature
Anyone at recipient's
address may sign for delivery.
Fee applies.

☐ Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 3/05 Part #150279-01994-2005 FedEx-PRINTED IN U.S.A.-SRS

C9B250196

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: EAMES SPARROW EAMES Sparrows Point 1
Report Type: C1 CLP - CD only
Client: 126501 - EA Engineering, Science and Technology

Date Received: 2009-02-25
Analytical Due Date: 2009-03-16
Report Due Date: 2009-03-17

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-10-2 DATE SAMPLED: 20090224 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7N291AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7N291AA METAL: XX

SMP#: 2 CLIENT ID: BH-SED-11-2 DATE SAMPLED: 20090224 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7N3D1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7N3D1AA METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: Patrick R. Ernst DATE: 2/25/09 1700

RECEIVED FOR LAB BY: [Signature] DATE: 2/26/09 1035

DATA SUMMARY PACKAGE

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9B250196



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-11-2

Lab Name: TestAmerica Burlington

Contract: C9B250196

SDG No.: 9B250196

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 786280

Matrix: SOLID

Client: STLPAP

Date Received: 02/26/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/09/09		%	1	0.0	117.6	

Printed on: 03/17/09 09:51 AM

Start Date:	03/09/09
Start Time:	1930
End Date:	03/10/09
Analyst:	MAP

(1-17)

Particle Size of Soils by ASTM D422

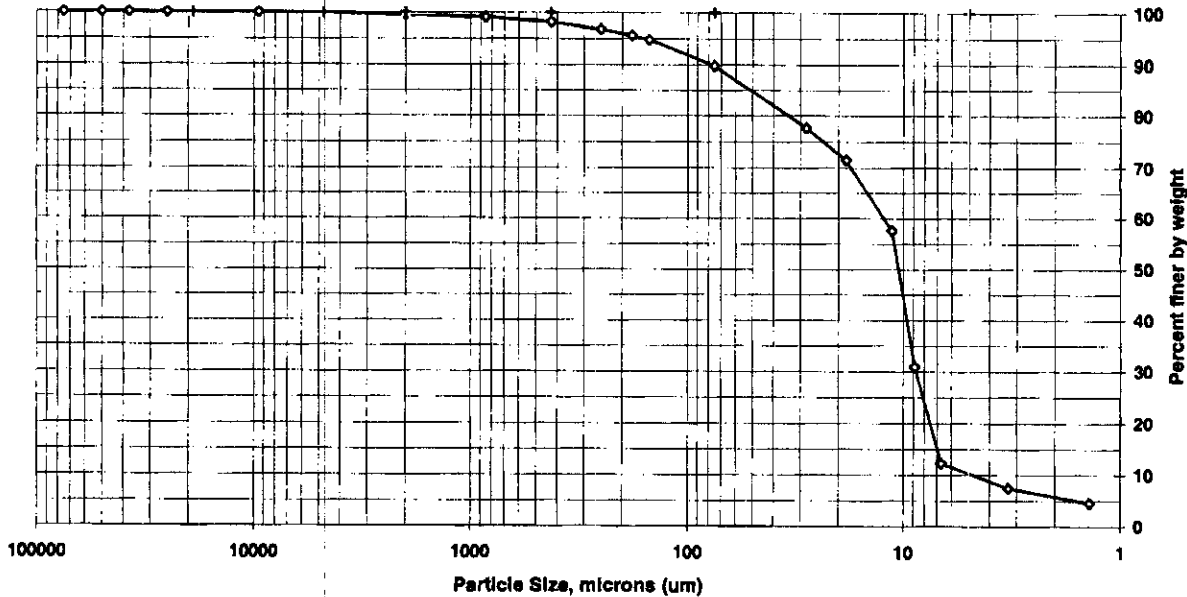
Client Code: STLPAP
Sample ID: BH-SED-10-2
Lab ID: 786279

SDG: 9B250196
ETR(s): 130355

Date Received: 2/26/2009
Start Date: 2/26/2009
End Date: 3/17/2009

Percent Solids: 42.9%
Specific Gravity: 2.650
Maximum Particle Size: Crs sand

Non-soil material: tar, shells
Shape (> #10): angular
Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.5	0.5
#20	850	99.1	0.4
#40	425	98.3	0.8
#60	250	96.9	1.4
#80	180	95.7	1.2
#100	150	94.8	0.8
#200	75	89.8	5.1
Hydrometer	28.2	77.7	12.1
	18.4	71.5	6.2
	11.3	57.6	13.9
	8.8	31.0	26.6
	6.7	12.4	18.6
	3.3	7.5	4.9
V	1.4	4.6	2.8

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	10.2
Coarse Sand	0.5
Medium Sand	1.3
Fine Sand	8.5
Silt	77.4
Clay	12.4

Preparation Method: D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

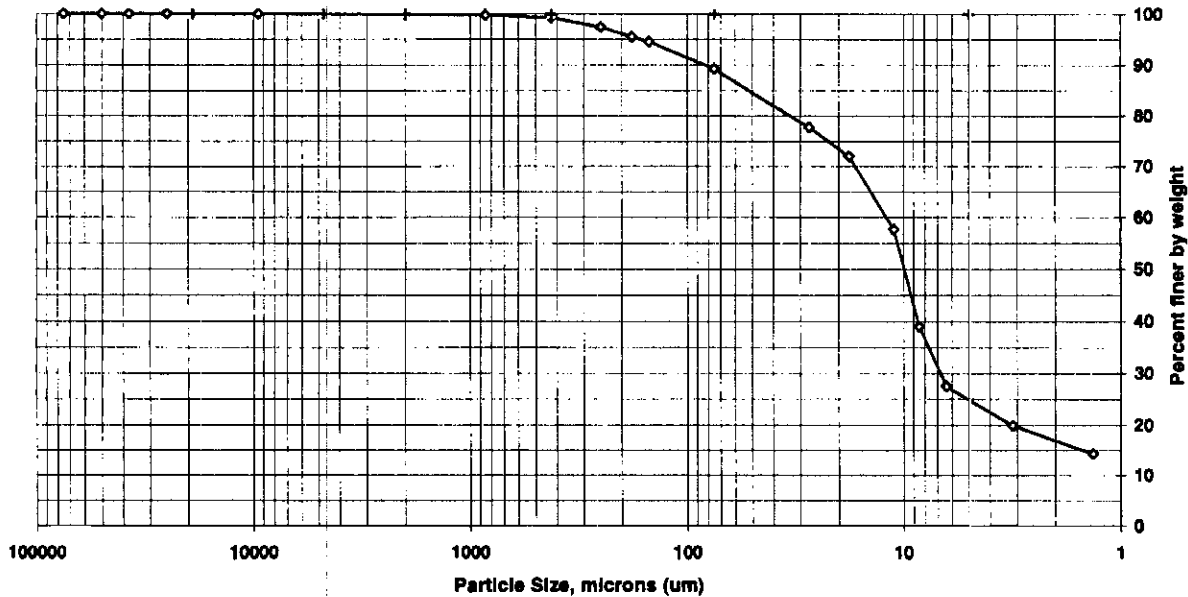
Client Code: STLPAP
 Sample ID: BH-SED-11-2
 Lab ID: 786280

SDG: 9B250196
 ETR(e): 130355

Date Received: 2/26/2009
 Start Date: 2/26/2009
 End Date: 3/17/2009

Percent Solids: 46.0%
 Specific Gravity: 2.650
 Maximum Particle Size: Crs sand

Non-soil material: na
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.9	0.1
#20	850	99.7	0.2
#40	425	99.3	0.4
#60	250	97.4	1.9
#80	180	95.5	1.9
#100	150	94.6	0.9
#200	75	89.3	5.3
Hydrometer	27.3	77.8	11.5
	17.8	72.1	5.7
	11.1	57.7	14.4
	8.5	39.0	18.7
	6.4	27.5	11.5
	3.1	19.9	7.7
V	1.3	14.4	5.5

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	10.7
Coarse Sand	0.1
Medium Sand	0.6
Fine Sand	10.0
Silt	61.7
Clay	27.5

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

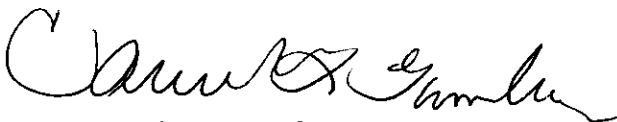
MES Sparrows Point 18001868

Lot #: C9B260258

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 12, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NA	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B260258

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 26, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard CC40227; but were within expected performance range for these compounds: 1,1,1,2-tetrachloroethane 28.7%, 1,2,3-trichloropropane 34.4%, acrolein 42.7%, and dichlorodifluoromethane 33.0%.

The following compound was out high by >50% in the calibration verification standard CC40227 and the compound was ND in the samples: 2-Butanone 56.1%

Sample BH-SED-03A-12 was analyzed at a dilution due to matrix interference.

Due to the concentration of target compounds detected, sample BH-SED-13A-6 was analyzed at a dilution.

GC/MS Semivolatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

Due to the concentration of target compounds detected, the samples and associated QC (matrix spike and matrix spike duplicate) were analyzed at a dilution.

CASE NARRATIVE

**EA Engineering
Sparrows Point**

LOT # C9B260258

GC/MS Semivolatiles (cont.):

The matrix spike duplicate of sample BH-SED-03A-12 recovered above control limits for naphthalene.

Metals:

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

General Chemistry:

The samples were analyzed at a dilution for TOC.

METHODS SUMMARY

C9B260258

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW346 9012A
ICP-MS (6020)	SW846 6020	SW346 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW346 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW346 5035

References:

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND
WASTEWATER", 20TH EDITION."

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

SAMPLE SUMMARY

C9B260258

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K7RJV	001	BH-SED-03A-12	02/25/09	11:00
K7RJ2	002	BH-SED-03A-TOC	02/25/09	11:05
K7RJ4	003	BH-SED-13A-TOC	02/25/09	13:46
K7RJ8	004	BH-SED-13A-6	02/25/09	14:15

NOTE(S) :

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

[illegible]

Cooler Receipt Form
TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 2/26/09

Coolers Opened and Unpacked on: 2/26/09 By: PRF

(Signature)

TestAmerica Pittsburgh Lot Number: C9B260258

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

C9B260258

10

(1 - 63)

FedEx US Airbill

Express

FedEx Tracking Number **8565 6932 6650**

SPH22

Form ID No. **0215**

Recipient's Copy

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records

Date **11/11/01** FedEx Tracking Number **856569326650**

Sender's Name **FedEx** Phone **1-800-468-3333**

Company **FedEx**

Address **1111 11th Ave**

City **NEW YORK** State **NY** ZIP **10111**

2 Your Internal Billing Reference

3 To Recipient's Name **FedEx** Phone **1-800-468-3333**

Company **FedEx**

Recipient's Address **1111 11th Ave**

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address **1111 11th Ave**

To request a package be held at a specific FedEx location, print FedEx address here.

City **NEW YORK** State **NY** ZIP **10111**



8565 6932 6650

4a Express Package Service

☐ FedEx Priority Overnight Next business morning. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight Next business afternoon. * Saturday Delivery NOT available.

☐ FedEx First Overnight Earliest next business morning delivery to select locations. * Saturday Delivery NOT available.

☐ FedEx 2Day Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver Third business day. * Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service

☐ FedEx 1Day Freight* Next business day. ** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 2Day Freight Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 3Day Freight Third business day. * Saturday Delivery NOT available.

* Call for Confirmation. ** To most locations.

5 Packaging

☐ FedEx Envelope* ☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. ☐ FedEx Box ☐ FedEx Tube ☒ Other

* Declared value limit \$500.

6 Special Handling

☐ SATURDAY Delivery Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☐ HOLD Weekday at FedEx Location Not available for FedEx First Overnight.

☐ HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

☐ No ☐ Yes As per attached Shipper's Declaration ☐ Yes Shipper's Declaration not required.

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ Dry Ice Dry Ice, 9 UN 1845 x kg ☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Obtain Recp. Acct. No.

Total Packages **1** Total Weight **1.0**

Total Charges **51.9**

Credit Card Auth.

*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ No Signature Required Package may be left without obtaining a signature for delivery.

☐ Direct Signature Anyone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

Rev. Date 8/05-Part #158279-©1994-2005 FedEx-PRINTED IN U.S.A.-SRS

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Volatiles

Lot-Sample #....: C9B260258-001	Work Order #....: K7RJV1AU	Matrix.....: SOLID
Date Sampled...: 02/25/09	Date Received...: 02/26/09	MS Run #.....:
Prep Date.....: 02/27/09	Analysis Date...: 02/27/09	
Prep Batch #....: 9058123	Analysis Time...: 10:14	
Dilution Factor: 1.17	Initial Wgt/Vol: 4.29 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 40	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	9800	ug/kg	1500
Acrylonitrile	ND	9800	ug/kg	790
Benzene	ND	490	ug/kg	96
Bromodichloromethane	ND	490	ug/kg	91
Bromoform	ND	490	ug/kg	100
Bromomethane	ND	490	ug/kg	150
2-Butanone (MEK)	ND	490	ug/kg	110
Carbon tetrachloride	ND	490	ug/kg	110
Chloroethane	ND	490	ug/kg	73
2-Chloroethyl vinyl ether	ND	980	ug/kg	110
Chloroform	ND	490	ug/kg	98
Chloromethane	ND	490	ug/kg	140
Dibromochloromethane	ND	490	ug/kg	63
1,2-Dichlorobenzene	ND	490	ug/kg	66
1,3-Dichlorobenzene	ND	490	ug/kg	49
1,4-Dichlorobenzene	ND	490	ug/kg	51
trans-1,2-Dichloroethene	ND	490	ug/kg	73
Dichlorodifluoromethane	ND	490	ug/kg	62
1,1-Dichloroethane	ND	490	ug/kg	99
1,2-Dichloroethane	ND	490	ug/kg	94
1,1-Dichloroethene	ND	490	ug/kg	100
1,2-Dichloropropane	ND	490	ug/kg	120
cis-1,3-Dichloropropene	ND	490	ug/kg	71
trans-1,3-Dichloropropene	ND	490	ug/kg	57
Ethylbenzene	ND	490	ug/kg	60
Methylene chloride	ND	490	ug/kg	110
1,1,2,2-Tetrachloroethane	ND	490	ug/kg	91
Tetrachloroethene	ND	490	ug/kg	80
Toluene	ND	490	ug/kg	82
1,1,1-Trichloroethane	ND	490	ug/kg	100
1,1,2-Trichloroethane	ND	490	ug/kg	110
Trichloroethene	ND	490	ug/kg	78
Trichlorofluoromethane	ND	490	ug/kg	110
Vinyl chloride	ND	490	ug/kg	130

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Volatiles

Lot-Sample #...: C9B260258-001 Work Order #...: K7RJV1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	99	(52 - 124)
Toluene-d8	109	(72 - 127)
4-Bromofluorobenzene	120	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

GC/MS Volatiles

Lot-Sample #....: C9B260258-004	Work Order #....: K7RJ81AU	Matrix.....: SOLID
Date Sampled....: 02/25/09	Date Received...: 02/26/09	MS Run #.....:
Prep Date.....: 02/27/09	Analysis Date...: 02/27/09	
Prep Batch #....: 9058123	Analysis Time...: 09:50	
Dilution Factor: 1.3	Initial Wgt/Vol: 3.85 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 19	Analyst ID.....: 010099	Instrument ID...: HP4
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	8000	ug/kg	1300
Acrylonitrile	ND	8000	ug/kg	650
Benzene	490	400	ug/kg	79
Bromodichloromethane	ND	400	ug/kg	75
Bromoform	ND	400	ug/kg	86
Bromomethane	ND	400	ug/kg	130
2-Butanone (MEK)	ND	400	ug/kg	87
Carbon tetrachloride	ND	400	ug/kg	87
Chloroethane	ND	400	ug/kg	60
2-Chloroethyl vinyl ether	ND	800	ug/kg	89
Chloroform	ND	400	ug/kg	81
Chloromethane	ND	400	ug/kg	110
Dibromochloromethane	ND	400	ug/kg	52
1,2-Dichlorobenzene	ND	400	ug/kg	55
1,3-Dichlorobenzene	ND	400	ug/kg	41
1,4-Dichlorobenzene	ND	400	ug/kg	42
trans-1,2-Dichloroethene	ND	400	ug/kg	60
Dichlorodifluoromethane	ND	400	ug/kg	51
1,1-Dichloroethane	ND	400	ug/kg	81
1,2-Dichloroethane	ND	400	ug/kg	77
1,1-Dichloroethene	ND	400	ug/kg	86
1,2-Dichloropropane	ND	400	ug/kg	100
cis-1,3-Dichloropropene	ND	400	ug/kg	58
trans-1,3-Dichloropropene	ND	400	ug/kg	47
Ethylbenzene	57 J	400	ug/kg	50
Methylene chloride	ND	400	ug/kg	87
1,1,2,2-Tetrachloroethane	ND	400	ug/kg	75
Tetrachloroethene	ND	400	ug/kg	66
Toluene	300 J	400	ug/kg	68
1,1,1-Trichloroethane	ND	400	ug/kg	83
1,1,2-Trichloroethane	ND	400	ug/kg	93
Trichloroethene	ND	400	ug/kg	64
Trichlorofluoromethane	ND	400	ug/kg	90
Vinyl chloride	ND	400	ug/kg	100

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

GC/MS Volatiles

Lot-Sample #...: C9B260258-004 Work Order #...: K7RJ81AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	106	(72 - 127)
4-Bromofluorobenzene	116	(63 - 120)
Dibromofluoromethane	101	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9B260258

Extraction: XXA4BQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-03A-12	99	109	120	104	00
02	BH-SED-13A-6	96	106	116	101	00
03	METHOD BLK. K7R7G1AA	94	103	111	97	00
04	LCS K7R7G1AC	87	93	99	89	00
05	LCSD K7R7G1AD	81	94	101	91	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9B270000

WO #: K7R7G1AC

BATCH: 9058123

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	2000	1810	91	59 - 129	
Trichloroethene	2000	2020	101	76 - 119	
Benzene	2000	1980	99	77 - 120	
Toluene	2000	2090	105	78 - 124	
Chlorobenzene	2000	2160	108	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9B270000

WO #: K7R7G1AD

BATCH: 9058123

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	2000	1760	88	59 - 129	
Trichloroethene	2000	1940	97	76 - 119	
Benzene	2000	1880	94	77 - 120	
Toluene	2000	2010	100	78 - 124	
Chlorobenzene	2000	2070	103	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

K7R7G1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 4022705.D

Lot Number: C9B260258

Date Analyzed: 02/27/09

Time Analyzed: 08:18

Matrix: SOLID

Date Extracted: 02/27/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP4

Level: (low/med) MED

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-03A-12	K7RJV1AU	4022710.D	02/27/09	10:14
02	BH-SED-13A-6	K7RJ81AU	4022709.D	02/27/09	09:50
03	CHECK SAMPLE	K7R7G1AC C	4022706.D	02/27/09	08:41
04	DUPLICATE CHECK	K7R7G1AD L	4022707.D	02/27/09	09:04
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B260258
MB Lot-Sample #: C9B270000-123

Work Order #...: K7R7G1AA

Matrix.....: SOLID

Analysis Date...: 02/27/09
Dilution Factor: 1

Prep Date.....: 02/27/09
Prep Batch #...: 9058123
Initial Wgt/Vol: 5 g
Analyst ID.....: 010099

Analysis Time...: 08:18
Final Wgt/Vol...: 5 mL
Instrument ID...: HP4

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acrolein	ND	5000	ug/kg	SW846 8260B
Acrylonitrile	ND	5000	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	250	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	250	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	500	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Chloromethane	ND	250	ug/kg	SW846 8260B
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	250	ug/kg	SW846 8260B
Vinyl chloride	ND	250	ug/kg	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	94	(52 - 124)
Toluene-d8	103	(72 - 127)
4-Bromofluorobenzene	111	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B260258

Work Order #...: K7R7G1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromofluoromethane	97	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B260258
 Lab File ID (Standard): CC40227 Date Analyzed: 02/27/09
 Instrument ID: HP4 Time Analyzed: 0524
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	898983	7.68	184853	10.76	310264	13.09
UPPER LIMIT	1797966	7.88	369706	10.96	620528	13.29
LOWER LIMIT	449492	7.48	92427	10.56	155132	12.89
EPA SAMPLE NO.						
01 INTRA-LAB BL	896575	7.69	187340	10.76	307815	13.10
02 INTRA-LAB CH	898903	7.68	186516	10.76	316072	13.09
03 INTRA-LAB CH	926332	7.68	193192	10.76	320169	13.09
04 BH-SED-13A-6	784984	7.68	165802	10.77	279534	13.10
05 BH-SED-03A-1	774426	7.69	160430	10.76	274978	13.09
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Semivolatiles

Lot-Sample #....: C9B260258-001	Work Order #....: K7RJV1AC	Matrix.....: SOLID
Date Sampled....: 02/25/09	Date Received...: 02/26/09	MS Run #.....: 9058002
Prep Date.....: 02/27/09	Analysis Date...: 02/27/09	
Prep Batch #....: 9058011	Analysis Time...: 20:15	
Dilution Factor: 5	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 40	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	600	56	ug/kg	8.4
2-Methylnaphthalene	1400	56	ug/kg	11
Naphthalene	16000 E	56	ug/kg	8.1
Acenaphthylene	290	56	ug/kg	11
Acenaphthene	75	56	ug/kg	8.9
Fluorene	310	56	ug/kg	8.4
Phenanthrene	480	56	ug/kg	6.6
Anthracene	150 J	280	ug/kg	9.7
Fluoranthene	600	56	ug/kg	4.7
Pyrene	660	56	ug/kg	15
Benzo (a) anthracene	420	56	ug/kg	8.9
Chrysene	320	56	ug/kg	9.7
Benzo (b) fluoranthene	500	56	ug/kg	11
Benzo (k) fluoranthene	270	56	ug/kg	12
Benzo (a) pyrene	460	56	ug/kg	16
Indeno (1,2,3-cd) pyrene	220	56	ug/kg	3.1
Dibenzo (a,h) anthracene	66	56	ug/kg	12
Benzo (ghi) perylene	260	56	ug/kg	4.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(27 - 110)
Terphenyl-d14	64	(21 - 130)
2-Fluorobiphenyl	61	(28 - 108)
2-Fluorophenol	57	(28 - 107)
Phenol-d5	62	(30 - 112)
2,4,6-Tribromophenol	31	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Semivolatiles

Lot-Sample #....: C9B260258-001	Work Order #....: K7RJV2AC	Matrix.....: SOLID
Date Sampled....: 02/25/09	Date Received...: 02/26/09	MS Run #.....: 9058002
Prep Date.....: 02/27/09	Analysis Date...: 03/05/09	
Prep Batch #....: 9058011	Analysis Time...: 16:43	
Dilution Factor: 15	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 40	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	650	170	ug/kg	25
2-Methylnaphthalene	1600	170	ug/kg	33
Naphthalene	29000	170	ug/kg	24
Acenaphthylene	320	170	ug/kg	33
Acenaphthene	93 J	170	ug/kg	27
Fluorene	350	170	ug/kg	25
Phenanthrene	540	170	ug/kg	20
Anthracene	180 J	830	ug/kg	29
Fluoranthene	700	170	ug/kg	14
Pyrene	730	170	ug/kg	44
Benzo (a) anthracene	460	170	ug/kg	27
Chrysene	380	170	ug/kg	29
Benzo (b) fluoranthene	670	170	ug/kg	34
Benzo (k) fluoranthene	280	170	ug/kg	35
Benzo (a) pyrene	460	170	ug/kg	47
Indeno (1,2,3-cd) pyrene	220	170	ug/kg	9.2
Dibenzo (a,h) anthracene	79 J	170	ug/kg	37
Benzo (ghi) perylene	250	170	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
Nitrobenzene-d5	56	(27 - 110)	
Terphenyl-d14	76	(21 - 130)	
2-Fluorobiphenyl	67	(28 - 108)	
2-Fluorophenol	58	(28 - 107)	
Phenol-d5	66	(30 - 112)	
2,4,6-Tribromophenol	29	(21 - 116)	

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

GC/MS Semivolatiles

Lot-Sample #....: C9B260258-004	Work Order #....: K7RJ81AC	Matrix.....: SOLID
Date Sampled....: 02/25/09	Date Received...: 02/26/09	MS Run #.....: 9058002
Prep Date.....: 02/27/09	Analysis Date...: 02/27/09	
Prep Batch #....: 9058011	Analysis Time...: 21:14	
Dilution Factor: 2.5	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 19	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	120	21	ug/kg	3.1
2-Methylnaphthalene	210	21	ug/kg	4.1
Naphthalene	2400	21	ug/kg	3.0
Acenaphthylene	220	21	ug/kg	4.1
Acenaphthene	110	21	ug/kg	3.3
Fluorene	310	21	ug/kg	3.1
Phenanthrene	1100	21	ug/kg	2.5
Anthracene	260	100	ug/kg	3.6
Fluoranthene	870	21	ug/kg	1.7
Pyrene	600	21	ug/kg	5.5
Benzo (a) anthracene	340	21	ug/kg	3.3
Chrysene	320	21	ug/kg	3.6
Benzo (b) fluoranthene	310	21	ug/kg	4.2
Benzo (k) fluoranthene	140	21	ug/kg	4.3
Benzo (a) pyrene	290	21	ug/kg	5.8
Indeno (1,2,3-cd) pyrene	130	21	ug/kg	1.1
Dibenzo (a,h) anthracene	41	21	ug/kg	4.5
Benzo (ghi) perylene	150	21	ug/kg	1.5

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	59	(27 - 110)
Terphenyl-d14	68	(21 - 130)
2-Fluorobiphenyl	60	(28 - 108)
2-Fluorophenol	64	(28 - 107)
Phenol-d5	65	(30 - 112)
2,4,6-Tribromophenol	52	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9B260258

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-03A-12	58	64	61	57	62	31	00
02	BH-SED-03A-12 RE-1 DL	56	76	67	58	66	29	00
03	BH-SED-13A-6	59	68	60	64	65	52	00
04	METHOD BLK. K7R071AA	57	77	56	58	62	59	00
05	LCS K7R071AC	54	64	55	56	57	66	00
06	BH-SED-03A-12 D	60	66	65	56	66	32	00
07	BH-SED-03A-12 S	61	71	63	60	65	46	00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9B270000

WO #: K7R071AC

BATCH: 9058011

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	165	49	39 - 105	
2-Chlorophenol	333	177	53	40 - 105	
1,4-Dichlorobenzene	333	176	53	41 - 101	
N-Nitrosodi-n-propylamine	333	181	54	42 - 108	
1,2,4-Trichlorobenzene	333	177	53	41 - 105	
4-Chloro-3-methylphenol	333	181	54	43 - 110	
Acenaphthene	333	178	53	42 - 104	
4-Nitrophenol	333	173	52	27 - 131	
2,4-Dinitrotoluene	333	193	58	48 - 118	
Pentachlorophenol	333	184	55	18 - 125	
Pyrene	333	202	60	39 - 113	
4-Methylphenol	667	352	53	43 - 107	
Hexachloroethane	333	172	52	40 - 102	
Naphthalene	333	174	52	42 - 104	
4-Bromophenyl phenyl ethe	333	202	61	43 - 111	
Butyl benzyl phthalate	333	189	57	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-03A-12

Level: (low/med) LOW

Lot #: C9B260258

WO #: K7RJV1AV

BATCH: 9058011

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	556	ND	328	59	39 - 105	
2-Chlorophenol	556	ND	311	56	40 - 105	
1,4-Dichlorobenzene	556	ND	280	50	41 - 101	
N-Nitrosodi-n-propylamine	556	ND	331	60	42 - 108	
1,2,4-Trichlorobenzene	556	ND	335	60	41 - 105	
4-Chloro-3-methylphenol	556	ND	371	67	43 - 110	
Acenaphthene	556	75	448	67	42 - 104	
4-Nitrophenol	556	ND	326	59	27 - 131	
2,4-Dinitrotoluene	556	ND	369	66	48 - 118	
Pentachlorophenol	556	ND	341	61	18 - 125	
Pyrene	556	660	1010	63	39 - 113	
4-Methylphenol	1110	ND	653	59	43 - 107	
Hexachloroethane	556	ND	281	51	40 - 102	
Naphthalene	556	16000	16200	69	42 - 104	
4-Bromophenyl phenyl ethe	556	ND	343	62	43 - 111	
Butyl benzyl phthalate	556	ND	403	72	40 - 117	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-03A-12

Level: (low/med) LOW

Lot #: C9B260258

WO #: K7RJVLAW

BATCH: 9058011

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	556	357	64	8.4	40	39 - 105	
2-Chlorophenol	556	341	61	9.1	37	40 - 105	
1,4-Dichlorobenzene	556	332	60	17	32	41 - 101	
N-Nitrosodi-n-propylamine	556	376	68	13	32	42 - 108	
1,2,4-Trichlorobenzene	556	370	67	9.9	36	41 - 105	
4-Chloro-3-methylphenol	556	395	71	6.3	31	43 - 110	
Acenaphthene	556	462	70	3.1	34	42 - 104	
4-Nitrophenol	556	318	57	2.6	33	27 - 131	
2,4-Dinitrotoluene	556	373	67	1.3	33	48 - 118	
Pentachlorophenol	556	303	55	12	34	18 - 125	
Pyrene	556	1070	74	6.0	28	39 - 113	
4-Methylphenol	1110	728	66	11	36	43 - 107	
Hexachloroethane	556	299	54	6.2	34	40 - 102	
Naphthalene	556	16900	204*	4.5	25	42 - 104	a
4-Bromophenyl phenyl ethe	556	384	69	11	20	43 - 111	
Butyl benzyl phthalate	556	421	76	4.5	34	40 - 117	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limitsSpike Recovery: 1 out of 16 outside limits

COMMENTS:

FORM III

K7R071AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: D0227014.

Lot Number: C9B260258

Date Analyzed: 02/27/09

Time Analyzed: 19:35

Matrix: SOLID

Date Extracted: 02/27/09

GC Column: DB5

ID: .32

Extraction Method:

Instrument ID: 732

Level: (low/med) LOW

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

CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
=====	=====	=====	=====	=====
01 BH-SED-03A-12	K7RJV1AC	D0227016.	02/27/09	20:15
02 BH-SED-03A-12	K7RJV1AV S	D0227017.	02/27/09	20:35
03 BH-SED-03A-12	K7RJV1AW D	D0227018.	02/27/09	20:54
04 BH-SED-03A-12 DL	K7RJV2AC	D0305002.	03/05/09	16:43
05 BH-SED-13A-6	K7RJ81AC	D0227019.	02/27/09	21:14
06 CHECK SAMPLE	K7R071AC C	D0227015.	02/27/09	19:56
07				
08				
09				
10				
11				
12				
13				
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20				
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22				
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24				
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26				
27				
28				
29				
30				

COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B260258
MB Lot-Sample #: C9B270000-011

Work Order #...: K7R071AA

Matrix.....: SOLID

Analysis Date...: 02/27/09
Dilution Factor: 0.5

Prep Date.....: 02/27/09
Prep Batch #...: 9058011
Initial Wgt/Vol: 30 g
Analyst ID.....: 403801

Analysis Time...: 19:36
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 732

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a,h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	57	(27 - 110)
Terphenyl-d14	77	(21 - 130)
2-Fluorobiphenyl	56	(28 - 108)
2-Fluorophenol	58	(28 - 107)
Phenol-d5	62	(30 - 112)
2,4,6-Tribromophenol	59	(21 - 116)

NOTE (S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B260258
Lab File ID (Standard): D0227CC1 Date Analyzed: 02/27/09
Instrument ID: 732 Time Analyzed: 1239

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	794831	7.71	641521	9.74	555747	10.98
UPPER LIMIT	1589662	8.21	1283042	10.24	1111494	11.48
LOWER LIMIT	397416	7.21	320761	9.24	277874	10.48
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	912023	7.71	680808	9.75	561616	11.00
02 INTRA-LAB CH	871923	7.71	788585	9.76	559083	11.00
03 BH-SED-03A-1	920757	7.71	815622	9.76	701170	11.01
04 BH-SED-03A-1	928721	7.71	812290	9.76	717586	11.01
05 BH-SED-03A-1	907608	7.71	835098	9.76	734915	11.01
06 BH-SED-13A-6	888364	7.71	788987	9.76	724706	11.01
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B260258
Lab File ID (Standard): D0227CC1 Date Analyzed: 02/27/09
Instrument ID: 732 Time Analyzed: 1239

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	794831	7.71	641521	9.74	555747	10.98
UPPER LIMIT	1589662	8.21	1283042	10.24	1111494	11.48
LOWER LIMIT	397416	7.21	320761	9.24	277874	10.48
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	912023	7.71	680808	9.75	561616	11.00
02 INTRA-LAB CH	871923	7.71	788585	9.76	559083	11.00
03 BH-SED-03A-1	920757	7.71	815622	9.76	701170	11.01
04 BH-SED-03A-1	928721	7.71	812290	9.76	717586	11.01
05 BH-SED-03A-1	907608	7.71	835098	9.76	734915	11.01
06 BH-SED-13A-6	888364	7.71	788987	9.76	724706	11.01
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B260258
Lab File ID (Standard): D0305CC1 Date Analyzed: 03/05/09
Instrument ID: 732 Time Analyzed: 1509

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	738156	7.67	639183	9.71	533367	10.92
UPPER LIMIT	1476312	8.17	1278366	10.21	1066734	11.42
LOWER LIMIT	369078	7.17	319592	9.21	266684	10.42
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-03A-1	794039	7.67	738714	9.71	636790	10.92
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9B260258
Lab File ID (Standard): D0305CC1 Date Analyzed: 03/05/09
Instrument ID: 732 Time Analyzed: 1509

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	738156	7.67	639183	9.71	533367	10.92
UPPER LIMIT	1476312	8.17	1278366	10.21	1066734	11.42
LOWER LIMIT	369078	7.17	319592	9.21	266684	10.42
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 BH-SED-03A-1	794039	7.67	738714	9.71	636790	10.92
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

TOTAL Metals

Lot-Sample #...: C9B260258-001

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

% Moisture.....: 40

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9061169						
Silver	0.17	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AQ
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	
Arsenic	8.7	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AD
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Beryllium	0.86	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AE
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0031	
Cadmium	0.70	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AF
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0076	
Chromium	806 J	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AG
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0067	
Copper	29.8	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AH
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0071	
Nickel	19.5	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AJ
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0057	
Lead	92.1	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AK
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0028	
Antimony	0.25	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7RJV1AL
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0028	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

TOTAL Metals

Lot-Sample #...: C9B260258-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	1.5	0.42	mg/kg	SW846 6020	03/02-03/04/09	K7RJVLAM
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.034	
Thallium	0.14	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVLAM
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0017	
Zinc	183 J	0.42	mg/kg	SW846 6020	03/02-03/04/09	K7RJVLAP
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0098	
Prep Batch #...: 9062016						
Mercury	0.25	0.028	mg/kg	SW846 7471A	03/03/09	K7RJVLAR
		Dilution Factor: 0.5		Analysis Time...: 08:23	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0021	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

TOTAL Metals

Lot-Sample #...: C9B260258-004

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9061169						
Silver	0.082	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AQ
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0015	
Arsenic	5.2	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AD
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.010	
Beryllium	0.87	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AE
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0023	
Cadmium	0.27	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AF
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0056	
Chromium	31.6 J	0.12	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AG
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0049	
Copper	12.1	0.12	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AH
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0053	
Nickel	6.5	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AJ
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0042	
Lead	69.3	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AK
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0021	
Antimony	0.18	0.12	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AL
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

TOTAL Metals

Lot-Sample #...: C9B260258-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.47	0.31	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AM
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.025	
Thallium	0.059 B	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AN
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0012	
Zinc	132 J	0.31	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AP
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0072	

Prep Batch #...: 9062016

Mercury	0.056	0.020	mg/kg	SW846 7471A	03/03/09	K7RJ81AR
		Dilution Factor: 0.5		Analysis Time...: 08:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0015	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C020000-169 Prep Batch #...: 9061169						
Antimony	ND	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AJ
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Arsenic	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AA
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Beryllium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AC
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Cadmium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AD
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Chromium	0.033 B	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AE
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Copper	ND	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AF
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Lead	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AH
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Nickel	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AG
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Selenium	ND	0.25	mg/kg	SW846 6020	03/02-03/04/09	K7W191AK
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Silver	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AN
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AL
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	0.015 B	0.25	mg/kg	SW846 6020	03/02-03/04/09	K7W191AM
Dilution Factor: 0.5						
Analysis Time...: 21:03		Analyst ID.....: 400149		Instrument ID...: ICP		

MB Lot-Sample #: C9C030000-016 Prep Batch #...: 9062016

Mercury	ND	0.016	mg/kg	SW846 7471A	03/03/09	K7XWJ1AA
Dilution Factor: 0.5						
Analysis Time...: 08:01		Analyst ID.....: 031043		Instrument ID...: HGH		

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C020000-169 Prep Batch #...: 9061169					
Arsenic	90	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AP	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Beryllium	96	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AQ	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Cadmium	100	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AR	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Chromium	108	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AT	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Copper	106	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AU	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Nickel	110	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AV	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Lead	102	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AW	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Antimony	91	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AX	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Selenium	95	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AO	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Thallium	99	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AI	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	95	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191A2
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
Silver	55	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191A3
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
LCS Lot-Sample#: C9C030000-016 Prep Batch #...: 9062016					
Mercury	97	(80 - 120)	SW846 7471A	03/03/09	K7XWJ1AC
Dilution Factor: 0.5 Analysis Time...: 08:03 Analyst ID.....: 031043					
Instrument ID...: HGHYDRA					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C020000-169 Prep Batch #...: 9061169							
Arsenic	2.00	1.79	mg/kg	90	SW846 6020	03/02-03/04/09	K7W191AP
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Beryllium	2.50	2.40	mg/kg	96	SW846 6020	03/02-03/04/09	K7W191AQ
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Cadmium	2.50	2.50	mg/kg	100	SW846 6020	03/02-03/04/09	K7W191AR
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Chromium	10.0	10.8	mg/kg	108	SW846 6020	03/02-03/04/09	K7W191AT
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Copper	12.5	13.3	mg/kg	106	SW846 6020	03/02-03/04/09	K7W191AU
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Nickel	25.0	27.5	mg/kg	110	SW846 6020	03/02-03/04/09	K7W191AV
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Lead	1.00	1.02	mg/kg	102	SW846 6020	03/02-03/04/09	K7W191AW
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Antimony	25.0	22.7	mg/kg	91	SW846 6020	03/02-03/04/09	K7W191AX
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Selenium	0.500	0.476	mg/kg	95	SW846 6020	03/02-03/04/09	K7W191A0
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Thallium	2.50	2.46	mg/kg	99	SW846 6020	03/02-03/04/09	K7W191A1
					Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Zinc	25.0	23.8	mg/kg	95	SW846 6020	03/02-03/04/09	K7W191A2
				Dilution Factor: 0.5		Analysis Time...: 21:08	
				Instrument ID...: ICPMS2		Analyst ID.....: 400149	
Silver	5.00	2.76	mg/kg	55	SW846 6020	03/02-03/04/09	K7W191A3
				Dilution Factor: 0.5		Analysis Time...: 21:08	
				Instrument ID...: ICPMS2		Analyst ID.....: 400149	
LCS Lot-Sample#: C9C030000-016 Prep Batch #...: 9062016							
Mercury	0.208	0.203	mg/kg	97	SW846 7471A	03/03/09	K7XWJ1AC
				Dilution Factor: 0.5		Analysis Time...: 08:03	
				Instrument ID...: HGHYDRA		Analyst ID.....: 031043	

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9061169							
						% Moisture.....: 45	
Antimony	55 N	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CN
	52 N	(75 - 125)	4.4	(0-20)	SW846 6020	03/02-03/04/09	K6W551CP
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Arsenic	NC	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551A7
	NC	(75 - 125)		(0-20)	SW846 6020	03/02-03/04/09	K6W551A8
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Beryllium	96	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551A9
	91	(75 - 125)	5.1	(0-20)	SW846 6020	03/02-03/04/09	K6W551CA
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Cadmium	94	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CC
	87	(75 - 125)	5.8	(0-20)	SW846 6020	03/02-03/04/09	K6W551CD
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Chromium	NC	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CE
	NC	(75 - 125)		(0-20)	SW846 6020	03/02-03/04/09	K6W551CF
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Copper	118	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CG
	74 N	(75 - 125)	10	(0-20)	SW846 6020	03/02-03/04/09	K6W551CH
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							
Lead	NC	(75 - 125)			SW846 6020	03/02-03/04/09	K6W551CL
	NC	(75 - 125)		(0-20)	SW846 6020	03/02-03/04/09	K6W551CM
Dilution Factor: 0.55							
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9061115							

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	101	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CJ
	92	(75 - 125)	5.4 (0-20)	SW846 6020	03/02-03/04/09	K6W551CK
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Selenium	85	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CQ
	66 N	(75 - 125)	7.2 (0-20)	SW846 6020	03/02-03/04/09	K6W551CR
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Silver	99	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CX
	92	(75 - 125)	6.0 (0-20)	SW846 6020	03/02-03/04/09	K6W551C0
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Thallium	94	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CT
	91	(75 - 125)	2.5 (0-20)	SW846 6020	03/02-03/04/09	K6W551CU
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Zinc	NC	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CV
	NC	(75 - 125)	(0-20)	SW846 6020	03/02-03/04/09	K6W551CW
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9061169

% Moisture.....: 45

Antimony

0.80	50.3	28.3 N	mg/kg	55		SW846 6020	03/02-03/04/09	K6W551CN
0.80	50.3	27.1 N	mg/kg	52	4.4	SW846 6020	03/02-03/04/09	K6W551CP
Dilution Factor: 0.55								
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9061115								

Arsenic

21.4	4.03	26.0 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551A7
21.4	4.03	23.3 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551A8
Dilution Factor: 0.55								
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9061115								

Beryllium

0.93	5.03	5.79	mg/kg	96		SW846 6020	03/02-03/04/09	K6W551A9
0.93	5.03	5.50	mg/kg	91	5.1	SW846 6020	03/02-03/04/09	K6W551CA
Dilution Factor: 0.55								
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9061115								

Cadmium

1.8	5.03	6.55	mg/kg	94		SW846 6020	03/02-03/04/09	K6W551CC
1.8	5.03	6.18	mg/kg	87	5.8	SW846 6020	03/02-03/04/09	K6W551CD
Dilution Factor: 0.55								
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9061115								

Chromium

376	20.1	429 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CE
376	20.1	385 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CF
Dilution Factor: 0.55								
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9061115								

Copper

81.7	25.2	111	mg/kg	118		SW846 6020	03/02-03/04/09	K6W551CG
81.7	25.2	100 N	mg/kg	74	10	SW846 6020	03/02-03/04/09	K6W551CH
Dilution Factor: 0.55								
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149								
MS Run #.....: 9061115								

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Lead									
	216	2.01	220 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CL
	216	2.01	199 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CM
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Nickel									
	34.9	50.3	85.5	mg/kg	101		SW846 6020	03/02-03/04/09	K6W551CJ
	34.9	50.3	81.1	mg/kg	92	5.4	SW846 6020	03/02-03/04/09	K6W551CK
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Selenium									
	1.9	1.01	2.73	mg/kg	85		SW846 6020	03/02-03/04/09	K6W551CQ
	1.9	1.01	2.54 N	mg/kg	66	7.2	SW846 6020	03/02-03/04/09	K6W551CR
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Silver									
	0.61	5.03	5.59	mg/kg	99		SW846 6020	03/02-03/04/09	K6W551CX
	0.61	5.03	5.27	mg/kg	92	6.0	SW846 6020	03/02-03/04/09	K6W551C0
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Thallium									
	0.33	5.03	5.04	mg/kg	94		SW846 6020	03/02-03/04/09	K6W551CT
	0.33	5.03	4.92	mg/kg	91	2.5	SW846 6020	03/02-03/04/09	K6W551CU
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Zinc									
	838	50.3	912 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CV
	838	50.3	807 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CW
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury	93	(75 - 125)		SW846 7471A	03/03/09	K7RJ81AV
	89	(75 - 125)	2.7 (0-20)	SW846 7471A	03/03/09	K7RJ81AW
Dilution Factor: 0.5						
Analysis Time...: 08:26 Instrument ID...: HGHYDRA Analyst ID.....: 031043						
MS Run #.....: 9062012						

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B260258

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury

0.056	0.103	0.152	mg/kg	93		SW846 7471A	03/03/09	K7RJ81AV
0.056	0.103	0.148	mg/kg	89	2.7	SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9B260258

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03A-12	C9B260258 001	K7RJV1AT	0.20 B	mg/kg	0.16	0.83	1	2/27/2009 - 2/27/2009 12:44	9058118
BH-SED-13A-6	C9B260258 004	K7RJ81AT	1.5	mg/kg	0.12	0.62	1	2/27/2009 - 2/27/2009 12:44	9058118

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SM20 2540G
 Lot Number: C9B260258

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03A-12	C9B260258 001	K7RJV1AA	60.0	%	0.0	1.0	1	2/27/2009 - 2/28/2009 07:00	9058057
BH-SED-03A-TOC	C9B260258 002	K7RJ21AA	56.7	%	0.0	1.0	1	2/27/2009 - 2/28/2009 07:00	9058057
BH-SED-13A-TOC	C9B260258 003	K7RJ41AA	63.8	%	0.0	1.0	1	2/27/2009 - 2/28/2009 07:00	9058057
BH-SED-13A-6	C9B260258 004	K7RJ81AA	80.9	%	0.0	1.0	1	2/27/2009 - 2/28/2009 07:00	9058057

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9B260258

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03A-TOC	C9B260258 002	K7RJ21AC	16000	mg/kg	365	1590	1.8	2/27/2009 - 2/27/2009 14:21	9058136
BH-SED-13A-TOC	C9B260258 003	K7RJ41AC	10800	mg/kg	352	1530	1.95	2/27/2009 - 2/27/2009 14:31	9058136

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Report ID: C9B260258

Matrix: SOLID

Date/Time Received: 2/23/2009 10:21:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B270000118B	118 MB	K7R691AA	ND	mg/kg	0.50	2/27/2009 - 2/27/2009 12:29	9058118	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: SM20 2540G
Report ID: C9B260258
Date/Time Received: 2/26/2009 9:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K7Q681A0	58.1	%	1.0	2/27/2009 - 2/28/2009 07:00	9058057	0.23 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: Maryland Environmental Service

Report ID: C9B260258

Matrix: SOLID

Date/Time Received: 2/20/2009 9:50:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9B270000136B	136 MB	K7R811AA	ND	mg/kg	1250	2/27/2009 - 2/27/2009 13:40	9058136	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9B230164
 Date/Time Received: 2/23/2009 10:21:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
LAB MS/MSD	MS	K7K6J1A5	102	75 - 125	2/27/2009 - 2/27/2009 13:10	9058118	2.1 / 20
LAB MS/MSD	MS	K7NE21A5	109	75 - 125	2/27/2009 - 2/27/2009 12:37	9058118	4.7 / 20
LAB MS/MSD	MSD	K7K6J1A6	100	75 - 125	2/27/2009 - 2/27/2009 13:10	9058118	2.1 / 20
LAB MS/MSD	MSD	K7NE21A6	114	75 - 125	2/27/2009 - 2/27/2009 12:37	9058118	4.7 / 20
CHECK SAMPLE	LCS	K7R691AC	101	41 - 159	2/27/2009 - 2/27/2009 12:29	9058118	

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number: C9B270000

Matrix: SOLID

Date/Time Received: 2/20/2009 9:50:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7R811AC	105	75 - 125	2/27/2009 - 2/27/2009 13:51	9058136	1.2 / 20
DUPLICATE CHECK	LCSD	K7R811AD	103	75 - 125	2/27/2009 - 2/27/2009 14:01	9058136	1.2 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B260258

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03A-12	C9B260258-001	Soil
2	BH-SED-13A-6	C9B260258-004	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values.

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

MES Sparrows Point 18001868

Cyanide, Total

1+2

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9B260258

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03A-12	C9B260258 001	K7RJV1AT	0.20	mg/kg	0.16	0.83	1	2/27/2009 - 2/27/2009 12:44	9058118
BH-SED-13A-6	C9B260258 004	K7RJ81AT	1.5	mg/kg	0.12	0.62	1	2/27/2009 - 2/27/2009 12:44	9058118

MES Sparrows Point 18001868

TOC

1+2

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9B260258

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03A-TOC	C9B260258 002	K7RJ21AC	16000	mg/kg	365	1590	1.8	2/27/2009 - 2/27/2009 14:21	9058136
BH-SED-13A-TOC	C9B260258 003	K7RJ41AC	10800	mg/kg	352	1530	1.95	2/27/2009 - 2/27/2009 14:31	9058136

luw
4/29/09

Site: Sparrows Point SDG #: C9B260258

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03A-12	C9B260258-001	Soil
2	BH-SED-13A-6	C9B260258-004	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
Reference	Antimony	55%/52%/Ok	L/UL	All samples
	Copper	Ok/74%/Ok	L/UL	
	Selenium	Ok/66%/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

TOTAL Metals

Lot-Sample #....: C9B260258-001

Matrix.....: SOLID

Date Sampled....: 02/25/09

Date Received...: 02/26/09

% Moisture.....: 40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9061169						
Silver	0.17	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AQ
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	
Arsenic	8.7	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AD
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Beryllium	0.86	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AE
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0031	
Cadmium	0.70	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AF
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0076	
Chromium	806 ✓	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AG
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0067	
Copper	29.8 L	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AH
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0071	
Nickel	19.5	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AJ
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0057	
Lead	92.1	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AK
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0028	
Antimony	0.25 L	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7RJVL1AL
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0028	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

TOTAL Metals

Lot-Sample #....: C9B260258-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	1.5 L	0.42	mg/kg	SW846 6020	03/02-03/04/09	K7RJVLAM
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.034	
Thallium	0.14	0.083	mg/kg	SW846 6020	03/02-03/04/09	K7RJVLAM
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0017	
Zinc	183 /	0.42	mg/kg	SW846 6020	03/02-03/04/09	K7RJVLAP
		Dilution Factor: 0.5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0098	
Prep Batch #....: 9062016						
Mercury	0.25	0.028	mg/kg	SW846 7471A	03/03/09	K7RJVLAR
		Dilution Factor: 0.5		Analysis Time...: 08:23	Analyst ID.....: 031043	
		Instrument ID...: HGHDRA		MS Run #.....: 9062012	MDL.....: 0.0021	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

luw
4/29/09

2

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

TOTAL Metals

Lot-Sample #....: C9B260258-004

Matrix.....: SOLID

Date Sampled....: 02/25/09

Date Received...: 02/26/09

% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9061169						
Silver	0.082	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AQ
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0015	
Arsenic	5.2	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AD
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.010	
Beryllium	0.87	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AE
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0023	
Cadmium	0.27	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AF
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0056	
Chromium	31.6 ✓	0.12	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AG
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0049	
Copper	12.1 L	0.12	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AH
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0053	
Nickel	6.5	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AJ
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0042	
Lead	69.3	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AK
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0021	
Antimony	0.18 L	0.12	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AL
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0020	

(Continued on next page)

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4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

TOTAL Metals

Lot-Sample #....: C9B260258-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.47 <i>L</i>	0.31	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AM
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.025	
Thallium	0.059 <i>B/J</i>	0.062	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AN
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0012	
Zinc	132 <i>J</i>	0.31	mg/kg	SW846 6020	03/02-03/04/09	K7RJ81AP
		Dilution Factor: 0.5		Analysis Time...: 22:54	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0072	

Prep Batch #....: 9062016

Mercury	0.056	0.020	mg/kg	SW846 7471A	03/03/09	K7RJ81AR
		Dilution Factor: 0.5		Analysis Time...: 08:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0015	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

B Estimated result. Result is less than RL.

POLYNUCLEAR AROMATIC HYDROCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B260258

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03A-12	C9B260258-001	Soil
1MS	BH-SED-03A-12MS	C9B260258-001MS	Soil
1MSD	BH-SED-03A-12MSD	C9B260258-001MSD	Soil
1DL	BH-SED-03A-12DL	C9B260258-001DL	Soil
2	BH-SED-13A-6	C9B260258-004	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
1	Naphthalene	Ok/204%/Ok	None - Dilution result used

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - One sample exhibited a high concentration of naphthalene which exceeded the instrument calibration range and was flagged (E) by the laboratory. The sample was diluted and reanalyzed and the dilution result for naphthalene should be used for reporting.

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Semivolatiles

Lot-Sample #....: C9B260258-001 Work Order #....: K7RJVL1AC Matrix.....: SOLID
 Date Sampled....: 02/25/09 Date Received...: 02/26/09 MS Run #.....: 9058002
 Prep Date.....: 02/27/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9058011 Analysis Time...: 20:15
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 40 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	600	56	ug/kg	8.4
2-Methylnaphthalene	1400	56	ug/kg	11
Naphthalene	29000 16000 E 170	56	ug/kg	24 8.1
Acenaphthylene	290	56	ug/kg	11
Acenaphthene	75	56	ug/kg	8.9
Fluorene	310	56	ug/kg	8.4
Phenanthrene	480	56	ug/kg	6.6
Anthracene	150 J	280	ug/kg	9.7
Fluoranthene	600	56	ug/kg	4.7
Pyrene	660	56	ug/kg	15
Benzo (a) anthracene	420	56	ug/kg	8.9
Chrysene	320	56	ug/kg	9.7
Benzo (b) fluoranthene	500	56	ug/kg	11
Benzo (k) fluoranthene	270	56	ug/kg	12
Benzo (a) pyrene	460	56	ug/kg	16
Indeno (1,2,3-cd) pyrene	220	56	ug/kg	3.1
Dibenzo (a,h) anthracene	66	56	ug/kg	12
Benzo (ghi) perylene	260	56	ug/kg	4.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	58	(27 - 110)
Terphenyl-d14	64	(21 - 130)
2-Fluorobiphenyl	61	(28 - 108)
2-Fluorophenol	57	(28 - 107)
Phenol-d5	62	(30 - 112)
2,4,6-Tribromophenol	31	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

lw
 4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Semivolatiles

Lot-Sample #....: C9B260258-001 Work Order #....: K7RJV2AC Matrix.....: SOLID
Date Sampled....: 02/25/09 Date Received...: 02/26/09 MS Run #.....: 9058002
Prep Date.....: 02/27/09 Analysis Date...: 03/05/09
Prep Batch #....: 9058011 Analysis Time...: 16:43
Dilution Factor: 15 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
% Moisture.....: 40 Analyst ID.....: 403801 Instrument ID...: 732
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	650	170	ug/kg	25
2-Methylnaphthalene	1600	170	ug/kg	33
Naphthalene	29000	170	ug/kg	24
Acenaphthylene	320	170	ug/kg	33
Acenaphthene	93 J	170	ug/kg	27
Fluorene	350	170	ug/kg	25
Phenanthrene	540	170	ug/kg	20
Anthracene	180 J	830	ug/kg	29
Fluoranthene	700	170	ug/kg	14
Pyrene	730	170	ug/kg	44
Benzo (a) anthracene	460	170	ug/kg	27
Chrysene	380	170	ug/kg	29
Benzo (b) fluoranthene	670	170	ug/kg	34
Benzo (k) fluoranthene	280	170	ug/kg	35
Benzo (a) pyrene	460	170	ug/kg	47
Indeno (1,2,3-cd) pyrene	220	170	ug/kg	9.2
Dibenzo (a,h) anthracene	79 J	170	ug/kg	37
Benzo (ghi) perylene	250	170	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(27 - 110)
Terphenyl-d14	76	(21 - 130)
2-Fluorobiphenyl	67	(28 - 108)
2-Fluorophenol	58	(28 - 107)
Phenol-d5	66	(30 - 112)
2,4,6-Tribromophenol	29	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Use original

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

GC/MS Semivolatiles

Lot-Sample #....: C9B260258-004 Work Order #....: K7RJ81AC Matrix.....: SOLID
 Date Sampled....: 02/25/09 Date Received...: 02/26/09 MS Run #.....: 9058002
 Prep Date.....: 02/27/09 Analysis Date...: 02/27/09
 Prep Batch #....: 9058011 Analysis Time...: 21:14
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 19 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	120	21	ug/kg	3.1
2-Methylnaphthalene	210	21	ug/kg	4.1
Naphthalene	2400	21	ug/kg	3.0
Acenaphthylene	220	21	ug/kg	4.1
Acenaphthene	110	21	ug/kg	3.3
Fluorene	310	21	ug/kg	3.1
Phenanthrene	1100	21	ug/kg	2.5
Anthracene	260	100	ug/kg	3.6
Fluoranthene	870	21	ug/kg	1.7
Pyrene	600	21	ug/kg	5.5
Benzo (a) anthracene	340	21	ug/kg	3.3
Chrysene	320	21	ug/kg	3.6
Benzo (b) fluoranthene	310	21	ug/kg	4.2
Benzo (k) fluoranthene	140	21	ug/kg	4.3
Benzo (a) pyrene	290	21	ug/kg	5.8
Indeno (1,2,3-cd) pyrene	130	21	ug/kg	1.1
Dibenzo (a,h) anthracene	41	21	ug/kg	4.5
Benzo (ghi) perylene	150	21	ug/kg	1.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(27 - 110)
Terphenyl-d14	68	(21 - 130)
2-Fluorobiphenyl	60	(28 - 108)
2-Fluorophenol	64	(28 - 107)
Phenol-d5	65	(30 - 112)
2,4,6-Tribromophenol	52	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

LW
 4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B260258

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03A-12	C9B260258-001	Soil
2	BH-SED-13A-6	C9B260258-004	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
11/08/08	Acrolein	0.039	L/R	All samples

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
02/27/09	2-Butanone	56.1%	J/UJ	All samples
	Acrolein	0.022 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Volatiles

Lot-Sample #....: C9B260258-001 Work Order #....: K7RJV1AU Matrix.....: SOLID
Date Sampled....: 02/25/09 Date Received...: 02/26/09 MS Run #.....:
Prep Date.....: 02/27/09 Analysis Date...: 02/27/09
Prep Batch #....: 9058123 Analysis Time...: 10:14
Dilution Factor: 1.17 Initial Wgt/Vol: 4.29 g Final Wgt/Vol...: 5 mL
% Moisture.....: 40 Analyst ID.....: 010099 Instrument ID...: HP4
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	9800	ug/kg	1500
Acrylonitrile	ND	9800	ug/kg	790
Benzene	ND	490	ug/kg	96
Bromodichloromethane	ND	490	ug/kg	91
Bromoform	ND	490	ug/kg	100
Bromomethane	ND	490	ug/kg	150
2-Butanone (MEK)	ND <i>uJ</i>	490	ug/kg	110
Carbon tetrachloride	ND	490	ug/kg	110
Chloroethane	ND	490	ug/kg	73
2-Chloroethyl vinyl ether	ND	980	ug/kg	110
Chloroform	ND	490	ug/kg	98
Chloromethane	ND	490	ug/kg	140
Dibromochloromethane	ND	490	ug/kg	63
1,2-Dichlorobenzene	ND	490	ug/kg	66
1,3-Dichlorobenzene	ND	490	ug/kg	49
1,4-Dichlorobenzene	ND	490	ug/kg	51
trans-1,2-Dichloroethene	ND	490	ug/kg	73
Dichlorodifluoromethane	ND	490	ug/kg	62
1,1-Dichloroethane	ND	490	ug/kg	99
1,2-Dichloroethane	ND	490	ug/kg	94
1,1-Dichloroethene	ND	490	ug/kg	100
1,2-Dichloropropane	ND	490	ug/kg	120
cis-1,3-Dichloropropene	ND	490	ug/kg	71
trans-1,3-Dichloropropene	ND	490	ug/kg	57
Ethylbenzene	ND	490	ug/kg	60
Methylene chloride	ND	490	ug/kg	110
1,1,2,2-Tetrachloroethane	ND	490	ug/kg	91
Tetrachloroethene	ND	490	ug/kg	80
Toluene	ND	490	ug/kg	82
1,1,1-Trichloroethane	ND	490	ug/kg	100
1,1,2-Trichloroethane	ND	490	ug/kg	110
Trichloroethene	ND	490	ug/kg	78
Trichlorofluoromethane	ND	490	ug/kg	110
Vinyl chloride	ND	490	ug/kg	130

(Continued on next page)

uw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-03A-12

GC/MS Volatiles

Lot-Sample #....: C9B260258-001 Work Order #....: K7RJV1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	99	(52 - 124)
Toluene-d8	109	(72 - 127)
4-Bromofluorobenzene	120	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SKD-13A-6

GC/MS Volatiles

Lot-Sample #....: C9B260258-004 Work Order #....: K7RJ81AU Matrix.....: SOLID
Date Sampled....: 02/25/09 Date Received...: 02/26/09 MS Run #.....:
Prep Date.....: 02/27/09 Analysis Date...: 02/27/09
Prep Batch #....: 9058123 Analysis Time...: 09:50
Dilution Factor: 1.3 Initial Wgt/Vol: 3.85 g Final Wgt/Vol...: 5 mL
% Moisture.....: 19 Analyst ID.....: 010099 Instrument ID...: HP4
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	8000	ug/kg	1300
Acrylonitrile	ND	8000	ug/kg	650
Benzene	490	400	ug/kg	79
Bromodichloromethane	ND	400	ug/kg	75
Bromoform	ND	400	ug/kg	86
Bromomethane	ND	400	ug/kg	130
2-Butanone (MEK)	ND u j	400	ug/kg	87
Carbon tetrachloride	ND	400	ug/kg	87
Chloroethane	ND	400	ug/kg	60
2-Chloroethyl vinyl ether	ND	800	ug/kg	89
Chloroform	ND	400	ug/kg	81
Chloromethane	ND	400	ug/kg	110
Dibromochloromethane	ND	400	ug/kg	52
1,2-Dichlorobenzene	ND	400	ug/kg	55
1,3-Dichlorobenzene	ND	400	ug/kg	41
1,4-Dichlorobenzene	ND	400	ug/kg	42
trans-1,2-Dichloroethene	ND	400	ug/kg	60
Dichlorodifluoromethane	ND	400	ug/kg	51
1,1-Dichloroethane	ND	400	ug/kg	81
1,2-Dichloroethane	ND	400	ug/kg	77
1,1-Dichloroethene	ND	400	ug/kg	86
1,2-Dichloropropane	ND	400	ug/kg	100
cis-1,3-Dichloropropene	ND	400	ug/kg	58
trans-1,3-Dichloropropene	ND	400	ug/kg	47
Ethylbenzene	57 J	400	ug/kg	50
Methylene chloride	ND	400	ug/kg	87
1,1,2,2-Tetrachloroethane	ND	400	ug/kg	75
Tetrachloroethene	ND	400	ug/kg	66
Toluene	300 J	400	ug/kg	68
1,1,1-Trichloroethane	ND	400	ug/kg	83
1,1,2-Trichloroethane	ND	400	ug/kg	93
Trichloroethene	ND	400	ug/kg	64
Trichlorofluoromethane	ND	400	ug/kg	90
Vinyl chloride	ND	400	ug/kg	100

(Continued on next page)

luw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-13A-6

GC/MS Volatiles

Lot-Sample #....: C9B260258-004 Work Order #....: K7RJ81AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	106	(72 - 127)
4-Bromofluorobenzene	116	(63 - 120)
Dibromofluoromethane	101	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

hw
4/29/09

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9B260261

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 20, 2009

CASE NARRATIVE
EA Engineering
Sparrows Point

LOT # C9B260261

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 26, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.



TestAmerica Laboratories, Inc.

March 16, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS: SDG: 9B260261

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on February 27th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/27/09 ETR No: 130381			
786456	BH-SED-03A-12	02/25/09	SOLID
786457	BH-SED-13A-6	02/25/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The samples were analyzed for particle size by ASTM D422 and moisture content by ASTM D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Duszak for

Ron Pentkowski
Project Manager

Enclosure

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013
 Cooler Rec'd & Opened for Temp. Check on: 2/26/09
 Coolers Opened and Unpacked on: 2/26/09 By: PRF
 (Signature)
 TestAmerica Pittsburgh Lot Number: C9B260261

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

Explain any discrepancies: _____

Level 2 Review _____
 Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved

UP: Unpreserved

[illegible]

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

Comments:

Cooler Number

Temperature*

Thermometer ID

Sample

Lot Number**

[illegible][illegible]

* Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid

Hydrochloric Acid

Sulfuric Acid

Sodium Hydroxide _____

FedEx *US Airbill*
Express
FedEx
Tracking
Number

8565 6932 6650

1 From Has portion can be removed for return address

Date _____ FedEx Tracking Number **856569326650**

Sender's Name _____ Phone _____

Company _____

Address _____

City _____ State _____ ZIP _____

2 Your Internal Billing Reference

3 To

Recipient's Name _____ Phone _____

Company _____

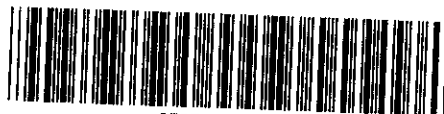
Recipient's Address _____

We cannot deliver to P.O. boxes or P.O. ZIP codes

Address _____

To request a package be held at a specific FedEx location, print FedEx address here.

City _____ State _____ ZIP _____



8565 6932 6650

Form
ID No.

0215

Recipient's Copy

4a Express Package Service

☐ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

☐ FedEx 2Day
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One pound rate.

* To most locations.

4b Express Freight Service

☐ FedEx 1Day Freight*
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 2Day Freight
Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

* To most locations.

5 Packaging

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.

* Declared value limit \$500.

6 Special Handling

☐ SATURDAY Delivery
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☐ HOLD Weekday at FedEx Location
Not available for FedEx First Overnight.

☐ HOLD Saturday at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?
Shipment must be checked.

☐ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging. ☐ Cargo Aircraft Only

7 Payment

Bill to: Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages

Total Weight

Total Charges

Credit Card Auth.

Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Anyone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

519

Rev. Date 8/06-Part #138279-©1994-2005 FedEx-PRINTED IN U.S.A.-SRS

C9B260261

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-02-26
Analytical Due Date: 2009-03-17
Report Due Date: 2009-03-18

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-03A-12 DATE SAMPLED: 20090225 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7RKH1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7RKH1AA METAL: XX

SMP#: 2 CLIENT ID: BH-SED-13A-8 DATE SAMPLED: 20090225 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7RKH1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7RKH1AA METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: Patrick J. Gamber DATE: 2/26/09 1:00
RECEIVED FOR LAB BY: [Signature] DATE: 02/27/09 1:00

DATA SUMMARY PACKAGE

**TestAmerica
South Burlington, VT**

**Sample Data Summary
Package**

9B260261



Sample Data Summary – Geotechnical

Start Date:	03/03/2009
Start Time:	1535
End Date:	03/04/2009
Analyst:	MAP

(1-17)

Particle Size of Soils by ASTM D422

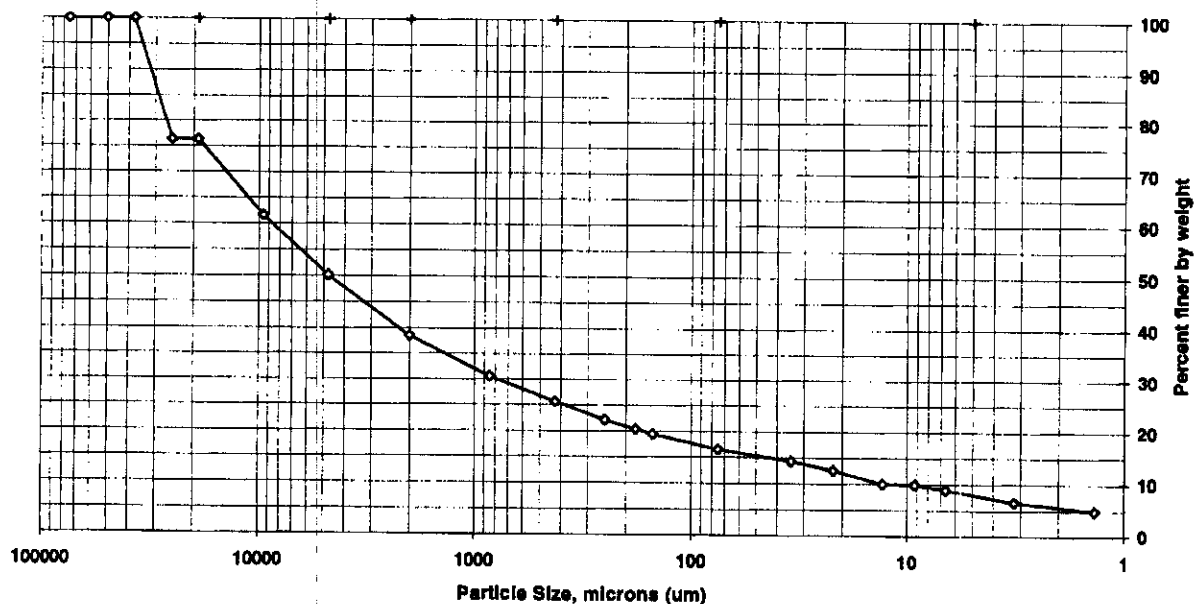
Client Code: STLPAP
 Sample ID: BH-SED-03A-12
 Lab ID: 788456

SDG: 9B260261
 ETR(s): 130381

Date Received: 2/27/2009
 Start Date: 3/2/2009
 End Date: 3/6/2009

Percent Solids: 73.4%
 Specific Gravity: 2.650
 Maximum Particle Size: 37.5 mm

Non-soil material: n/a
 Shape (> #10): subangular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	76.4	23.6
3/4 inch	19000	76.4	0.0
3/8 inch	9500	61.6	14.8
#4	4750	50.1	11.5
#10	2000	38.6	11.6
#20	850	30.6	7.9
#40	425	25.7	5.0
#60	250	22.2	3.5
#80	180	20.4	1.8
#100	150	19.5	0.9
#200	75	16.6	2.9
Hydrometer	34.4	14.3	2.3
	22.0	12.6	1.6
	12.9	10.0	2.6
	9.2	9.9	0.1
	6.8	8.9	1.0
	3.2	6.6	2.3
V	1.4	4.9	1.6

Soil Classification	Percent of Total Sample
Gravel	49.9
Sand	33.5
Coarse Sand	11.6
Medium Sand	12.9
Fine Sand	9.1
Silt	7.7
Clay	8.9

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

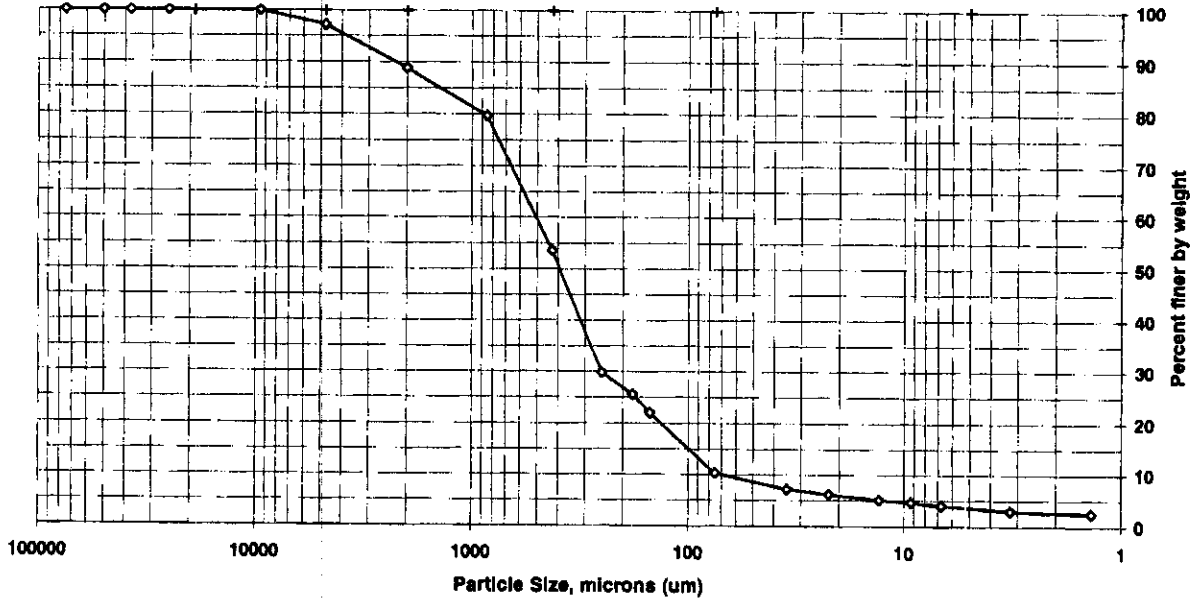
Client Code: STLPAP
Sample ID: BH-SED-13A-6
Lab ID: 786457

SDG: 9B260261
ETR(s): 130381

Date Received: 2/27/2009
Start Date: 3/2/2009
End Date: 3/6/2009

Percent Solids: 80.8%
Specific Gravity: 2.650
Maximum Particle Size: 9.5 mm

Non-soil material: shell
Shape (> #10): subrounded
Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	97.1	2.9
#10	2000	88.9	8.2
#20	850	79.7	9.2
#40	425	53.5	26.2
#60	250	29.8	23.7
#80	180	25.6	4.3
#100	150	22.1	3.5
#200	75	10.3	11.7
Hydrometer	34.9	7.2	3.1
	22.3	6.2	1.0
	13.1	5.1	1.1
	9.3	4.6	0.5
	6.8	4.0	0.6
	3.2	3.0	1.0
V	1.4	2.5	0.5

Soil Classification	Percent of Total Sample
Gravel	2.9
Sand	86.8
Coarse Sand	8.2
Medium Sand	35.3
Fine Sand	43.2
Silt	6.3
Clay	4.0

Preparation Method: D2217
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9B270261

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 12, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
US Dept of Agriculture	NA	NAVY	X
Arkansas	(#P330-07-00101)	Foreign Soil Import Permit	X
	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsbuigh.doc

CASE NARRATIVE

EA Engineering Sparrows Point

LOT # C9B270261

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 27, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard CC30302; but were within expected performance range for these compounds: bromomethane 34.0% and dichlorodifluoromethane 27.7%.

The following compound had the %D > 25% in the calibration verification standard 1C30302; but was within expected performance range for this/these compound: acrylonitrile 46.8%.

GC/MS Semivolatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in the calibration verification standard F030209C1; but were within expected performance range for these compounds: 2-naphthylamine 30%, benzidine 39%, benzoic acid 27%, and butyl benzyl phthalate 26%.

Due to matrix interference or target compounds detected, the samples were analyzed at a dilution.

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9B270261

GC/MS Semivolatiles cont.:

The matrix spike and matrix spike duplicate recovered below control limits for hexachloroethane. The matrix spike duplicate recovered below the control limit for 4-methylphenol and n-nitrosodi-n-propylamine.

The RPD between the matrix spike and matrix spike duplicate was outside the control limits for pentachlorophenol, naphthalene and 4-bromophenyl phenyl ether.

Metals:

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

General Chemistry:

Several samples were analyzed at a dilution for TOC.

The matrix spike and matrix spike duplicate recovered below control limits for total cyanide.

METHODS SUMMARY

C9B270261

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9B270261

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K7VE2	001	BH-SED-13B-8	02/26/09	11:05
K7VFC	002	BH-SED-13B-TOC	02/26/09	11:10
K7VFE	003	BH-SED-14-8	02/26/09	13:10
K7VFK	004	BH-SED-14-TOC	02/26/09	13:15
K7VFR	005	BH-SED-09-12	02/26/09	15:30
K7VFFV	006	BH-SED-09-TOC	02/26/09	15:50

NOTE(S) :

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

Client: EA Engineering Science, and Technology, Inc. 15 Loveton Circle Sparks, MD 21152				Project Manager: Frank Barranco Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250				Parameters/Method Numbers for Analysis												Chain of Custody Record	
Project Name: Sparrows Point Offshore Areas Project#: 14534.06								Laboratory: TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber												Remarks	
Page 1 of 1				Sediment Samples																	
Date	Time	Water	Sediment	Sample Identification	No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids								
2/26/09	1105		X	BH-SED - 13B-S	5	X	X	X	X	X		X	X								
	1110			BH-SED - 13B-TOC	1						X										
	1310			BH-SED 14-S	5	X	X	X	X	X		X	X								
	1315			BH-SED - 14-TOC	1						X										
	1530			BH-SED - 09-12	5	X	X	X	X	X		X	X								
	1530			BH-SED - 09-TOC	1						X										
Sampled by: (Signature)					Date/Time		Relinquished by: (Signature)					Date/Time		SEDIMENT							
Relinquished by: (Signature)					Date/Time		Received by Laboratory: (Signature)					Date/Time									

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA Engineering Project: Sparrows Pt. Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 2/27/09

Coolers Opened and Unpacked on: 2/27/09 By: [Signature]

(Signature)

TestAmerica Pittsburgh Lot Number: C9B270261

	Yes	No	NA
1. Were custody seals on the outside of the cooler? _____		<input checked="" type="checkbox"/>	
If YES, how many and where? Quantity <u>0</u> Location <u>—</u>			
Were signatures and date correct? _____			<input checked="" type="checkbox"/>
2. Were custody papers included inside the cooler? _____	<input checked="" type="checkbox"/>		
3. Were custody papers properly filled out (ink, signed, match labels)? _____	<input checked="" type="checkbox"/>		
4. Did you sign the custody papers in the appropriate place? _____	<input checked="" type="checkbox"/>		
5. Was shippers packing slip attached to this form? _____	<input checked="" type="checkbox"/>		
6. Were packing materials used? _____	<input checked="" type="checkbox"/>		
If YES, what type? <u>Bubble Bags</u>			
7. Were the samples received within the acceptable temperature range? _____	<input checked="" type="checkbox"/>		
8. Were the samples appropriately preserved? _____	<input checked="" type="checkbox"/>		
9. Were all bottles sealed in separate plastic bags? _____	<input checked="" type="checkbox"/>		
10. Did all bottles arrive in good condition (unbroken)? _____	<input checked="" type="checkbox"/>		
11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____	<input checked="" type="checkbox"/>		
12. Did all bottle labels and/or tags agree with custody papers? _____	<input checked="" type="checkbox"/>		
13. Were correct bottles used for tests indicated? _____	<input checked="" type="checkbox"/>		
14. Were all VOA vials checked for the presence of air bubbles? _____			<input checked="" type="checkbox"/>
15. Was a sufficient amount of sample sent in each bottle? _____	<input checked="" type="checkbox"/>		
16. Samples received by <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DEL US CARGO			

Explain any discrepancies: _____

Level 2 Review _____
 Was contacted on _____ by _____ to resolve discrepancies.

C9B270261

10

(1 - 66)

218

500

FedEx *US Airbill*
Express

FedEx
Tracking
Number

8565 6932 6640

Form
ID No.

0215

SPH22

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records

Date 7/15/09 FedEx Tracking Number 856569326640

Sender's Name John A. Smith Phone 408 633 2100

Company JOHN A. SMITH CONSULTING LLC

Address 1000 BAYVIEW BLVD

Dept./Floor/Suite/Room

City SCOTTSDALE State AZ ZIP 85252

2 Your Internal Billing Reference

3 To

Recipient's Name John A. Smith Phone 408 633 2100

Company JOHN A. SMITH CONSULTING LLC

Recipient's Address 1000 BAYVIEW BLVD

Dept./Floor/Suite/Room

Address 1000 BAYVIEW BLVD

To request a package be held at a specific FedEx location, print FedEx address here.

City SCOTTSDALE State AZ ZIP 85252



8565 6932 6640

fedex.com 1.800.GoFedEx 1.800.463.3339

4a Express Package Service

- | | | |
|--|--|---|
| <input type="checkbox"/> FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. | <input type="checkbox"/> FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available. | <input type="checkbox"/> FedEx First Overnight
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available. |
| <input type="checkbox"/> FedEx 2Day
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. | <input type="checkbox"/> FedEx Express Saver
Third business day.* Saturday Delivery NOT available. | |
- * To most locations. FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service

- | | | |
|--|---|--|
| <input type="checkbox"/> FedEx 1Day Freight*
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. | <input type="checkbox"/> FedEx 2Day Freight
Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected. | <input type="checkbox"/> FedEx 3Day Freight
Third business day.** Saturday Delivery NOT available. |
|--|---|--|
- * Call for Confirmation. ** To most locations.

5 Packaging

- | | | | | |
|---|---|---|--|---------------------------------------|
| <input type="checkbox"/> FedEx Envelope* | <input type="checkbox"/> FedEx Pak*
<small>Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.</small> | <input type="checkbox"/> FedEx Box | <input type="checkbox"/> FedEx Tube | <input type="checkbox"/> Other |
|---|---|---|--|---------------------------------------|
- * Declared value limit \$500.

6 Special Handling

- | | | |
|--|---|---|
| <input type="checkbox"/> SATURDAY Delivery
<small>Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.</small> | <input type="checkbox"/> HOLD Weekday at FedEx Location
<small>Not available for FedEx First Overnight.</small> | <input type="checkbox"/> HOLD Saturday at FedEx Location
<small>Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.</small> |
|--|---|---|
- Does this shipment contain dangerous goods?
One box must be checked.
- | | | | |
|---|--|---|--|
| <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes
<small>As per attached Shipper's Declaration.</small> | <input type="checkbox"/> Yes
<small>Shipper's Declaration not required.</small> | <input type="checkbox"/> Dry Ice
<small>Dry Ice, 9, UN 1845</small> <u> </u> x <u> </u> kg |
|---|--|---|--|
- Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.
- ☐ **Cargo Aircraft Only**

7 Payment Bill to:

- | | | | | |
|---|---|---|---|--|
| <input type="checkbox"/> Sender
<small>Acct. No. in Section 1 will be billed.</small> | <input type="checkbox"/> Recipient | <input type="checkbox"/> Third Party | <input type="checkbox"/> Credit Card | <input type="checkbox"/> Cash/Check |
|---|---|---|---|--|
- Enter FedEx Acct. No. or Credit Card No. below.



Total Packages <u>1</u>	Total Weight <u> </u>	Total Charges <u> </u>
-----------------------------------	--	---

*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

- | | | |
|---|--|---|
| <input type="checkbox"/> No Signature Required
<small>Package may be left without obtaining a signature for delivery.</small> | <input type="checkbox"/> Direct Signature
<small>Anyone at recipient's address may sign for delivery. Fee applies.</small> | <input type="checkbox"/> Indirect Signature
<small>If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.</small> |
|---|--|---|

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DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

GC/MS Volatiles

Lot-Sample #....: C9B270261-001	Work Order #....: K7VE21AV	Matrix.....: SOLID
Date Sampled....: 02/26/09	Date Received...: 02/27/09	MS Run #.....: 9061022
Prep Date.....: 03/02/09	Analysis Date...: 03/02/09	
Prep Batch #....: 9061030	Analysis Time...: 08:20	
Dilution Factor: 1.28	Initial Wgt/Vol: 3.92 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 100	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	130	ug/kg	9.0
Acrylonitrile	ND	130	ug/kg	13
Benzene	ND	6.4	ug/kg	0.86
Bromodichloromethane	ND	6.4	ug/kg	0.72
Bromoform	ND	6.4	ug/kg	0.57
Bromomethane	ND	6.4	ug/kg	0.95
2-Butanone (MEK)	ND	6.4	ug/kg	1.1
Carbon tetrachloride	ND	6.4	ug/kg	0.57
Chloroethane	ND	6.4	ug/kg	2.0
2-Chloroethyl vinyl ether	ND	13	ug/kg	0.99
Chloroform	ND	6.4	ug/kg	0.75
Chloromethane	ND	6.4	ug/kg	1.1
Dibromochloromethane	ND	6.4	ug/kg	0.91
1,2-Dichlorobenzene	ND	6.4	ug/kg	1.0
1,3-Dichlorobenzene	ND	6.4	ug/kg	0.84
1,4-Dichlorobenzene	ND	6.4	ug/kg	0.82
trans-1,2-Dichloroethene	ND	6.4	ug/kg	0.76
Dichlorodifluoromethane	ND	6.4	ug/kg	0.85
1,1-Dichloroethane	ND	6.4	ug/kg	0.74
1,2-Dichloroethane	ND	6.4	ug/kg	0.79
1,1-Dichloroethene	ND	6.4	ug/kg	1.1
1,2-Dichloropropane	ND	6.4	ug/kg	0.70
cis-1,3-Dichloropropene	ND	6.4	ug/kg	0.87
trans-1,3-Dichloropropene	ND	6.4	ug/kg	0.77
Ethylbenzene	ND	6.4	ug/kg	0.82
Methylene chloride	ND	6.4	ug/kg	0.86
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg	0.92
Tetrachloroethene	ND	6.4	ug/kg	0.87
Toluene	ND	6.4	ug/kg	0.93
1,1,1-Trichloroethane	ND	6.4	ug/kg	0.62
1,1,2-Trichloroethane	ND	6.4	ug/kg	1.1
Trichloroethene	ND	6.4	ug/kg	0.84
Trichlorofluoromethane	ND	6.4	ug/kg	1.2
Vinyl chloride	ND	6.4	ug/kg	0.60

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

GC/MS Volatiles

Lot-Sample #....: C9B270261-001 Work Order #....: K7VE21AV Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	84	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	100	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SED-14-8

GC/MS Volatiles

Lot-Sample #....: C9B270261-003	Work Order #....: K7VFE1AV	Matrix.....: SOLID
Date Sampled....: 02/26/09	Date Received...: 02/27/09	MS Run #.....: 9061022
Prep Date.....: 03/02/09	Analysis Date...: 03/02/09	
Prep Batch #....: 9061030	Analysis Time...: 09:09	
Dilution Factor: 1.25	Initial Wgt/Vol: 4.01 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 100	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	120	ug/kg	8.8
Acrylonitrile	ND	120	ug/kg	13
Benzene	ND	6.2	ug/kg	0.84
Bromodichloromethane	ND	6.2	ug/kg	0.70
Bromoform	ND	6.2	ug/kg	0.55
Bromomethane	ND	6.2	ug/kg	0.92
2-Butanone (MEK)	ND	6.2	ug/kg	1.1
Carbon tetrachloride	ND	6.2	ug/kg	0.56
Chloroethane	ND	6.2	ug/kg	1.9
2-Chloroethyl vinyl ether	ND	12	ug/kg	0.97
Chloroform	ND	6.2	ug/kg	0.73
Chloromethane	ND	6.2	ug/kg	1.1
Dibromochloromethane	ND	6.2	ug/kg	0.89
1,2-Dichlorobenzene	ND	6.2	ug/kg	1.0
1,3-Dichlorobenzene	ND	6.2	ug/kg	0.82
1,4-Dichlorobenzene	ND	6.2	ug/kg	0.80
trans-1,2-Dichloroethene	ND	6.2	ug/kg	0.74
Dichlorodifluoromethane	ND	6.2	ug/kg	0.83
1,1-Dichloroethane	ND	6.2	ug/kg	0.72
1,2-Dichloroethane	ND	6.2	ug/kg	0.77
1,1-Dichloroethene	ND	6.2	ug/kg	1.1
1,2-Dichloropropane	ND	6.2	ug/kg	0.68
cis-1,3-Dichloropropene	ND	6.2	ug/kg	0.85
trans-1,3-Dichloropropene	ND	6.2	ug/kg	0.75
Ethylbenzene	ND	6.2	ug/kg	0.80
Methylene chloride	ND	6.2	ug/kg	0.84
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg	0.90
Tetrachloroethene	ND	6.2	ug/kg	0.85
Toluene	ND	6.2	ug/kg	0.91
1,1,1-Trichloroethane	ND	6.2	ug/kg	0.61
1,1,2-Trichloroethane	ND	6.2	ug/kg	1.0
Trichloroethene	ND	6.2	ug/kg	0.32
Trichlorofluoromethane	ND	6.2	ug/kg	1.1
Vinyl chloride	ND	6.2	ug/kg	0.59

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-14-8

GC/MS Volatiles

Lot-Sample #...: C9B270261-003 Work Order #...: K7VFE1AV Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	104	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SKD-09-12

GC/MS Volatiles

Lot-Sample #....: C9B270261-005	Work Order #....: K7VFR1AV	Matrix.....: SOLID
Date Sampled....: 02/26/09	Date Received...: 02/27/09	MS Run #.....: 9061022
Prep Date.....: 03/02/09	Analysis Date...: 03/02/09	
Prep Batch #....: 9061030	Analysis Time...: 08:45	
Dilution Factor: 1.12	Initial Wgt/Vol: 4.46 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 100	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	110	ug/kg	7.9
Acrylonitrile	ND	110	ug/kg	12
Benzene	ND	5.6	ug/kg	0.76
Bromodichloromethane	ND	5.6	ug/kg	0.63
Bromoform	ND	5.6	ug/kg	0.50
Bromomethane	ND	5.6	ug/kg	0.83
2-Butanone (MEK)	ND	5.6	ug/kg	0.99
Carbon tetrachloride	ND	5.6	ug/kg	0.50
Chloroethane	ND	5.6	ug/kg	1.7
2-Chloroethyl vinyl ether	ND	11	ug/kg	0.87
Chloroform	ND	5.6	ug/kg	0.66
Chloromethane	ND	5.6	ug/kg	0.95
Dibromochloromethane	ND	5.6	ug/kg	0.79
1,2-Dichlorobenzene	ND	5.6	ug/kg	0.89
1,3-Dichlorobenzene	ND	5.6	ug/kg	0.73
1,4-Dichlorobenzene	ND	5.6	ug/kg	0.71
trans-1,2-Dichloroethene	ND	5.6	ug/kg	0.67
Dichlorodifluoromethane	ND	5.6	ug/kg	0.75
1,1-Dichloroethane	ND	5.6	ug/kg	0.64
1,2-Dichloroethane	ND	5.6	ug/kg	0.69
1,1-Dichloroethene	ND	5.6	ug/kg	0.95
1,2-Dichloropropane	ND	5.6	ug/kg	0.61
cis-1,3-Dichloropropene	ND	5.6	ug/kg	0.76
trans-1,3-Dichloropropene	ND	5.6	ug/kg	0.67
Ethylbenzene	ND	5.6	ug/kg	0.72
Methylene chloride	ND	5.6	ug/kg	0.75
1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	0.80
Tetrachloroethene	ND	5.6	ug/kg	0.76
Toluene	ND	5.6	ug/kg	0.82
1,1,1-Trichloroethane	ND	5.6	ug/kg	0.54
1,1,2-Trichloroethane	ND	5.6	ug/kg	0.93
Trichloroethene	ND	5.6	ug/kg	0.74
Trichlorofluoromethane	ND	5.6	ug/kg	1.0
Vinyl chloride	ND	5.6	ug/kg	0.53

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-09-12

GC/MS Volatiles

Lot-Sample #....: C9B270261-005 Work Order #....: K7VFR1AV Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	92	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9B270261

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-13B-8	84	105	100	93	00
02	BH-SED-14-8	85	100	104	93	00
03	BH-SED-09-12	85	102	102	92	00
04	INTRA-LAB QC	96	99	100	98	00
05	METHOD BLK. K7WRV1AA	95	99	91	90	00
06	LCS K7WRV1AC	93	105	106	94	00
07	LAB MS/MSD D	88	109	99	90	00
08	LAB MS/MSD S	91	108	101	95	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C020000

WO #: K7WRV1AC

BATCH: 9061030

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	36.2	90	59 - 129	
Trichloroethene	40.0	33.9	85	76 - 119	
Benzene	40.0	37.8	95	77 - 120	
Toluene	40.0	40.6	102	78 - 124	
Chlorobenzene	40.0	39.0	98	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B270335

WO #: K7VX31CL

BATCH: 9061030

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	40.0	ND	42.2	106	59 - 129	
Trichloroethene	40.0	ND	37.8	95	76 - 119	
Benzene	40.0	ND	42.6	106	77 - 120	
Toluene	40.0	ND	47.6	119	78 - 124	
Chlorobenzene	40.0	ND	42.7	107	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9B270335

WO #: K7VX31CM

BATCH: 9061030

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	40.3	101	4.7	25	59 - 129	
Trichloroethene	40.0	36.5	91	3.7	21	76 - 119	
Benzene	40.0	41.6	104	2.3	20	77 - 120	
Toluene	40.0	48.0	120	0.83	21	78 - 124	
Chlorobenzene	40.0	41.9	105	2.0	20	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7WRV1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3030201.D

Lot Number: C9B270261

Date Analyzed: 03/02/09

Time Analyzed: 05:54

Matrix: SOLID

Date Extracted: 03/02/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-13B-8	K7VE21AV	3030207.D	03/02/09	08:20
02	BH-SED-14-8	K7VFE1AV	3030209.D	03/02/09	09:09
03	BH-SED-09-12	K7VFR1AV	3030208.D	03/02/09	08:45
04	INTRA-LAB QC	K7VX31AC	3030202.D	03/02/09	06:18
05	LAB MS/MSD	K7VX31CL S	3030204.D	03/02/09	07:07
06	LAB MS/MSD	K7VX31CM D	3030205.D	03/02/09	07:31
07	CHECK SAMPLE	K7WRV1AC C	3030203.D	03/02/09	06:43
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B270261
MB Lot-Sample #: C9C020000-030

Work Order #...: K7WRV1AA

Matrix.....: SOLID

Analysis Date...: 03/02/09
Dilution Factor: 1

Prep Date.....: 03/02/09
Prep Batch #...: 9061030
Initial Wgt/Vol: 5 g
Analyst ID.....: 010099

Analysis Time...: 05:54
Final Wgt/Vol...: 5 mL
Instrument ID...: HP3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	95	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9B270261

Work Order #...: K7WRV1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	90	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B270261
 Lab File ID (Standard): CC30302 Date Analyzed: 03/02/09
 Instrument ID: HP3 Time Analyzed: 0448
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	399610	7.40	92690	10.49	199734	12.81
UPPER LIMIT	799220	7.60	185380	10.69	399468	13.01
LOWER LIMIT	199805	7.20	46345	10.29	99867	12.61
EPA SAMPLE NO.						
01 INTRA-LAB BL	539600	7.42	125484	10.49	190078	12.82
02 INTRA-LAB CH	444184	7.40	104625	10.49	224437	12.81
03 BH-SED-13B-8	737824	7.41	165610	10.49	270586	12.81
04 BH-SED-09-12	700615	7.41	158817	10.49	277766	12.81
05 BH-SED-14-8	546760	7.41	126965	10.49	227373	12.81
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

GC/MS Semivolatiles

Lot-Sample #...: C9B270261-001 Work Order #...: K7VE21AC Matrix.....: SOLID
 Date Sampled...: 02/26/09 11:05 Date Received...: 02/27/09 10:40 MS Run #.....: 9061003
 Prep Date.....: 03/02/09 Analysis Date...: 03/03/09
 Prep Batch #...: 9061011 Analysis Time...: 02:53
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 37 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	26	ug/kg	4.0
2-Methylnaphthalene	ND	26	ug/kg	5.2
Naphthalene	7.6 J	26	ug/kg	3.8
Acenaphthylene	ND	26	ug/kg	5.2
Acenaphthene	ND	26	ug/kg	4.2
Fluorene	ND	26	ug/kg	4.0
Phenanthrene	11 J	26	ug/kg	3.1
Anthracene	ND	130	ug/kg	4.6
Fluoranthene	ND	26	ug/kg	2.2
Pyrene	ND	26	ug/kg	7.0
Benzo(a)anthracene	ND	26	ug/kg	4.2
Chrysene	ND	26	ug/kg	4.6
Benzo(b)fluoranthene	ND	26	ug/kg	5.3
Benzo(k)fluoranthene	ND	26	ug/kg	5.5
Benzo(a)pyrene	ND	26	ug/kg	7.4
Indeno(1,2,3-cd)pyrene	ND	26	ug/kg	1.4
Dibenzo(a,h)anthracene	ND	26	ug/kg	5.8
Benzo(ghi)perylene	ND	26	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(27 - 110)
Terphenyl-d14	67	(21 - 130)
2-Fluorobiphenyl	67	(28 - 108)
2-Fluorophenol	60	(28 - 107)
Phenol-d5	58	(30 - 112)
2,4,6-Tribromophenol	66	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-14-8

GC/MS Semivolatiles

Lot-Sample #...: C9B270261-003 Work Order #...: K7VFE1AC Matrix.....: SOLID
 Date Sampled...: 02/26/09 13:10 Date Received...: 02/27/09 10:40 MS Run #.....: 9061003
 Prep Date.....: 03/02/09 Analysis Date...: 03/03/09
 Prep Batch #...: 9061011 Analysis Time...: 03:15
 Dilution Factor: 2.48 Initial Wgt/Vol: 30.2 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 70 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	670	56	ug/kg	8.4
2-Methylnaphthalene	1200	56	ug/kg	11
Naphthalene	6100	56	ug/kg	8.1
Acenaphthylene	380	56	ug/kg	11
Acenaphthene	770	56	ug/kg	8.9
Fluorene	810	56	ug/kg	8.4
Phenanthrene	2700	56	ug/kg	6.6
Anthracene	990	280	ug/kg	9.8
Fluoranthene	5200	56	ug/kg	4.7
Pyrene	3400	56	ug/kg	15
Benzo (a) anthracene	2200	56	ug/kg	8.9
Chrysene	2100	56	ug/kg	9.7
Benzo (b) fluoranthene	2300	56	ug/kg	11
Benzo (k) fluoranthene	750	56	ug/kg	12
Benzo (a) pyrene	2100	56	ug/kg	16
Indeno (1,2,3-cd) pyrene	1100	56	ug/kg	3.1
Dibenzo (a,h) anthracene	270	56	ug/kg	12
Benzo (ghi) perylene	1300	56	ug/kg	4.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	46	(27 - 110)
Terphenyl-d14	50	(21 - 130)
2-Fluorobiphenyl	52	(28 - 108)
2-Fluorophenol	46	(28 - 107)
Phenol-d5	44	(30 - 112)
2,4,6-Tribromophenol	57	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SED-09-12

GC/MS Semivolatiles

Lot-Sample #....: C9B270261-005 Work Order #....: K7VFR1AC Matrix.....: SOLID
 Date Sampled....: 02/26/09 15:30 Date Received...: 02/27/09 10:40 MS Run #.....: 9061003
 Prep Date.....: 03/02/09 Analysis Date...: 03/03/09
 Prep Batch #....: 9061011 Analysis Time...: 03:37
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 31 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	24	ug/kg	3.6
2-Methylnaphthalene	ND	24	ug/kg	4.7
Naphthalene	ND	24	ug/kg	3.5
Acenaphthylene	ND	24	ug/kg	4.8
Acenaphthene	ND	24	ug/kg	3.9
Fluorene	ND	24	ug/kg	3.6
Phenanthrene	8.4 J	24	ug/kg	2.9
Anthracene	ND	120	ug/kg	4.2
Fluoranthene	ND	24	ug/kg	2.0
Pyrene	ND	24	ug/kg	6.4
Benzo(a)anthracene	ND	24	ug/kg	3.8
Chrysene	ND	24	ug/kg	4.2
Benzo(b)fluoranthene	ND	24	ug/kg	4.9
Benzo(k)fluoranthene	ND	24	ug/kg	5.0
Benzo(a)pyrene	ND	24	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	ND	24	ug/kg	1.3
Dibenzo(a,h)anthracene	ND	24	ug/kg	5.3
Benzo(ghi)perylene	ND	24	ug/kg	1.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	45	(27 - 110)
Terphenyl-d14	56	(21 - 130)
2-Fluorobiphenyl	54	(28 - 108)
2-Fluorophenol	48	(28 - 107)
Phenol-d5	45	(30 - 112)
2,4,6-Tribromophenol	60	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9B270261

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-13B-8	56	67	67	60	58	66	00
02	BH-SED-14-8	46	50	52	46	44	57	00
03	BH-SED-09-12	45	56	54	48	45	60	00
04	METHOD BLK. K7WQ41AA	65	100	77	72	69	87	00
05	LCS K7WQ41AC	63	74	70	73	67	97	00
06	BH-SED-09-12 D	44	53	56	50	46	63	00
07	BH-SED-09-12 S	59	77	70	63	59	74	00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C020000

WO #: K7WQ41AC

BATCH: 9061011

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Phenol	333	186	56	39 - 105	
2-Chlorophenol	333	223	67	40 - 105	
1,4-Dichlorobenzene	333	227	68	41 - 101	
N-Nitrosodi-n-propylamine	333	177	53	42 - 108	
1,2,4-Trichlorobenzene	333	247	74	41 - 105	
4-Chloro-3-methylphenol	333	234	70	43 - 110	
Acenaphthene	333	214	64	42 - 104	
4-Nitrophenol	333	246	74	27 - 131	
2,4-Dinitrotoluene	333	258	77	48 - 118	
Pentachlorophenol	333	207	62	18 - 125	
Pyrene	333	207	62	39 - 113	
4-Methylphenol	667	395	59	43 - 107	
Hexachloroethane	333	214	64	40 - 102	
Naphthalene	333	230	69	42 - 104	
4-Bromophenyl phenyl ethe	333	240	72	43 - 111	
Butyl benzyl phthalate	333	226	68	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-09-12

Level: (low/med) LOW

Lot #: C9B270261

WO #: K7VFR1AW

BATCH: 9061011

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Acenaphthene	481	ND	339	70	42 - 104	
4-Nitrophenol	481	ND	368	77	27 - 131	
Phenol	481	ND	239	50	39 - 105	
2-Chlorophenol	481	ND	295	61	40 - 105	
1,4-Dichlorobenzene	481	ND	279	58	41 - 101	
N-Nitrosodi-n-propylamine	481	ND	231	48	42 - 108	
1,2,4-Trichlorobenzene	481	ND	338	70	41 - 105	
4-Chloro-3-methylphenol	481	ND	320	66	43 - 110	
2,4-Dinitrotoluene	481	ND	344	71	48 - 118	
Pentachlorophenol	481	ND	228	47	18 - 125	
Pyrene	481	ND	331	69	39 - 113	
4-Methylphenol	962	ND	501	52	43 - 107	
Hexachloroethane	481	ND	177	37*	40 - 102	a
Naphthalene	481	ND	338	70	42 - 104	
4-Bromophenyl phenyl ethe	481	ND	372	77	43 - 111	
Butyl benzyl phthalate	481	ND	366	76	40 - 117	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a. Spiked analytic recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 1 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-09-12

Level: (low/med) LOW

Lot #: C9B270261

WO #: K7VFR1AX

BATCH: 9061011

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Butyl benzyl phthalate	481	293	61	22	34	40 - 117	
Phenol	481	192	40	22	40	39 - 105	
2-Chlorophenol	481	230	48	25	37	40 - 105	
1,4-Dichlorobenzene	481	222	46	23	32	41 - 101	
N-Nitrosodi-n-propylamine	481	188	39*	20	32	42 - 108	a
1,2,4-Trichlorobenzene	481	256	53	28	36	41 - 105	
4-Chloro-3-methylphenol	481	236	49	30	31	43 - 110	
Acenaphthene	481	239	50	34	34	42 - 104	
4-Nitrophenol	481	286	59	25	33	27 - 131	
2,4-Dinitrotoluene	481	283	59	19	33	48 - 118	
Pentachlorophenol	481	147	31	43	* 34	18 - 125	p
Pyrene	481	249	52	28	28	39 - 113	
4-Methylphenol	962	398	41*	23	36	43 - 107	a
Hexachloroethane	481	130	27*	31	34	40 - 102	a
Naphthalene	481	248	52	31	* 25	42 - 104	p
4-Bromophenyl phenyl ethe	481	281	58	28	* 20	43 - 111	p

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 3 out of 16 outside limitsSpike Recovery: 3 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K7WQ41AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0302008.

Lot Number: C9B270261

Date Analyzed: 03/03/09

Time Analyzed: 02:10

Matrix: SOLID

Date Extracted: 03/02/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-13B-8	K7VE21AC	F0302010.	03/03/09	02:53
02	BH-SED-14-8	K7VFE1AC	F0302011.	03/03/09	03:15
03	BH-SED-09-12	K7VFR1AC	F0302012.	03/03/09	03:37
04	BH-SED-09-12	K7VFR1AW S	F0302013.	03/03/09	03:58
05	BH-SED-09-12	K7VFR1AX D	F0302014.	03/03/09	04:20
06	CHECK SAMPLE	K7WQ41AC C	F0302009.	03/03/09	02:32
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9B270261
MB Lot-Sample #: C9C020000-011

Work Order #...: K7WQ41AA

Matrix.....: SOLID

Analysis Date...: 03/03/09
Dilution Factor: 0.5

Prep Date.....: 03/02/09
Prep Batch #...: 9061011
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 02:10
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo(a,h)anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	65	(27 - 110)
Terphenyl-d14	100	(21 - 130)
2-Fluorobiphenyl	77	(28 - 108)
2-Fluorophenol	72	(28 - 107)
Phenol-d5	69	(30 - 112)
2,4,6-Tribromophenol	87	(21 - 116)

NOTE (S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9B270261

Lab File ID (Standard): F03020C1

Date Analyzed: 03/02/09

Instrument ID: 722

Time Analyzed: 2317

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	82852	4.26	293115	5.25	158491	6.60
UPPER LIMIT	165704	4.76	586230	5.75	316982	7.10
LOWER LIMIT	41426	3.76	146558	4.75	79246	6.10
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	83752	4.26	300314	5.25	161146	6.60
02 INTRA-LAB CH	77994	4.27	280138	5.25	160660	6.60
03 BH-SED-13B-8	78095	4.27	272533	5.26	153472	6.60
04 BH-SED-14-8	70825	4.27	240126	5.25	142245	6.60
05 BH-SED-09-12	86026	4.27	290306	5.25	163481	6.60
06 BH-SED-09-12	84151	4.27	274042	5.25	149402	6.60
07 BH-SED-09-12	76832	4.27	260570	5.25	142174	6.60
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9B270261
 Lab File ID (Standard): F03020C1 Date Analyzed: 03/02/09
 Instrument ID: 722 Time Analyzed: 2317

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	275992	7.75	167465	10.06	147224	11.65
UPPER LIMIT	551984	8.25	334930	10.56	294448	12.15
LOWER LIMIT	137996	7.25	83733	9.56	73612	11.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	288806	7.75	191961	10.04	160497	11.63
02 INTRA-LAB CH	255846	7.75	205792	10.08	155183	11.73
03 BH-SED-13B-8	242769	7.75	180025	10.07	152139	11.68
04 BH-SED-14-8	240866	7.75	229472	10.06	228538	11.66
05 BH-SED-09-12	259196	7.75	223307	10.05	212347	11.63
06 BH-SED-09-12	242706	7.74	195043	10.05	195994	11.62
07 BH-SED-09-12	228346	7.74	192279	10.04	180738	11.61
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

TOTAL Metals

Lot-Sample #...: C9B270261-001

Matrix.....: SOLID

Date Sampled...: 02/26/09

Date Received...: 02/27/09

% Moisture.....: 37

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9061169						
Silver	0.056 B	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AQ
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0019	
Arsenic	5.3	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AD
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Beryllium	0.76	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AE
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0029	
Cadmium	0.25	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AF
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0072	
Chromium	22.9 J	0.16	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AG
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0063	
Copper	12.9	0.16	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AH
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0067	
Nickel	14.8	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AJ
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0054	
Lead	11.9	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AK
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0027	
Antimony	0.073 B	0.16	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AL
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0026	

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Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

TOTAL Metals

Lot-Sample #...: C9B270261-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.77	0.40	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AM
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.032	
Thallium	0.11	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AN
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0016	
Zinc	43.2 J	0.40	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AP
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0092	

Prep Batch #...: 9062016

Mercury	0.026	0.026	mg/kg	SW846 7471A	03/03/09	K7VE21AR
		Dilution Factor: 0.5		Analysis Time...: 08:30	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9052012	MDL.....: 0.0020	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

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

Maryland Environmental Service

Client Sample ID: BH-SED-14-8

TOTAL Metals

Lot-Sample #... C9B270261-003

Matrix.....: SOLID

Date Sampled... 02/26/09

Date Received... 02/27/09

% Moisture.....: 70

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #... 9061169						
Silver	2.0	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0040	
Arsenic	24.2	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AD
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.028	
Beryllium	1.8	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AE
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0062	
Cadmium	3.4	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AF
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.015	
Chromium	165 J	0.34	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AG
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Copper	178	0.34	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AH
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Nickel	53.9	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Lead	340	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AK
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0057	
Antimony	0.99	0.34	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AL
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0056	

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Maryland Environmental Service

Client Sample ID: BH-SED-14-8

TOTAL Metals

Lot-Sample #....: C9B270261-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	4.8	0.84	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AM
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.068	
Thallium	0.86	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AN
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	
Zinc	954 J	0.84	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AP
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.020	

Prep Batch #....: 9062016

Mercury	0.67	0.056	mg/kg	SW846 7471A	03/03/09	K7VFE1AR
		Dilution Factor: 0.5		Analysis Time...: 08:32	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0042	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: BH-SKD-09-12

TOTAL Metals

Lot-Sample #...: C9B270261-005

Matrix.....: SOLID

Date Sampled...: 02/26/09

Date Received...: 02/27/09

% Moisture.....: 31

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9061169						
Silver	0.037 B	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0017	
Arsenic	4.0	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AD
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	
Beryllium	0.50	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AE
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0027	
Cadmium	0.19	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AF
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0066	
Chromium	15.7 J	0.14	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AG
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0058	
Copper	6.6	0.14	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AH
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0061	
Nickel	9.1	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0049	
Lead	7.2	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AK
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0025	
Antimony	0.075 B	0.14	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AL
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-09-12

TOTAL Metals

Lot-Sample #...: C9B270261-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.59	0.36	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AM
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.029	
Thallium	0.064 B	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AN
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0014	
Zinc	28.8 J	0.36	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AP
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0084	

Prep Batch #...: 9062016

Mercury	0.011 B	0.024	mg/kg	SW846 7471A	03/03/09	K7VFR1AR
		Dilution Factor: 0.5		Analysis Time...: 08:34	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0018	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C020000-169 Prep Batch #....: 9061169						
Antimony	ND	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AJ
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Arsenic	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AA
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Beryllium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AC
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Cadmium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AD
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Chromium	0.033 B	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AE
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Copper	ND	0.10	mg/kg	SW846 6020	03/02-03/04/09	K7W191AF
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Lead	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AH
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Nickel	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AG
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Selenium	ND	0.25	mg/kg	SW846 6020	03/02-03/04/09	K7W191AK
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Silver	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AN
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/02-03/04/09	K7W191AL
		Dilution Factor: 0.5				
		Analysis Time...: 21:03		Analyst ID.....: 400149	Instrument ID...: ICP	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	0.015 B	0.25	mg/kg	SW846 6020	03/02-03/04/09	K7W191AM
Dilution Factor: 0.5						
Analysis Time...: 21:03		Analyst ID.....: 400149		Instrument ID...: ICP		

MB Lot-Sample #: C9C030000-016 Prep Batch #...: 9062016

Mercury	ND	0.016	mg/kg	SW846 7471A	03/03/09	K7XWJ1AA
Dilution Factor: 0.5						
Analysis Time...: 08:01		Analyst ID.....: 031043		Instrument ID...: HGH		

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C020000-169 Prep Batch #... : 9061169					
Arsenic	90	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AP	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Beryllium	96	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AQ	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Cadmium	100	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AR	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Chromium	108	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AT	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Copper	106	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AU	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Nickel	110	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AV	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Lead	102	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AW	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Antimony	91	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AX	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Selenium	95	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AO	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			
Thallium	99	(80 - 120)	SW846 6020	03/02-03/04/09 K7W191AI	
		Dilution Factor: 0.5	Analysis Time...: 21:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	95	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191A2
Dilution Factor: 0.5 Analysis Time..: 21:08 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
Silver	55	(80 - 120)	SW846 6020	03/02-03/04/09	K7W191A3
Dilution Factor: 0.5 Analysis Time..: 21:08 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
LCS Lot-Sample#: C9C030000-016 Prep Batch #...: 9062016					
Mercury	97	(80 - 120)	SW846 7471A	03/03/09	K7XWJ1AC
Dilution Factor: 0.5 Analysis Time..: 08:03 Analyst ID.....: 031043					
Instrument ID...: HGHYDRA					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVR	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C020000-169 Prep Batch #...: 9061169							
Arsenic	2.00	1.79	mg/kg	90	SW846 6020	03/02-03/04/09	K7W191AP
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Beryllium	2.50	2.40	mg/kg	96	SW846 6020	03/02-03/04/09	K7W191AQ
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Cadmium	2.50	2.50	mg/kg	100	SW846 6020	03/02-03/04/09	K7W191AR
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Chromium	10.0	10.8	mg/kg	108	SW846 6020	03/02-03/04/09	K7W191AT
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Copper	12.5	13.3	mg/kg	106	SW846 6020	03/02-03/04/09	K7W191AU
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Nickel	25.0	27.5	mg/kg	110	SW846 6020	03/02-03/04/09	K7W191AV
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Lead	1.00	1.02	mg/kg	102	SW846 6020	03/02-03/04/09	K7W191AW
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Antimony	25.0	22.7	mg/kg	91	SW846 6020	03/02-03/04/09	K7W191AX
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Selenium	0.500	0.476	mg/kg	95	SW846 6020	03/02-03/04/09	K7W191A0
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				
Thallium	2.50	2.46	mg/kg	99	SW846 6020	03/02-03/04/09	K7W191A1
			Dilution Factor: 0.5		Analysis Time...: 21:08	Analyst ID.....: 400149	
			Instrument ID...: ICPMS2				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	25.0	23.8	mg/kg	95	SW846 6020	03/02-03/04/09	K7W191A2
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Silver	5.00	2.76	mg/kg	55	SW846 6020	03/02-03/04/09	K7W191A3
Dilution Factor: 0.5 Analysis Time...: 21:08 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
LCS Lot-Sample#: C9C030000-016 Prep Batch #...: 9062016							
Mercury	0.208	0.203	mg/kg	97	SW846 7471A	03/03/09	K7XWJ1AC
Dilution Factor: 0.5 Analysis Time...: 08:03 Analyst ID.....: 031043							
Instrument ID...: HGHYDRA							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9061169						
					% Moisture.....: 45	
Antimony	55 N	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CN
	52 N	(75 - 125) 4.4	(0-20)	SW846 6020	03/02-03/04/09	K6W551CP
		Dilution Factor: 0.55				
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149				
		MS Run #.....: 9061115				
Arsenic	NC	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551A7
	NC	(75 - 125)	(0-20)	SW846 6020	03/02-03/04/09	K6W551A8
		Dilution Factor: 0.55				
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149				
		MS Run #.....: 9061115				
Beryllium	96	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551A9
	91	(75 - 125) 5.1	(0-20)	SW846 6020	03/02-03/04/09	K6W551CA
		Dilution Factor: 0.55				
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149				
		MS Run #.....: 9061115				
Cadmium	94	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CC
	87	(75 - 125) 5.8	(0-20)	SW846 6020	03/02-03/04/09	K6W551CD
		Dilution Factor: 0.55				
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149				
		MS Run #.....: 9061115				
Chromium	NC	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CE
	NC	(75 - 125)	(0-20)	SW846 6020	03/02-03/04/09	K6W551CF
		Dilution Factor: 0.55				
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149				
		MS Run #.....: 9061115				
Copper	118	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CG
	74 N	(75 - 125) 10	(0-20)	SW846 6020	03/02-03/04/09	K6W551CH
		Dilution Factor: 0.55				
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149				
		MS Run #.....: 9061115				
Lead	NC	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CL
	NC	(75 - 125)	(0-20)	SW846 6020	03/02-03/04/09	K6W551CM
		Dilution Factor: 0.55				
		Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149				
		MS Run #.....: 9061115				

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	101	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CJ
	92	(75 - 125)	5.4 (0-20)	SW846 6020	03/02-03/04/09	K6W551CK
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Selenium	85	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CQ
	66 N	(75 - 125)	7.2 (0-20)	SW846 6020	03/02-03/04/09	K6W551CR
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Silver	99	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CX
	92	(75 - 125)	6.0 (0-20)	SW846 6020	03/02-03/04/09	K6W551C0
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Thallium	94	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CT
	91	(75 - 125)	2.5 (0-20)	SW846 6020	03/02-03/04/09	K6W551CU
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						
Zinc	NC	(75 - 125)		SW846 6020	03/02-03/04/09	K6W551CV
	NC	(75 - 125)	(0-20)	SW846 6020	03/02-03/04/09	K6W551CW
Dilution Factor: 0.55						
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9061115						

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B070192-006 Prep Batch #...: 9061169

% Moisture.....: 45

Antimony

0.80	50.3	28.3 N	mg/kg	55			SW846 6020	03/02-03/04/09	K6W551CN
0.80	50.3	27.1 N	mg/kg	52	4.4		SW846 6020	03/02-03/04/09	K6W551CP
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Arsenic

21.4	4.03	26.0 NC	mg/kg				SW846 6020	03/02-03/04/09	K6W551A7
21.4	4.03	23.3 NC	mg/kg				SW846 6020	03/02-03/04/09	K6W551A8
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Beryllium

0.93	5.03	5.79	mg/kg	96			SW846 6020	03/02-03/04/09	K6W551A9
0.93	5.03	5.50	mg/kg	91	5.1		SW846 6020	03/02-03/04/09	K6W551CA
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Cadmium

1.8	5.03	6.55	mg/kg	94			SW846 6020	03/02-03/04/09	K6W551CC
1.8	5.03	6.18	mg/kg	87	5.8		SW846 6020	03/02-03/04/09	K6W551CD
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Chromium

376	20.1	429 NC	mg/kg				SW846 6020	03/02-03/04/09	K6W551CE
376	20.1	385 NC	mg/kg				SW846 6020	03/02-03/04/09	K6W551CF
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

Copper

81.7	25.2	111	mg/kg	118			SW846 6020	03/02-03/04/09	K6W551CG
81.7	25.2	100 N	mg/kg	74	10		SW846 6020	03/02-03/04/09	K6W551CH
Dilution Factor: 0.55									
Analysis Time...: 21:56 Instrument ID...: ICPMS2 Analyst ID.....: 400149									
MS Run #.....: 9061115									

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

Date Sampled...: 02/06/09

Date Received...: 02/07/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Lead									
	216	2.01	220 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CL
	216	2.01	199 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CM
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Nickel									
	34.9	50.3	85.5	mg/kg	101		SW846 6020	03/02-03/04/09	K6W551CJ
	34.9	50.3	81.1	mg/kg	92	5.4	SW846 6020	03/02-03/04/09	K6W551CK
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Selenium									
	1.9	1.01	2.73	mg/kg	85		SW846 6020	03/02-03/04/09	K6W551CQ
	1.9	1.01	2.54 N	mg/kg	66	7.2	SW846 6020	03/02-03/04/09	K6W551CR
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Silver									
	0.61	5.03	5.59	mg/kg	99		SW846 6020	03/02-03/04/09	K6W551CX
	0.61	5.03	5.27	mg/kg	92	6.0	SW846 6020	03/02-03/04/09	K6W551C0
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Thallium									
	0.33	5.03	5.04	mg/kg	94		SW846 6020	03/02-03/04/09	K6W551CT
	0.33	5.03	4.92	mg/kg	91	2.5	SW846 6020	03/02-03/04/09	K6W551CU
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Zinc									
	838	50.3	912 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CV
	838	50.3	807 NC	mg/kg			SW846 6020	03/02-03/04/09	K6W551CW
Dilution Factor: 0.55									
Analysis Time...: 21:56									
MS Run #.....: 9061115									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9B270261

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #...: 9062016

% Moisture.....: 19

Mercury	93	(75 - 125)		SW846 7471A	03/03/09	K7RJ81AV
	89	(75 - 125)	2.7 (0-20)	SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26 Instrument ID...: HGHYDRA Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9B270261

Matrix.....: SOLID

Date Sampled...: 02/25/09

Date Received...: 02/26/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9B260258-004 Prep Batch #....: 9062016

% Moisture.....: 19

Mercury

0.056	0.103	0.152	mg/kg	93		SW846 7471A	03/03/09	K7RJ81AV
0.056	0.103	0.148	mg/kg	89	2.7	SW846 7471A	03/03/09	K7RJ81AW

Dilution Factor: 0.5

Analysis Time...: 08:26

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9062012

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9B270261

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13B-8	C9B270261 001	K7VE21AT	ND	mg/kg	0.15	0.79	1	3/3/2009 - 3/4/2009 07:51	9062150
BH-SED-14-8	C9B270261 003	K7VFE1AT	1.7	mg/kg	0.32	1.7	1	3/3/2009 - 3/4/2009 07:51	9062150
BH-SED-09-12	C9B270261 005	K7VFR1AT	ND	mg/kg	0.14	0.72	1	3/3/2009 - 3/4/2009 07:55	9062150

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Lot Number: C9B270261

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13B-8	C9B270261 001	K7VE21AA	63.3	%	0.0	1.0	1	3/2/2009 - 3/3/2009 00:00	9061018
BH-SED-13B-TOC	C9B270261 002	K7VFC1AA	60.8	%	0.0	1.0	1	3/2/2009 - 3/3/2009 00:00	9061018
BH-SED-14-8	C9B270261 003	K7VFE1AA	29.7	%	0.0	1.0	1	3/2/2009 - 3/3/2009 00:00	9061018
BH-SED-14-TOC	C9B270261 004	K7VFK1AA	72.4	%	0.0	1.0	1	3/2/2009 - 3/3/2009 00:00	9061018
BH-SED-09-12	C9B270261 005	K7VFR1AA	69.3	%	0.0	1.0	1	3/2/2009 - 3/3/2009 00:00	9061018
BH-SED-09-TOC	C9B270261 006	K7VJV1AA	77.4	%	0.0	1.0	1	3/2/2009 - 3/3/2009 00:00	9061018

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9B270261

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13B-TOC	C9B270261 002	K7VFC1AC	15800	mg/kg	306	1330	1.62	3/6/2009 - 3/6/2009 11:03	9065045
BH-SED-14-TOC	C9B270261 004	K7VFK1AC	4050	mg/kg	227	987	1.43	3/6/2009 - 3/6/2009 11:14	9065045
BH-SED-09-TOC	C9B270261 006	K7VJV1AC	844	mg/kg	116	504	0.78	3/6/2009 - 3/6/2009 11:24	9065045

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: SW846 9012A
Report ID: C9B270261
Date/Time Received: 2/26/2009 8:50:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C030000150B	150 MB	K7X4G1AA	ND	mg/kg	0.50	3/3/2009 - 3/4/2009 07:44	9062150	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: SM20 2540G
Report ID: C9B270261
Date/Time Received: 2/27/2009 10:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K7TAL1AR	59.6	%	1.0	3/2/2009 - 3/3/2009 00:00	9061018	1.5 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: EPA Lloyd Kahn
Report ID: C9B270261
Date/Time Received: 3/5/2009 9:45:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C060000045B	045 MB	K749G1AA	ND	mg/kg	500	3/6/2009 - 3/6/2009 10:33	9065045	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C030000
 Date/Time Received: 2/26/2009 8:50:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K7X4G1AC	124	41 - 159	3/3/2009 - 3/4/2009 07:44	9062150	
LAB MS/MSD	MS	K7QDC1A9	84	75 - 125	3/3/2009 - 3/4/2009 07:44	9062150	16 / 20
BH-SED-13B-8	MS	K7VE21AW	67 N	75 - 125	3/3/2009 - 3/4/2009 07:51	9062150	9.3 / 20
LAB MS/MSD	MSD	K7QDC1CA	99	75 - 125	3/3/2009 - 3/4/2009 07:44	9062150	16 / 20
BH-SED-13B-8	MSD	K7VE21AX	74 N	75 - 125	3/3/2009 - 3/4/2009 07:51	9062150	9.3 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C050210
 Date/Time Received: 3/5/2009 9:45:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
LAB MS/MSD	MSD	K737L1AG	89	75 - 125	3/6/2009 - 3/6/2009 11:54	9065045	18 / 20
LAB MS/MSD	MS	K737L1AF	101	75 - 125	3/6/2009 - 3/6/2009 11:44	9065045	18 / 20
CHECK SAMPLE	LCS	K749G1AC	103	75 - 125	3/6/2009 - 3/6/2009 10:43	9065045	1.9 / 20
DUPLICATE CHECK	LCSD	K749G1AD	101	75 - 125	3/6/2009 - 3/6/2009 10:53	9065045	1.9 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B270261

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13B-8	C9B270261-001	Soil
1MS	BH-SED-13B-8MS	C9B270261-001MS	Soil
1MSD	BH-SED-13B-8MSD	C9B270261-001MSD	Soil
2	BH-SED-14-8	C9B270261-002	Soil
3	BH-SED-09-12	C9B270261-003	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
1	Cyanide	67%/74%/Ok	L/UL - All samples

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

MES Sparrows Point 18001868

Cyanide, Total

1,2,3

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9B270261

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13B-8	C9B270261 001	K7VE21AT	UL ND	mg/kg	0.15	0.79	1	3/3/2009 - 3/4/2009 07:51	9062150
BH-SED-14-8	C9B270261 003	K7VFE1AT	L 1.7	mg/kg	0.32	1.7	1	3/3/2009 - 3/4/2009 07:51	9062150
BH-SED-09-12	C9B270261 005	K7VFR1AT	L ND	mg/kg	0.14	0.72	1	3/3/2009 - 3/4/2009 07:55	9062150

MES Sparrows Point 18001868

TOC

1,2,3

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9B270261

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13B-TOC	C9B270261 002	K7VFC1AC	15800	mg/kg	306	1330	1.62	3/6/2009 - 3/6/2009 11:03	9065045
BH-SED-14-TOC	C9B270261 004	K7VFK1AC	4050	mg/kg	227	987	1.43	3/6/2009 - 3/6/2009 11:14	9065045
BH-SED-09-TOC	C9B270261 006	K7VFFV1AC	844	mg/kg	116	504	0.78	3/6/2009 - 3/6/2009 11:24	9065045

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B270261

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13B-8	C9B270261-001	Soil
2	BH-SED-14-8	C9B270261-002	Soil
3	BH-SED-09-12	C9B270261-003	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate sample exhibited acceptable %R and RPD values except the following.

MS Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
Reference	Antimony	55%/52%/Ok	J/UJ	All Samples
	Copper	Ok/74%/Ok	J/UJ	
	Selenium	Ok/66%/Ok	J/UJ	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

TOTAL Metals

Lot-Sample #....: C9B270261-001

Matrix.....: SOLID

Date Sampled....: 02/26/09

Date Received...: 02/27/09

% Moisture.....: 37

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9061169						
Silver	0.056 <i>J</i>	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AQ
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0019
Arsenic	5.3	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AD
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.013
Beryllium	0.76	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AE
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0029
Cadmium	0.25	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AF
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0072
Chromium	22.9 <i>J</i>	0.16	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AG
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0063
Copper	12.9 <i>L</i>	0.16	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AH
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0067
Nickel	14.8	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AJ
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0054
Lead	11.9	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AK
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0027
Antimony	0.073 <i>B/L</i>	0.16	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AL
		Dilution Factor: 0.5		Analysis Time...: 22:58		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9061115		MDL.....: 0.0026

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Qu
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

TOTAL Metals

Lot-Sample #....: C9B270261-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.77 L	0.40	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AM
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.032	
Thallium	0.11	0.079	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AN
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0016	
Zinc	43.2 J	0.40	mg/kg	SW846 6020	03/02-03/04/09	K7VE21AP
		Dilution Factor: 0.5		Analysis Time...: 22:58	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0092	
Prep Batch #....: 9062016						
Mercury	0.026	0.026	mg/kg	SW846 7471A	03/03/09	K7VE21AR
		Dilution Factor: 0.5		Analysis Time...: 08:30	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9052012	MDL.....: 0.0020	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

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

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4/29/09

Maryland Environmental Service

2

Client Sample ID: BH-SED-14-8

TOTAL Metals

Lot-Sample #....: C9B270261-003

Matrix.....: SOLID

Date Sampled....: 02/26/09

Date Received...: 02/27/09

% Moisture.....: 70

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9061169						
Silver	2.0	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0040	
Arsenic	24.2	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AD
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.028	
Beryllium	1.8	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AE
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0062	
Cadmium	3.4	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AF
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.015	
Chromium	165	0.34	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AG
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.013	
Copper	178 L	0.34	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AH
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.014	
Nickel	53.9	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.011	
Lead	340	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AK
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0057	
Antimony	0.99 L	0.34	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AL
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0056	

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LW
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-14-8

TOTAL Metals

Lot-Sample #....: C9B270261-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	4.8 L	0.84	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AM
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.068	
Thallium	0.86	0.17	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AN
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0034	
Zinc	954 /	0.84	mg/kg	SW846 6020	03/02-03/04/09	K7VFE1AP
		Dilution Factor: 0.5		Analysis Time...: 23:02	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.020	
Prep Batch #....: 9062016						
Mercury	0.67	0.056	mg/kg	SW846 7471A	03/03/09	K7VFE1AR
		Dilution Factor: 0.5		Analysis Time...: 08:32	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9062012	MDL.....: 0.0042	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

3

Client Sample ID: BH-SKD-09-12

TOTAL Metals

Lot-Sample #....: C9B270261-005

Matrix.....: SOLID

Date Sampled....: 02/26/09

Date Received...: 02/27/09

% Moisture.....: 31

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Prep Batch #....: 9061169						
Silver	0.037 <i>J</i>	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0017	
Arsenic	4.0	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AD
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.012	
Beryllium	0.50	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AE
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0027	
Cadmium	0.19	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AF
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0066	
Chromium	15.7 <i>J</i>	0.14	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AG
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0058	
Copper	6.6 <i>L</i>	0.14	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AH
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0061	
Nickel	9.1	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0049	
Lead	7.2	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AK
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0025	
Antimony	0.075 <i>J L</i>	0.14	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AL
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0024	

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Maryland Environmental Service

Client Sample ID: BH-SED-09-12

TOTAL Metals

Lot-Sample #....: C9B270261-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.59 L	0.36	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AM
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.029	
Thallium	0.064 J	0.072	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AN
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0014	
Zinc	28.8 J	0.36	mg/kg	SW846 6020	03/02-03/04/09	K7VFR1AP
		Dilution Factor: 0.5		Analysis Time...: 23:06	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9061115	MDL.....: 0.0084	

Prep Batch #....: 9062016

Mercury	0.011 J	0.024	mg/kg	SW846 7471A	03/03/09	K7VFR1AR
		Dilution Factor: 0.5		Analysis Time...: 08:34	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9052012	MDL.....: 0.0018	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

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

POLYNUCLEAR AROMATIC HYDROCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B270261

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13B-8	C9B270261-001	Soil
2	BH-SED-14-8	C9B270261-002	Soil
3	BH-SED-09-12	C9B270261-003	Soil
3MS	BH-SED-09-12MS	C9B270261-003MS	Soil
3MSD	BH-SED-09-12MSD	C9B270261-003MSD	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
3	Naphthalene	Ok/Ok/31	None for RPD alone

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

GC/MS Semivolatiles

Lot-Sample #....: C9B270261-001 Work Order #....: K7VE21AC Matrix.....: SOLID
 Date Sampled....: 02/26/09 11:05 Date Received...: 02/27/09 10:40 MS Run #.....: 9061003
 Prep Date.....: 03/02/09 Analysis Date...: 03/03/09
 Prep Batch #....: 9061011 Analysis Time...: 02:53
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 37 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

REPORTING

PARAMETER	RESULT	LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	26	ug/kg	4.0
2-Methylnaphthalene	ND	26	ug/kg	5.2
Naphthalene	7.6 J	26	ug/kg	3.3
Acenaphthylene	ND	26	ug/kg	5.2
Acenaphthene	ND	26	ug/kg	4.2
Fluorene	ND	26	ug/kg	4.0
Phenanthrene	11 J	26	ug/kg	3.1
Anthracene	ND	130	ug/kg	4.6
Fluoranthene	ND	26	ug/kg	2.2
Pyrene	ND	26	ug/kg	7.0
Benzo(a)anthracene	ND	26	ug/kg	4.2
Chrysene	ND	26	ug/kg	4.6
Benzo(b)fluoranthene	ND	26	ug/kg	5.3
Benzo(k)fluoranthene	ND	26	ug/kg	5.5
Benzo(a)pyrene	ND	26	ug/kg	7.4
Indeno(1,2,3-cd)pyrene	ND	26	ug/kg	1.4
Dibenzo(a,h)anthracene	ND	26	ug/kg	5.8
Benzo(ghi)perylene	ND	26	ug/kg	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(27 - 110)
Terphenyl-d14	67	(21 - 130)
2-Fluorobiphenyl	67	(28 - 108)
2-Fluorophenol	60	(28 - 107)
Phenol-d5	58	(30 - 112)
2,4,6-Tribromophenol	66	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

2

Maryland Environmental Service

Client Sample ID: BH-SED-14-8

GC/MS Semivolatiles

Lot-Sample #....: C9B270261-003 Work Order #....: K7VFE1AC Matrix.....: SOLID
 Date Sampled....: 02/26/09 13:10 Date Received...: 02/27/09 10:40 MS Run #.....: 9061003
 Prep Date.....: 03/02/09 Analysis Date...: 03/03/09
 Prep Batch #....: 9061011 Analysis Time...: 03:15
 Dilution Factor: 2.48 Initial Wgt/Vol: 30.2 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 70 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	670	56	ug/kg	8.4
2-Methylnaphthalene	1200	56	ug/kg	11
Naphthalene	6100	56	ug/kg	8.1
Acenaphthylene	380	56	ug/kg	11
Acenaphthene	770	56	ug/kg	8.9
Fluorene	810	56	ug/kg	8.4
Phenanthrene	2700	56	ug/kg	6.6
Anthracene	990	280	ug/kg	9.8
Fluoranthene	5200	56	ug/kg	4.7
Pyrene	3400	56	ug/kg	15
Benzo(a)anthracene	2200	56	ug/kg	8.9
Chrysene	2100	56	ug/kg	9.7
Benzo(b)fluoranthene	2300	56	ug/kg	11
Benzo(k)fluoranthene	750	56	ug/kg	12
Benzo(a)pyrene	2100	56	ug/kg	16
Indeno(1,2,3-cd)pyrene	1100	56	ug/kg	3.1
Dibenzo(a,h)anthracene	270	56	ug/kg	12
Benzo(ghi)perylene	1300	56	ug/kg	4.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	46	(27 - 110)
Terphenyl-d14	50	(21 - 130)
2-Fluorobiphenyl	52	(28 - 108)
2-Fluorophenol	46	(28 - 107)
Phenol-d5	44	(30 - 112)
2,4,6-Tribromophenol	57	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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3

Maryland Environmental Service

Client Sample ID: BH-SED-09-12

GC/MS Semivolatiles

Lot-Sample #....: C9B270261-005 Work Order #....: K7VFR1AC Matrix.....: SOLID
 Date Sampled....: 02/26/09 15:30 Date Received...: 02/27/09 10:40 MS Run #.....: 9061003
 Prep Date.....: 03/02/09 Analysis Date...: 03/03/09
 Prep Batch #....: 9061011 Analysis Time...: 03:37
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 31 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	24	ug/kg	3.6
2-Methylnaphthalene	ND	24	ug/kg	4.7
Naphthalene	ND	24	ug/kg	3.5
Acenaphthylene	ND	24	ug/kg	4.8
Acenaphthene	ND	24	ug/kg	3.9
Fluorene	ND	24	ug/kg	3.6
Phenanthrene	8.4 J	24	ug/kg	2.9
Anthracene	ND	120	ug/kg	4.2
Fluoranthene	ND	24	ug/kg	2.0
Pyrene	ND	24	ug/kg	6.4
Benzo(a)anthracene	ND	24	ug/kg	3.8
Chrysene	ND	24	ug/kg	4.2
Benzo(b)fluoranthene	ND	24	ug/kg	4.9
Benzo(k)fluoranthene	ND	24	ug/kg	5.0
Benzo(a)pyrene	ND	24	ug/kg	6.7
Indeno(1,2,3-cd)pyrene	ND	24	ug/kg	1.3
Dibenzo(a,h)anthracene	ND	24	ug/kg	5.3
Benzo(ghi)perylene	ND	24	ug/kg	1.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	45	(27 - 110)
Terphenyl-d14	56	(21 - 130)
2-Fluorobiphenyl	54	(28 - 108)
2-Fluorophenol	48	(28 - 107)
Phenol-d5	45	(30 - 112)
2,4,6-Tribromophenol	60	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

ms
4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9B270261

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13B-8	C9B270261-001	Soil
2	BH-SED-14-8	C9B270261-002	Soil
3	BH-SED-09-12	C9B270261-003	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.043 RRF	L/R	All samples

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

GC/MS Volatiles

Lot-Sample #....: C9B270261-001	Work Order #....: K7VE21AV	Matrix.....: SOLID
Date Sampled....: 02/26/09	Date Received...: 02/27/09	MS Run #.....: 9061022
Prep Date.....: 03/02/09	Analysis Date...: 03/02/09	
Prep Batch #....: 9061030	Analysis Time...: 08:20	
Dilution Factor: 1.28	Initial Wgt/Vol: 3.92 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 100	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	130	ug/kg	9.0
Acrylonitrile	ND	130	ug/kg	13
Benzene	ND	6.4	ug/kg	0.86
Bromodichloromethane	ND	6.4	ug/kg	0.72
Bromoform	ND	6.4	ug/kg	0.57
Bromomethane	ND	6.4	ug/kg	0.95
2-Butanone (MEK)	ND	6.4	ug/kg	1.1
Carbon tetrachloride	ND	6.4	ug/kg	0.57
Chloroethane	ND	6.4	ug/kg	2.0
2-Chloroethyl vinyl ether	ND	13	ug/kg	0.99
Chloroform	ND	6.4	ug/kg	0.75
Chloromethane	ND	6.4	ug/kg	1.1
Dibromochloromethane	ND	6.4	ug/kg	0.91
1,2-Dichlorobenzene	ND	6.4	ug/kg	1.0
1,3-Dichlorobenzene	ND	6.4	ug/kg	0.84
1,4-Dichlorobenzene	ND	6.4	ug/kg	0.82
trans-1,2-Dichloroethene	ND	6.4	ug/kg	0.76
Dichlorodifluoromethane	ND	6.4	ug/kg	0.85
1,1-Dichloroethane	ND	6.4	ug/kg	0.74
1,2-Dichloroethane	ND	6.4	ug/kg	0.79
1,1-Dichloroethene	ND	6.4	ug/kg	1.1
1,2-Dichloropropane	ND	6.4	ug/kg	0.70
cis-1,3-Dichloropropene	ND	6.4	ug/kg	0.87
trans-1,3-Dichloropropene	ND	6.4	ug/kg	0.77
Ethylbenzene	ND	6.4	ug/kg	0.82
Methylene chloride	ND	6.4	ug/kg	0.86
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg	0.92
Tetrachloroethene	ND	6.4	ug/kg	0.87
Toluene	ND	6.4	ug/kg	0.93
1,1,1-Trichloroethane	ND	6.4	ug/kg	0.62
1,1,2-Trichloroethane	ND	6.4	ug/kg	1.1
Trichloroethene	ND	6.4	ug/kg	0.84
Trichlorofluoromethane	ND	6.4	ug/kg	1.2
Vinyl chloride	ND	6.4	ug/kg	0.60

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Maryland Environmental Service

Client Sample ID: BH-SED-13B-8

GC/MS Volatiles

Lot-Sample #....: C9B270261-001 Work Order #....: K7VE21AV

Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	84	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	100	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

2

Maryland Environmental Service

Client Sample ID: BH-SED-14-8

GC/MS Volatiles

Lot-Sample #....: C9B270261-003 Work Order #....: K7VFE1AV Matrix.....: SOLID
Date Sampled....: 02/26/09 Date Received...: 02/27/09 MS Run #.....: 9061022
Prep Date.....: 03/02/09 Analysis Date...: 03/02/09
Prep Batch #....: 9061030 Analysis Time...: 09:09
Dilution Factor: 1.25 Initial Wgt/Vol: 4.01 g Final Wgt/Vol...: 5 mL
% Moisture.....: 100 Analyst ID.....: 010099 Instrument ID...: HP3
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	120	ug/kg	8.8
Acrylonitrile	ND	120	ug/kg	13
Benzene	ND	6.2	ug/kg	0.84
Bromodichloromethane	ND	6.2	ug/kg	0.70
Bromoform	ND	6.2	ug/kg	0.55
Bromomethane	ND	6.2	ug/kg	0.92
2-Butanone (MEK)	ND	6.2	ug/kg	1.1
Carbon tetrachloride	ND	6.2	ug/kg	0.56
Chloroethane	ND	6.2	ug/kg	1.9
2-Chloroethyl vinyl ether	ND	12	ug/kg	0.97
Chloroform	ND	6.2	ug/kg	0.73
Chloromethane	ND	6.2	ug/kg	1.1
Dibromochloromethane	ND	6.2	ug/kg	0.89
1,2-Dichlorobenzene	ND	6.2	ug/kg	1.0
1,3-Dichlorobenzene	ND	6.2	ug/kg	0.82
1,4-Dichlorobenzene	ND	6.2	ug/kg	0.80
trans-1,2-Dichloroethene	ND	6.2	ug/kg	0.74
Dichlorodifluoromethane	ND	6.2	ug/kg	0.83
1,1-Dichloroethane	ND	6.2	ug/kg	0.72
1,2-Dichloroethane	ND	6.2	ug/kg	0.77
1,1-Dichloroethene	ND	6.2	ug/kg	1.1
1,2-Dichloropropane	ND	6.2	ug/kg	0.68
cis-1,3-Dichloropropene	ND	6.2	ug/kg	0.85
trans-1,3-Dichloropropene	ND	6.2	ug/kg	0.75
Ethylbenzene	ND	6.2	ug/kg	0.80
Methylene chloride	ND	6.2	ug/kg	0.84
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg	0.90
Tetrachloroethene	ND	6.2	ug/kg	0.85
Toluene	ND	6.2	ug/kg	0.91
1,1,1-Trichloroethane	ND	6.2	ug/kg	0.61
1,1,2-Trichloroethane	ND	6.2	ug/kg	1.0
Trichloroethene	ND	6.2	ug/kg	0.82
Trichlorofluoromethane	ND	6.2	ug/kg	1.1
Vinyl chloride	ND	6.2	ug/kg	0.59

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Maryland Environmental Service

Client Sample ID: BH-SKD-14-8

GC/MS Volatiles

Lot-Sample #....: C9B270261-003 Work Order #....: K7VFE1AV

Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	104	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

aw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-09-12

GC/MS Volatiles

Lot-Sample #....: C9B270261-005	Work Order #....: K7VFR1AV	Matrix.....: SOLID
Date Sampled....: 02/26/09	Date Received...: 02/27/09	MS Run #.....: 9061022
Prep Date.....: 03/02/09	Analysis Date...: 03/02/09	
Prep Batch #....: 9061030	Analysis Time...: 08:45	
Dilution Factor: 1.12	Initial Wgt/Vol: 4.46 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 100	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	110	ug/kg	7.9
Acrylonitrile	ND	110	ug/kg	12
Benzene	ND	5.6	ug/kg	0.76
Bromodichloromethane	ND	5.6	ug/kg	0.63
Bromoform	ND	5.6	ug/kg	0.50
Bromomethane	ND	5.6	ug/kg	0.83
2-Butanone (MEK)	ND	5.6	ug/kg	0.99
Carbon tetrachloride	ND	5.6	ug/kg	0.50
Chloroethane	ND	5.6	ug/kg	1.7
2-Chloroethyl vinyl ether	ND	11	ug/kg	0.87
Chloroform	ND	5.6	ug/kg	0.66
Chloromethane	ND	5.6	ug/kg	0.95
Dibromochloromethane	ND	5.6	ug/kg	0.79
1,2-Dichlorobenzene	ND	5.6	ug/kg	0.89
1,3-Dichlorobenzene	ND	5.6	ug/kg	0.73
1,4-Dichlorobenzene	ND	5.6	ug/kg	0.71
trans-1,2-Dichloroethene	ND	5.6	ug/kg	0.67
Dichlorodifluoromethane	ND	5.6	ug/kg	0.75
1,1-Dichloroethane	ND	5.6	ug/kg	0.64
1,2-Dichloroethane	ND	5.6	ug/kg	0.69
1,1-Dichloroethene	ND	5.6	ug/kg	0.95
1,2-Dichloropropane	ND	5.6	ug/kg	0.61
cis-1,3-Dichloropropene	ND	5.6	ug/kg	0.76
trans-1,3-Dichloropropene	ND	5.6	ug/kg	0.67
Ethylbenzene	ND	5.6	ug/kg	0.72
Methylene chloride	ND	5.6	ug/kg	0.75
1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	0.80
Tetrachloroethene	ND	5.6	ug/kg	0.76
Toluene	ND	5.6	ug/kg	0.82
1,1,1-Trichloroethane	ND	5.6	ug/kg	0.54
1,1,2-Trichloroethane	ND	5.6	ug/kg	0.93
Trichloroethene	ND	5.6	ug/kg	0.74
Trichlorofluoromethane	ND	5.6	ug/kg	1.0
Vinyl chloride	ND	5.6	ug/kg	0.53

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Maryland Environmental Service

Client Sample ID: BH-SKD-09-12

GC/MS Volatiles

Lot-Sample #....: C9B270261-005 Work Order #....: K7VFR1AV Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	92	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

luw
4/29/09

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9B270274

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 20, 2009

CASE NARRATIVE

**EA Engineering
Sparrows Point**

LOT # C9B270274

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on February 27, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

March 18, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG; 9B270274

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on February 28th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 02/28/09 ETR No: 130411			
786726	BH-SED-13B-8	02/26/09	SOLID
786727	BH-SED-14-8	02/26/09	SOLID
786728	BH-SED-09-12	02/26/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

There were no exceptions to the method quality control criteria during the analyses of these samples.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, reading "Ron Pentkowski".

Ron Pentkowski
Project Manager

Enclosure

[illegible]

Cooler Receipt Form
TestAmerica Pittsburgh

Client: EA Engineering Project: Sparrows Pt. Quote: 82013
Cooler Rec'd & Opened for Temp. Check on: 2/27/09
Coolers Opened and Unpacked on: 2/27/09 By: [Signature]
(Signature)
TestAmerica Pittsburgh Lot Number: C9B270274

	Yes	No	NA
1. Were custody seals on the outside of the cooler? _____		<input checked="" type="checkbox"/>	
If YES, how many and where? Quantity <u>0</u> Location <u>—</u>			
Were signatures and date correct? _____			<input checked="" type="checkbox"/>
2. Were custody papers included inside the cooler? _____	<input checked="" type="checkbox"/>		
3. Were custody papers properly filled out (ink, signed, match labels)? _____	<input checked="" type="checkbox"/>		
4. Did you sign the custody papers in the appropriate place? _____	<input checked="" type="checkbox"/>		
5. Was shippers packing slip attached to this form? _____	<input checked="" type="checkbox"/>		
6. Were packing materials used? _____	<input checked="" type="checkbox"/>		
If YES, what type? <u>Bubble Bags</u>			
7. Were the samples received within the acceptable temperature range? _____	<input checked="" type="checkbox"/>		
8. Were the samples appropriately preserved? _____	<input checked="" type="checkbox"/>		
9. Were all bottles sealed in separate plastic bags? _____	<input checked="" type="checkbox"/>		
10. Did all bottles arrive in good condition (unbroken)? _____	<input checked="" type="checkbox"/>		
11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____	<input checked="" type="checkbox"/>		
12. Did all bottle labels and/or tags agree with custody papers? _____	<input checked="" type="checkbox"/>		
13. Were correct bottles used for tests indicated? _____	<input checked="" type="checkbox"/>		
14. Were all VOA vials checked for the presence of air bubbles? _____			<input checked="" type="checkbox"/>
15. Was a sufficient amount of sample sent in each bottle? _____	<input checked="" type="checkbox"/>		
16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO			

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

218

500

FedEx *US Airbill*
ExpressFedEx
Tracking
Number

8565 6932 6640

1 From This portion can be removed for Recipient's records.

856569326640

Data 4/26/09

FedEx Tracking Number

Sender's
Name

John Ward

Phone

410 870-1000

Company

E & ENGINEERING SCIENCE & TECH

Address

15 LUMBER CTR

Dept./Floor/Suite/Room

City

FARMING GLENCOE

State

MD

ZIP 21152

2 Your Internal Billing Reference

173-106

3 To

Recipient's
Name

John Ward

Phone

410 870-1000

Company

E & ENGINEERING SCIENCE & TECH

Recipient's
Address

15 LUMBER CTR

Dept./Floor/Suite/Room

Address

15 LUMBER CTR

To request a package be held at a specific FedEx location, print FedEx address here.

City

FARMING GLENCOE

State

MD

ZIP 21152



8565 6932 6640

0326961024

Form
FD No.

0215

Recipient's Copy

4a Express Package Service

Packages up to 150 lbs.

☒ FedEx Priority Overnight

Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight

Next business afternoon.* Saturday Delivery NOT available.

☐ FedEx First Overnight

Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

☐ FedEx 2Day

Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver

Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service

Packages over 150 lbs.

☐ FedEx 1Day Freight*

Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 2Day Freight

Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 3Day Freight

Third business day.* Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging

☐ FedEx Envelope*☐ FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.☐ FedEx Box☐ FedEx Tube☒ Other
* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3.

☐ SATURDAY Delivery

Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☐ HOLD Weekday at FedEx Location

Not available for FedEx First Overnight.

☐ HOLD Saturday at FedEx Location

Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☐ No☐ Yes
As per attached
Shipper's Declaration.☐ Yes
Shipper's Declaration
not required.☐ Dry Ice
Dry Ice, 9, UN 1845

kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip.
Acct. No.☐ Sender
Acct. No. in Section
1 will be billed.☐ Recipient☐ Third Party☐ Credit Card☐ Cash/Check

Total Packages

Total Weight



Total Charges

Credit Card Auth.

Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ No Signature
Required
Package may be left with-
out obtaining a signature
for delivery.☐ Direct Signature
Anyone at recipient's
address may sign for delivery.
Fee applies.☐ Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 8/05-Part #10279-0104-2005 FedEx PRINTED IN U.S.A.-SRS

fedex.com 1800.GoFedEx 1800.463.3339

RECIPIENT: PEEL HERE

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-02-27
Analytical Due Date: 2009-03-18
Report Due Date: 2009-03-19

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-13B-8 DATE SAMPLED: 20090226 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7VHH1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7VHH1AA METAL: XX

SMP#: 2 CLIENT ID: BH-SED-14-8 DATE SAMPLED: 20090226 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7VHP1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7VHP1AA METAL: XX

SMP#: 3 CLIENT ID: BH-SED-09-12 DATE SAMPLED: 20090226 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7VHR1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K7VHR1AA METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: 

DATE: 2/27/09

RECEIVED FOR LAB BY: 

DATE: 02/28/09 1020

DATA SUMMARY PACKAGE

**TestAmerica
South Burlington, VT**

**Sample Data Summary
Package**

9B270274



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-13B-8

Lab Name: TestAmerica Burlington

Contract: C9B270274

SDG No.: 9B270274

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 786726

Matrix: SOLID

Client: STLPAP

Date Received: 02/28/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/10/09		%	1	0.0	52.2	

Printed on: 03/17/09 10:30 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code:	STLPAP
ETR:	130411
SDG:	9B270274

Start Date:	03/10/2009
Start Time:	1900
End Date:	03/11/2009
Analyst:	MAP

[illegible]

Particle Size of Soils by ASTM D422

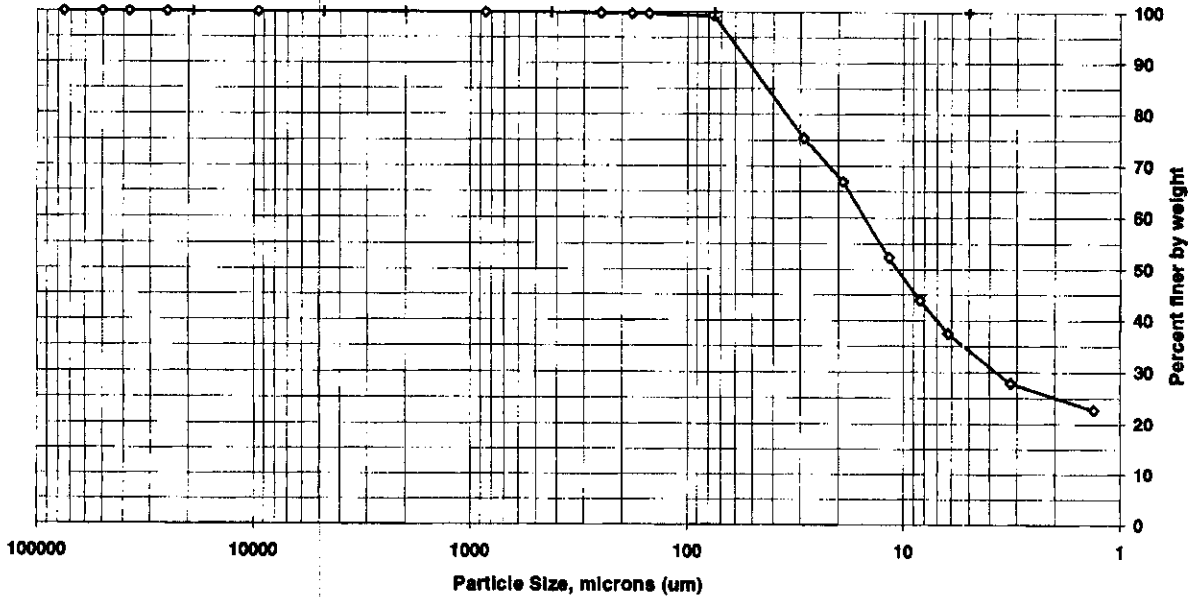
Client Code: STLPAP
 Sample ID: BH-SED-13B-8
 Lab ID: 786726

SDG: 9B270274
 ETR(s): 130411

Date Received: 2/28/2009
 Start Date: 3/2/2009
 End Date: 3/17/2009

Percent Solids: 65.7%
 Specific Gravity: 2.650
 Maximum Particle Size: Med sand

Non-soil material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	100.0	0.0
#40	425	99.9	0.0
#60	250	99.8	0.1
#80	180	99.7	0.1
#100	150	99.7	0.0
#200	75	99.2	0.5
Hydrometer	28.8	75.3	23.9
	19.0	66.9	8.4
	11.6	52.3	14.6
	8.4	43.9	8.4
	6.2	37.4	6.5
	3.2	27.9	9.5
V	1.3	22.8	5.1

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	0.8
Coarse Sand	0.0
Medium Sand	0.1
Fine Sand	0.7
Silt	61.8
Clay	37.4

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

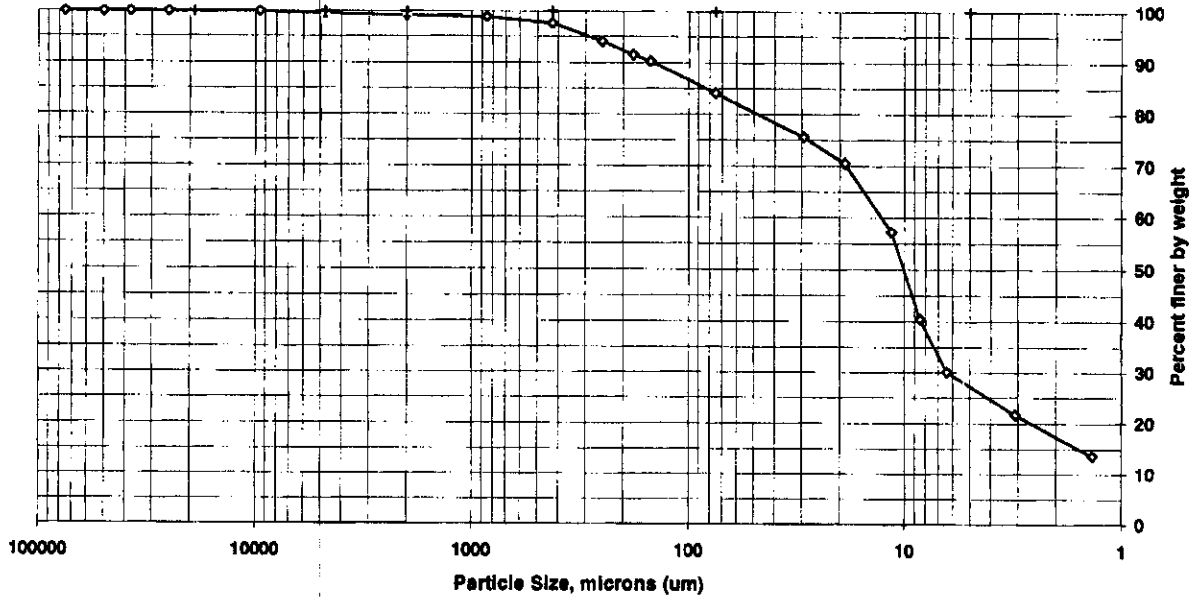
Client Code: STLPAP
 Sample ID: BH-SED-14-8
 Lab ID: 786727

SDG: 9B270274
 ETR(s): 130411

Date Received: 2/28/2009
 Start Date: 3/2/2009
 End Date: 3/17/2009

Percent Solids: 41.9%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: tar, shell
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.6	0.4
#10	2000	99.3	0.3
#20	850	98.9	0.4
#40	425	97.6	1.3
#60	250	94.0	3.5
#80	180	91.6	2.5
#100	150	90.3	1.3
#200	75	84.1	6.1
Hydrometer	29.2	75.6	8.6
	18.9	70.5	5.0
	11.5	57.2	13.4
	8.5	40.4	16.7
	6.4	30.1	10.3
	3.1	21.7	8.4
V	1.4	13.7	8.1

Soil Classification	Percent of Total Sample
Gravel	0.4
Sand	15.5
Coarse Sand	0.3
Medium Sand	1.7
Fine Sand	13.5
Silt	54.0
Clay	30.1

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

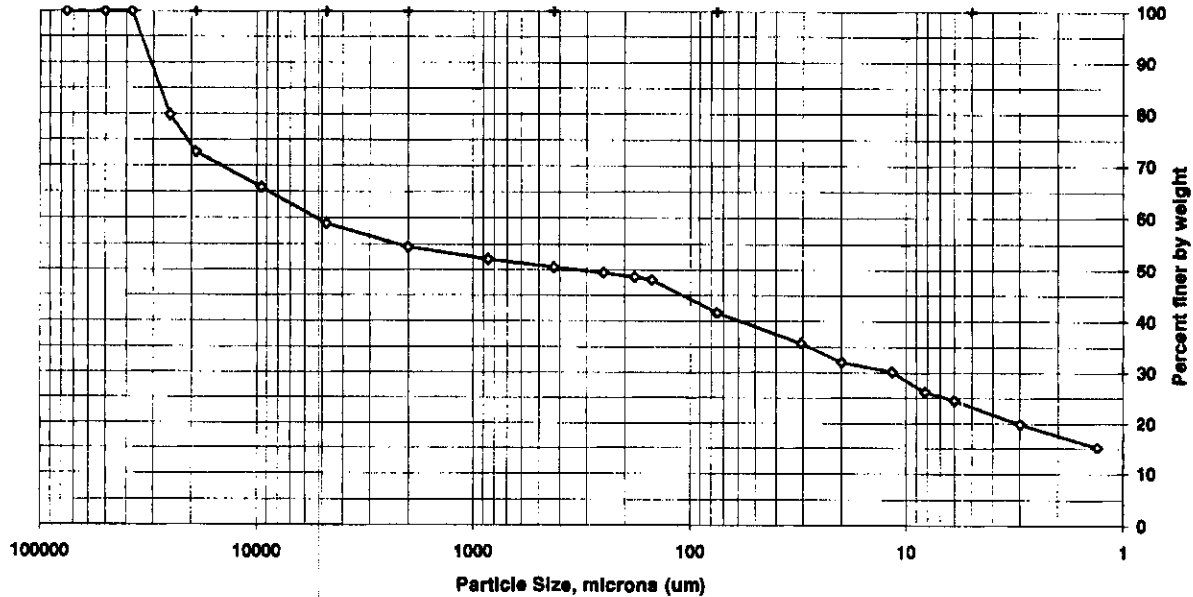
Client Code: STLPAP
 Sample ID: BH-SED-09-12
 Lab ID: 786728

SDG: 9B270274
 ETR(s): 130411

Date Received: 2/28/2009
 Start Date: 3/2/2009
 End Date: 3/17/2009

Percent Solids: 59.2%
 Specific Gravity: 2.650
 Maximum Particle Size: 37.5 mm

Non-soil material: shells
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	79.8	20.2
3/4 inch	19000	72.6	7.2
3/8 inch	9500	65.9	6.8
#4	4750	59.0	6.9
#10	2000	54.4	4.5
#20	850	52.0	2.4
#40	425	50.5	1.5
#60	250	49.4	1.1
#80	180	48.6	0.8
#100	150	48.1	0.6
#200	75	41.6	6.4
Hydrometer	30.7	35.8	5.8
	19.9	32.0	3.8
	11.6	30.2	1.9
	8.2	26.3	3.9
	6.0	24.5	1.7
	3.0	19.8	4.7
V	1.3	15.2	4.7

Soil Classification	Percent of Total Sample
Gravel	41.0
Sand	17.3
Coarse Sand	4.5
Medium Sand	3.9
Fine Sand	8.9
Silt	17.1
Clay	24.5

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

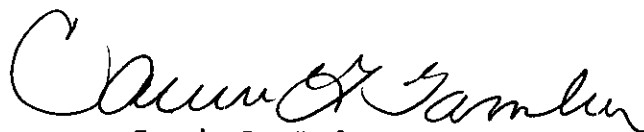
MES Sparrows Point 18001868

Lot #: C9C050210

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 20, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
US Dept of Agriculture	NA	NAVY	X
Arkansas	(#P330-07-00101)	Foreign Soil Import Permit	X
	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C050210

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 5, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

Sample BH-SED-05-4 and its matrix spike duplicate methanol vial of the terra core kit were received with no methanol present. A methanol vial was prepared from a sediment jar for the sample and the matrix spike duplicate; however, these vials were not needed for analysis.

The sample ID listed for sample BH-SED-05-4 was listed incorrectly on the chain-of-custody. Per Karin Olsen and Todd Ward, EA Engineering on March 5, 2008. The ID should be BH-SED-05-4.

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

GC/MS Volatiles:

The matrix spike of sample BH-SED-05-4 recovered outside of the control limits for trichloroethene and benzene.

The relative percent difference between the matrix spike and the matrix spike duplicate of sample BH-SED-05-4 was outside of the control limits for several compounds.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compound had the %D > 25% in calibration verification standard 1C30309; but was within expected performance range for this compound: acrylonitrile 38.5%.

The following compounds had the %D > 25% in calibration verification standard 2C30309; but were within expected performance range for these compounds: 1,1,2,2-tetrachloroethane 33.7%, 1,2-dibromo-3-chloropropane 26.1%, bromomethane 36.3%, and dichlorodifluoromethane 25.9%.

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C050210

GC/MS Volatiles cont.:

The following compounds had the %D > 25% in calibration verification standard 1C30312; but were within expected performance range for these compounds: 1,2,3-trichloropropane 25.3%, 1,2-dibromo-3-chloropropane 36.7%, acetone 27.1%, acrolein 49.4%, bromochloromethane 30.4%, and methyl acetate 36.8%.

GC/MS Semivolatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

Due to matrix interference, the samples were analyzed at a dilution. Several samples had the surrogates diluted out.

The matrix spike and matrix spike duplicate had the recoveries diluted out.

Metals:

Sample BH-SED-04-8 was over the instruments' calibration range for mercury and required a dilution. This sample was also diluted for zinc due to the concentration detected.

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

The matrix spike and matrix spike duplicate recovered outside of the control limits for antimony, chromium, and selenium.

The matrix spike recovered outside of the control limits for mercury.

For the matrix spike and matrix spike duplicate, lead and zinc recoveries were not calculated due to the concentration of analyte in the sample being >4 times the concentration of spike added.

General Chemistry:

Several samples were analyzed at a dilution for TOC.

The relative percent difference between the matrix spike and the matrix spike duplicate were outside of the control limits for total cyanide.

METHODS SUMMARY

C9C050210

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
SM20	"STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9C050210

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K737H	001	BH-SED-13C-6	03/04/09	10:45
K737L	002	BH-SED-13C-TOC	03/04/09	10:50
K737M	003	BH-SED-05-4	03/04/09	13:40
K737Q	004	BH-SED-05-TOC	03/04/09	13:45
K737V	005	BH-SED-04-8	03/04/09	15:55
K737X	006	BH-SED-04-TOC	03/04/09	16:00
K7372	007	DUP-1	03/04/09	

NOTE(S) :

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

Cooler Receipt Form

TestAmerica Pittsburgh

Client: E.A. Engineering Project: 3/5/09 Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 3/5/09

Coolers Opened and Unpacked on: 3/5/09 By: PRF

(Signature)

TestAmerica Pittsburgh Lot Number: C9C050210

- | | Yes | No | NA |
|---|-------------------------------------|----|-------------------------------------|
| 1. Were custody seals on the outside of the cooler? _____ | | | <input checked="" type="checkbox"/> |
| If YES, how many and where? Quantity _____ Location _____ | | | |
| Were signatures and date correct? _____ | | | <input checked="" type="checkbox"/> |
| 2. Were custody papers included inside the cooler? _____ | <input checked="" type="checkbox"/> | | |
| 3. Were custody papers properly filled out (ink, signed, match labels)? _____ | <input checked="" type="checkbox"/> | | |
| 4. Did you sign the custody papers in the appropriate place? _____ | <input checked="" type="checkbox"/> | | |
| 5. Was shippers packing slip attached to this form? _____ | <input checked="" type="checkbox"/> | | |
| 6. Were packing materials used? _____ | <input checked="" type="checkbox"/> | | |
| If YES, what type? <u>Bubble Wrap</u> | | | |
| 7. Were the samples received within the acceptable temperature range? _____ | <input checked="" type="checkbox"/> | | |
| 8. Were the samples appropriately preserved? _____ | <input checked="" type="checkbox"/> | | |
| 9. Were all bottles sealed in separate plastic bags? _____ | <input checked="" type="checkbox"/> | | |
| 10. Did all bottles arrive in good condition (unbroken)? _____ | <input checked="" type="checkbox"/> | | |
| 11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____ | <input checked="" type="checkbox"/> | | |
| 12. Did all bottle labels and/or tags agree with custody papers? _____ | <input checked="" type="checkbox"/> | | |
| 13. Were correct bottles used for tests indicated? _____ | <input checked="" type="checkbox"/> | | |
| 14. Were all VOA vials checked for the presence of air bubbles? _____ | <input checked="" type="checkbox"/> | | |
| 15. Was a sufficient amount of sample sent in each bottle? _____ | <input checked="" type="checkbox"/> | | |
| 16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO | | | |

Explain any discrepancies: *See Variance

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved
UP: Unpreserved

[illegible]

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

Comments:

[illegible]

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid _____
Sulfuric Acid _____

Hydrochloric Acid _____
Sodium Hydroxide _____

227

500

FedEx® *US Airbill*
ExpressFedEx
Tracking
Number

8565 6932 6731

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.Date 3/4/09

FedEx Tracking Number

856569326731

Sender's
NameTODD WARD

Phone

410 746-1250

Company

E A ENGINEERING SCIENCE & TECH

Address

15 LOVETON CIR

Dept./Floor/Suite/Room

City

SPARKS GLENCOE

State

MD

ZIP

21152**2 Your Internal Billing Reference**1453406**3 To**Recipient's
NameSAMPLE MANAGEMENT

Phone

412 963-2428

Company

TEST AMERICA - PITTSBURGHRecipient's
Address301 ALPHA DRIVE

Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

RIDG PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City

PITTSBURGH

State

PA

ZIP

15238

0326961324



8565 6932 6731

Recipient's Copy**4a Express Package Service**☒ **FedEx Priority Overnight**
Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx Standard Overnight**
Next business afternoon.*
Saturday Delivery NOT available.**Packages up to 150 lbs.**☐ **FedEx First Overnight**
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.☐ **FedEx 2Day**
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx Express Saver**
Third business day.*
Saturday Delivery NOT available.* To meet locations.
FedEx Envelope rate not available. Minimum charge: One-pound rate.**4b Express Freight Service**☐ **FedEx 1Day Freight***
Next business day.** Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx 2Day Freight**
Second business day.** Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.**Packages over 150 lbs.**☐ **FedEx 3Day Freight**
Third business day.**
Saturday Delivery NOT available.

* Call for Confirmation.

** To meet locations.

5 Packaging☐ **FedEx
Envelope***☐ **FedEx Pak***
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.☐ **FedEx
Box**☐ **FedEx
Tube**☒ **Other**

* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3.

☐ **SATURDAY Delivery**
Not available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 2Day Freight.☐ **HOLD Weekday
at FedEx Location**
Not available for
FedEx First Overnight.☐ **HOLD Saturday
at FedEx Location**
Available ONLY for FedEx Priority
Overnight and FedEx 2Day
to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☒ **No**☐ **Yes**As per attached
Shipper's Declaration.☐ **Yes**Shipper's Declaration
not required.☐ **Dry Ice**
Dry ice, & UN 1845

x _____ kg

☐ **Cargo Aircraft Only**

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip.
Acct. No.☒ **Sender**
Acct. No. in Section
1 will be billed.☐ **Recipient**☐ **Third Party**☐ **Credit Card**☐ **Cash/Check**

Total Packages

Total Weight

Total Charges

*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.☐ **No Signature
Required**
Package may be left with-
out obtaining a signature
for delivery.☐ **Direct Signature**
Anyone at recipient's
address may sign for delivery.
Fee applies.☐ **Indirect Signature**
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 8/05-Part #150279-01/99-2005 FedEx-PRINTED IN U.S.A.-SRS

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SKD-13C-6

GC/MS Volatiles

Lot-Sample #....: C9C050210-001	Work Order #....: K737H1AU	Matrix.....: SOLID
Date Sampled....: 03/04/09	Date Received...: 03/05/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #....: 9068066	Analysis Time...: 12:26	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.86 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 42	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	180	ug/kg	13
Acrylonitrile	ND	180	ug/kg	18
Benzene	64	8.9	ug/kg	1.2
Bromodichloromethane	ND	8.9	ug/kg	1.0
Bromoform	ND	8.9	ug/kg	0.79
Bromomethane	ND	8.9	ug/kg	1.3
2-Butanone (MEK)	ND	8.9	ug/kg	1.6
Carbon tetrachloride	ND	8.9	ug/kg	0.79
Chloroethane	ND	8.9	ug/kg	2.8
2-Chloroethyl vinyl ether	ND	18	ug/kg	1.4
Chloroform	ND	8.9	ug/kg	1.0
Chloromethane	ND	8.9	ug/kg	1.5
Dibromochloromethane	ND	8.9	ug/kg	1.3
1,2-Dichlorobenzene	ND	8.9	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.9	ug/kg	1.2
1,4-Dichlorobenzene	ND	8.9	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.9	ug/kg	1.1
Dichlorodifluoromethane	ND	8.9	ug/kg	1.2
1,1-Dichloroethane	ND	8.9	ug/kg	1.0
1,2-Dichloroethane	ND	8.9	ug/kg	1.1
1,1-Dichloroethene	ND	8.9	ug/kg	1.5
1,2-Dichloropropane	ND	8.9	ug/kg	0.97
cis-1,3-Dichloropropene	ND	8.9	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.9	ug/kg	1.1
Ethylbenzene	4.4 J	8.9	ug/kg	1.1
Methylene chloride	ND	8.9	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.9	ug/kg	1.3
Tetrachloroethene	ND	8.9	ug/kg	1.2
Toluene	7.2 J	8.9	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.9	ug/kg	0.86
1,1,2-Trichloroethane	ND	8.9	ug/kg	1.5
Trichloroethene	ND	8.9	ug/kg	1.2
Trichlorofluoromethane	ND	8.9	ug/kg	1.6
Vinyl chloride	ND	8.9	ug/kg	0.83

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

GC/MS Volatiles

Lot-Sample #...: C9C050210-001 Work Order #...: K737H1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	89	(52 - 124)
Toluene-d8	101	(72 - 127)
4-Bromofluorobenzene	109	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Volatiles

Lot-Sample #... : C9C050210-003	Work Order #... : K737M1AU	Matrix..... : SOLID
Date Sampled... : 03/04/09	Date Received... : 03/05/09	MS Run #..... : 9068106
Prep Date..... : 03/09/09	Analysis Date... : 03/09/09	
Prep Batch #... : 9068066	Analysis Time... : 07:54	
Dilution Factor: 1.08	Initial Wgt/Vol: 4.64 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 46	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	200	ug/kg	14
Acrylonitrile	ND	200	ug/kg	21
Benzene	ND	9.9	ug/kg	1.3
Bromodichloromethane	ND	9.9	ug/kg	1.1
Bromoform	ND	9.9	ug/kg	0.88
Bromomethane	ND	9.9	ug/kg	1.5
2-Butanone (MEK)	ND	9.9	ug/kg	1.8
Carbon tetrachloride	ND	9.9	ug/kg	0.89
Chloroethane	ND	9.9	ug/kg	3.1
2-Chloroethyl vinyl ether	ND	20	ug/kg	1.5
Chloroform	ND	9.9	ug/kg	1.2
Chloromethane	ND	9.9	ug/kg	1.7
Dibromochloromethane	ND	9.9	ug/kg	1.4
1,2-Dichlorobenzene	ND	9.9	ug/kg	1.6
1,3-Dichlorobenzene	ND	9.9	ug/kg	1.3
1,4-Dichlorobenzene	ND	9.9	ug/kg	1.3
trans-1,2-Dichloroethene	ND	9.9	ug/kg	1.2
Dichlorodifluoromethane	ND	9.9	ug/kg	1.3
1,1-Dichloroethane	ND	9.9	ug/kg	1.1
1,2-Dichloroethane	ND	9.9	ug/kg	1.2
1,1-Dichloroethene	ND	9.9	ug/kg	1.7
1,2-Dichloropropane	ND	9.9	ug/kg	1.1
cis-1,3-Dichloropropene	ND	9.9	ug/kg	1.3
trans-1,3-Dichloropropene	ND	9.9	ug/kg	1.2
Ethylbenzene	ND	9.9	ug/kg	1.3
Methylene chloride	ND	9.9	ug/kg	1.3
1,1,2,2-Tetrachloroethane	ND	9.9	ug/kg	1.4
Tetrachloroethene	ND	9.9	ug/kg	1.4
Toluene	ND	9.9	ug/kg	1.5
1,1,1-Trichloroethane	ND	9.9	ug/kg	0.97
1,1,2-Trichloroethane	ND	9.9	ug/kg	1.7
Trichloroethene	ND	9.9	ug/kg	1.3
Trichlorofluoromethane	ND	9.9	ug/kg	1.8
Vinyl chloride	ND	9.9	ug/kg	0.93

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Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Volatiles

Lot-Sample #...: C9C050210-003 Work Order #...: K737M1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	93	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

GC/MS Volatiles

Lot-Sample #...: C9C050210-005	Work Order #...: K737V1AU	Matrix.....: SOLID
Date Sampled...: 03/04/09	Date Received...: 03/05/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #...: 9068066	Analysis Time...: 12:50	
Dilution Factor: 0.91	Initial Wgt/Vol: 5.48 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 59	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	220	ug/kg	16
Acrylonitrile	ND	220	ug/kg	23
Benzene	53	11	ug/kg	1.5
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.98
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	2.0
Carbon tetrachloride	ND	11	ug/kg	0.99
Chloroethane	ND	11	ug/kg	3.4
2-Chloroethyl vinyl ether	ND	22	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.9
Dibromochloromethane	ND	11	ug/kg	1.6
1,2-Dichlorobenzene	ND	11	ug/kg	1.8
1,3-Dichlorobenzene	ND	11	ug/kg	1.5
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.5
1,1-Dichloroethane	ND	11	ug/kg	1.3
1,2-Dichloroethane	ND	11	ug/kg	1.4
1,1-Dichloroethene	ND	11	ug/kg	1.9
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	100	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.5
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.6
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	100	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.1
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.5
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

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Maryland Environmental Service

Client Sample ID: BH-SED-04-8

GC/MS Volatiles

Lot-Sample #...: C9C050210-005 Work Order #...: K737V1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	91	(72 - 127)
4-Bromofluorobenzene	101	(63 - 120)
Dibromofluoromethane	89	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9C050210-007	Work Order #....: K73721AV	Matrix.....: SOLID
Date Sampled....: 03/04/09	Date Received...: 03/05/09	MS Run #.....: 9071074
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071060	Analysis Time...: 08:55	
Dilution Factor: 1	Initial Wgt/Vol: 4.98 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 37	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	160	ug/kg	11
Acrylonitrile	ND	160	ug/kg	16
Benzene	ND	7.9	ug/kg	1.1
Bromodichloromethane	ND	7.9	ug/kg	0.89
Bromoform	ND	7.9	ug/kg	0.70
Bromomethane	ND	7.9	ug/kg	1.2
2-Butanone (MEK)	ND	7.9	ug/kg	1.4
Carbon tetrachloride	ND	7.9	ug/kg	0.71
Chloroethane	ND	7.9	ug/kg	2.5
2-Chloroethyl vinyl ether	ND	16	ug/kg	1.2
Chloroform	ND	7.9	ug/kg	0.93
Chloromethane	ND	7.9	ug/kg	1.4
Dibromochloromethane	ND	7.9	ug/kg	1.1
1,2-Dichlorobenzene	ND	7.9	ug/kg	1.3
1,3-Dichlorobenzene	ND	7.9	ug/kg	1.0
1,4-Dichlorobenzene	ND	7.9	ug/kg	1.0
trans-1,2-Dichloroethene	ND	7.9	ug/kg	0.95
Dichlorodifluoromethane	ND	7.9	ug/kg	1.1
1,1-Dichloroethane	ND	7.9	ug/kg	0.91
1,2-Dichloroethane	ND	7.9	ug/kg	0.97
1,1-Dichloroethene	ND	7.9	ug/kg	1.3
1,2-Dichloropropane	ND	7.9	ug/kg	0.86
cis-1,3-Dichloropropene	ND	7.9	ug/kg	1.1
trans-1,3-Dichloropropene	ND	7.9	ug/kg	0.95
Ethylbenzene	ND	7.9	ug/kg	1.0
Methylene chloride	ND	7.9	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	7.9	ug/kg	1.1
Tetrachloroethene	ND	7.9	ug/kg	1.1
Toluene	ND	7.9	ug/kg	1.2
1,1,1-Trichloroethane	ND	7.9	ug/kg	0.77
1,1,2-Trichloroethane	ND	7.9	ug/kg	1.3
Trichloroethene	ND	7.9	ug/kg	1.0
Trichlorofluoromethane	ND	7.9	ug/kg	1.5
Vinyl chloride	ND	7.9	ug/kg	0.75

(Continued on next page)

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9C050210-007 Work Order #....: K73721AV Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(52 - 124)
Toluene-d8	90	(72 - 127)
4-Bromofluorobenzene	110	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C050210

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-13C-6	89	101	109	96	00
02	BH-SED-05-4	86	100	93	96	00
03	BH-SED-04-8	91	91	101	89	00
04	DUP-1	95	90	110	93	00
05	INTRA-LAB QC	90	96	109	93	00
06	METHOD BLK. K773J1AA	100	92	108	95	00
07	METHOD BLK. K8D2V1AA	96	93	108	94	00
08	LCS K773J1AC	102	107	119	98	00
09	LCS K8D2V1AC	94	102	118	89	00
10	BH-SED-05-4 D	96	109	105	93	00
11	LAB MS/MSD D	90	97	110	85	00
12	BH-SED-05-4 S	98	100	118	95	00
13	LAB MS/MSD S	101	105	119	94	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C050210

Extraction: XXA4EQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	101	90	102	98	00
02	LAB MS/MSD D	96	97	116	91	00
03	LAB MS/MSD S	102	108	118	96	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C090000

WO #: K773J1AC

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	32.9	82	59- 129	
Trichloroethene	40.0	31.7	79	76- 119	
Benzene	40.0	34.2	86	77- 120	
Toluene	40.0	39.0	97	78- 124	
Chlorobenzene	40.0	39.4	99	79- 120	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120000

WO #: K8D2V1AC

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	31.3	78	59- 129	
Trichloroethene	40.0	30.7	77	76- 119	
Benzene	40.0	33.4	84	77- 120	
Toluene	40.0	38.4	96	78- 124	
Chlorobenzene	40.0	40.4	101	79- 120	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C030265

WO #: K708C1AF

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	42.7	ND	36.8	86	59- 129	
Trichloroethene	42.7	ND	35.9	84	76- 119	
Benzene	42.7	ND	39.1	92	77- 120	
Toluene	42.7	ND	46.6	109	78- 124	
Chlorobenzene	42.7	ND	46.5	109	79- 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C030265

WO #: K708C1AG

BATCH: 9068066

COMPOUND	SPIKE	MSD	MSD		QC LIMITS		QUAL
	ADDED	CONCENT.	%	%	RPD	REC	
	(ug/kg)	(ug/kg)	REC	RPD			
1,1-Dichloroethene	45.9	43.3	94	16	25	59- 129	
Trichloroethene	45.9	38.9	85	8.1	21	76- 119	
Benzene	45.9	43.0	94	9.7	20	77- 120	
Toluene	45.9	46.9	102	0.78	21	78- 124	
Chlorobenzene	45.9	48.4	105	4.0	20	79- 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 5 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-05-4

Level: (low/med) LOW

Lot #: C9C050210

WO #: K737M1CX

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	72.2	ND	48.8	68	59 - 129	
Trichloroethene	72.2	ND	44.3	61*	76 - 119	a
Benzene	72.2	ND	50.2	69*	77 - 120	a
Toluene	72.2	ND	56.8	79	78 - 124	
Chlorobenzene	72.2	ND	58.6	81	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 2 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-05-4

Level: (low/med) LOW

Lot #: C9C050210

WO #: K737M1C0

BATCH: 9068066

COMPOUND	SPIKE	MSD	MSD	QC LIMITS				QUAL
	ADDED (ug/kg)	CONCENT. (ug/kg)	% REC	% RPD	RPD	REC		
1,1-Dichloroethene	72.2	47.9	66	1.9	25	59 - 129		
Trichloroethene	72.2	58.3	81	27	*	21	76 - 119	p
Benzene	72.2	61.8	86	21	*	20	77 - 120	p
Toluene	72.2	76.9	106	30	*	21	78 - 124	p
Chlorobenzene	72.2	74.7	103	24	*	20	79 - 120	p

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

p Relative percent difference (RPD) is outside stated control limits.

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

RPD: 4 out of 5 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AF

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	40.0	ND	30.7	77	59- 129	
Trichloroethene	40.0	ND	30.6	76	76- 119	
Benzene	40.0	ND	33.9	85	77- 120	
Toluene	40.0	ND	39.1	98	78- 124	
Chlorobenzene	40.0	ND	40.5	101	79- 120	

NOTES(S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AG

BATCH: 9071060

COMPOUND	SPIKE	MSD	MSD		QC LIMITS		QUAL
	ADDED (ug/kg)	CONCENT. (ug/kg)	% REC	% RPD	RPD	REC	
1,1-Dichloroethene	40.0	30.4	76	0.81	25	59- 129	
Trichloroethene	40.0	29.8	75*	2.4	21	76- 119	a
Benzene	40.0	32.9	82	3.2	20	77- 120	
Toluene	40.0	38.5	96	1.5	21	78- 124	
Chlorobenzene	40.0	39.6	99	2.2	20	79- 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limitsSpike Recovery: 1 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K773J1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3030901.D

Lot Number: C9C050210

Date Analyzed: 03/09/09

Time Analyzed: 07:05

Matrix: SOLID

Date Extracted: 03/09/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 INTRA-LAB QC	K708C1AE	3030910.D	03/09/09	11:12
02 LAB MS/MSD	K708C1AF S	3030908.D	03/09/09	10:22
03 LAB MS/MSD	K708C1AG D	3030909.D	03/09/09	10:47
04 BH-SED-13C-6	K737H1AU	3030913.D	03/09/09	12:26
05 BH-SED-05-4	K737M1AU	3030903.D	03/09/09	07:54
06 BH-SED-05-4	K737M1CX S	3030905.D	03/09/09	08:43
07 BH-SED-05-4	K737M1C0 D	3030907.D	03/09/09	09:33
08 BH-SED-04-8	K737V1AU	3030914.D	03/09/09	12:50
09 CHECK SAMPLE	K773J1AC C	3030906.D	03/09/09	09:08
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COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C050210
MB Lot-Sample #: C9C090000-066

Work Order #...: K773J1AA

Matrix.....: SOLID

Analysis Date...: 03/09/09
Dilution Factor: 1

Prep Date.....: 03/09/09
Prep Batch #...: 9068066
Initial Wgt/Vol: 5 g
Analyst ID.....: 010099

Analysis Time...: 07:05
Final Wgt/Vol...: 5 mL
Instrument ID...: HP3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	100	(52 - 124)
Toluene-d8	92	(72 - 127)
4-Bromofluorobenzene	108	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C050210

Work Order #...: K773J1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dibromofluoromethane	95	(68 - 121)		

NOTE(S):

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

K8D2V1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3031201.D

Lot Number: C9C050210

Date Analyzed: 03/12/09

Time Analyzed: 06:52

Matrix: SOLID

Date Extracted: 03/12/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	DUP-1	K73721AV	3031206.D	03/12/09	08:55
02	INTRA-LAB QC	K74TN1AE	3031202.D	03/12/09	07:17
03	LAB MS/MSD	K74TN1AF S	3031204.D	03/12/09	08:06
04	LAB MS/MSD	K74TN1AG D	3031209.D	03/12/09	10:08
05	CHECK SAMPLE	K8D2V1AC C	3031203.D	03/12/09	07:41
06					
07					
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COMMENTS:

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C050210
MB Lot-Sample #: C9C120000-060

Work Order #...: K8D2V1AA

Matrix.....: SOLID

Analysis Date...: 03/12/09
Dilution Factor: 1

Prep Date.....: 03/12/09
Prep Batch #...: 9071060
Initial Wgt/Vol: 5 g
Analyst ID.....: 010099

Analysis Time...: 06:52
Final Wgt/Vol...: 5 mL
Instrument ID...: HP3

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	93	(72 - 127)
4-Bromofluorobenzene	108	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C050210

Work Order #...: K8D2V1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	94	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C050210
 Lab File ID (Standard): 2C30309 Date Analyzed: 03/09/09
 Instrument ID: HP3 Time Analyzed: 0622
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	280004	7.40	67911	10.49	168165	12.81
UPPER LIMIT	560008	7.60	135822	10.69	336330	13.01
LOWER LIMIT	140002	7.20	33956	10.29	84083	12.61
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	329830	7.41	78924	10.49	168846	12.81
02 BH-SED-05-6	381036	7.41	86656	10.49	125701	12.81
03 BH-SED-05-6	296611	7.41	73062	10.49	183762	12.81
04 INTRA-LAB CH	263026	7.40	62945	10.49	148577	12.81
05 BH-SED-05-6	388215	7.41	89348	10.49	154395	12.81
06 BH-SED-13C-6	455319	7.41	103399	10.49	211566	12.81
07 BH-SED-04-8	403184	7.40	128328	10.49	170232	12.81
08						
09						
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19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C050210
 Lab File ID (Standard): 1C30312 Date Analyzed: 03/12/09
 Instrument ID: HP3 Time Analyzed: 0542
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	340820	7.40	81548	10.49	183892	12.81
UPPER LIMIT	681640	7.60	163096	10.69	367784	13.01
LOWER LIMIT	170410	7.20	40774	10.29	91946	12.61
EPA SAMPLE NO.						
01 INTRA-LAB BL	446400	7.40	107113	10.49	209407	12.81
02 INTRA-LAB CH	319203	7.40	77050	10.49	184286	12.81
03 DUP-1	359212	7.40	89162	10.49	189938	12.81
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19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-001 Work Order #....: K737H1AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 10:45 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 00:10
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 42 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	340	58	ug/kg	8.7
2-Methylnaphthalene	180	58	ug/kg	11
Naphthalene	8400	58	ug/kg	8.4
Acenaphthylene	140	58	ug/kg	11
Acenaphthene	1100	58	ug/kg	9.2
Fluorene	560	58	ug/kg	8.7
Phenanthrene	1300	58	ug/kg	6.9
Anthracene	570	280	ug/kg	10
Fluoranthene	2700	58	ug/kg	4.9
Pyrene	1700	58	ug/kg	15
Benzo (a) anthracene	1000	58	ug/kg	9.2
Chrysene	770	58	ug/kg	10
Benzo (b) fluoranthene	780	58	ug/kg	12
Benzo (k) fluoranthene	440	58	ug/kg	12
Benzo (a) pyrene	720	58	ug/kg	16
Indeno (1,2,3-cd) pyrene	390	58	ug/kg	3.2
Dibenzo (a,h) anthracene	110	58	ug/kg	13
Benzo (ghi) perylene	410	58	ug/kg	4.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(27 - 110)
Terphenyl-d14	90	(21 - 130)
2-Fluorobiphenyl	76	(28 - 108)
2-Fluorophenol	65	(28 - 107)
Phenol-d5	64	(30 - 112)
2,4,6-Tribromophenol	85	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Semivolatiles

Lot-Sample #...: C9C050210-003 Work Order #...: K737M1AC Matrix.....: SOLID
 Date Sampled...: 03/04/09 13:40 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #...: 9065012 Analysis Time...: 00:33
 Dilution Factor: 25 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 46 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2100	310	ug/kg	46
2-Methylnaphthalene	5400	310	ug/kg	60
Naphthalene	150000 E	310	ug/kg	45
Acenaphthylene	850	310	ug/kg	61
Acenaphthene	6600	310	ug/kg	49
Fluorene	5400	310	ug/kg	46
Phenanthrene	16000	310	ug/kg	37
Anthracene	5200	1500	ug/kg	54
Fluoranthene	11000	310	ug/kg	26
Pyrene	7700	310	ug/kg	82
Benzo (a) anthracene	4900	310	ug/kg	49
Chrysene	3900	310	ug/kg	54
Benzo (b) fluoranthene	4700	310	ug/kg	62
Benzo (k) fluoranthene	1600	310	ug/kg	64
Benzo (a) pyrene	4100	310	ug/kg	86
Indeno (1,2,3-cd) pyrene	2300	310	ug/kg	17
Dibenzo (a,h) anthracene	500	310	ug/kg	68
Benzo (ghi) perylene	2200	310	ug/kg	23

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.
 DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.
 E Estimated result. Result concentration exceeds the calibration range.

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-003 Work Order #....: K737M2AC Matrix.....: SOLID
 Date Sampled...: 03/04/09 13:40 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 02:49
 Dilution Factor: 500 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 46 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	3400 J	6200	ug/kg	930
2-Methylnaphthalene	8600	6200	ug/kg	1200
Naphthalene	590000	6200	ug/kg	890
Acenaphthylene	1800 J	6200	ug/kg	1200
Acenaphthene	9700	6200	ug/kg	990
Fluorene	7200	6200	ug/kg	930
Phenanthrene	23000	6200	ug/kg	730
Anthracene	6700 J	30000	ug/kg	1100
Fluoranthene	16000	6200	ug/kg	520
Pyrene	10000	6200	ug/kg	1600
Benzo (a) anthracene	7100	6200	ug/kg	980
Chrysene	5500 J	6200	ug/kg	1100
Benzo (b) fluoranthene	6400	6200	ug/kg	1200
Benzo (k) fluoranthene	3500 J	6200	ug/kg	1300
Benzo (a) pyrene	6200	6200	ug/kg	1700
Indeno (1,2,3-cd) pyrene	4100 J	6200	ug/kg	340
Dibenzo (a,h) anthracene	ND	6200	ug/kg	1400
Benzo (ghi) perylene	4200 J	6200	ug/kg	450

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-005 Work Order #....: K737V1AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 15:55 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 01:41
 Dilution Factor: 250 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	26000	4100	ug/kg	620
2-Methylnaphthalene	71000	4100	ug/kg	800
Naphthalene	1600000 E	4100	ug/kg	590
Acenaphthylene	19000	4100	ug/kg	810
Acenaphthene	2500 J	4100	ug/kg	650
Fluorene	12000	4100	ug/kg	610
Phenanthrene	29000	4100	ug/kg	490
Anthracene	13000 J	20000	ug/kg	710
Fluoranthene	47000 E	4100	ug/kg	340
Pyrene	33000	4100	ug/kg	1100
Benzo (a) anthracene	22000	4100	ug/kg	650
Chrysene	21000	4100	ug/kg	710
Benzo (b) fluoranthene	24000	4100	ug/kg	820
Benzo (k) fluoranthene	8200	4100	ug/kg	850
Benzo (a) pyrene	21000	4100	ug/kg	1100
Indeno (1,2,3-cd) pyrene	12000	4100	ug/kg	220
Dibenzo (a,h) anthracene	3400 J	4100	ug/kg	900
Benzo (ghi) perylene	12000	4100	ug/kg	300

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-005 Work Order #....: K737V2AC Matrix.....: SOLID
 Date Sampled...: 03/04/09 15:55 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 03:12
 Dilution Factor: 2500 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	37000 J	41000	ug/kg	6200
2-Methylnaphthalene	93000	41000	ug/kg	8000
Naphthalene	4400000	41000	ug/kg	5900
Acenaphthylene	25000 J	41000	ug/kg	8100
Acenaphthene	ND	41000	ug/kg	6500
Fluorene	19000 J	41000	ug/kg	6100
Phenanthrene	44000	41000	ug/kg	4900
Anthracene	17000 J	200000	ug/kg	7100
Fluoranthene	67000	41000	ug/kg	3400
Pyrene	46000	41000	ug/kg	11000
Benzo (a) anthracene	35000 J	41000	ug/kg	6500
Chrysene	28000 J	41000	ug/kg	7100
Benzo (b) fluoranthene	33000 J	41000	ug/kg	8200
Benzo (k) fluoranthene	12000 J	41000	ug/kg	8500
Benzo (a) pyrene	29000 J	41000	ug/kg	11000
Indeno (1, 2, 3-cd) pyrene	16000 J	41000	ug/kg	2200
Dibenzo (a, h) anthracene	ND	41000	ug/kg	9000
Benzo (ghi) perylene	17000 J	41000	ug/kg	3000

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-007 Work Order #....: K73721AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 02:04
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 37 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2300	110	ug/kg	16
2-Methylnaphthalene	2200	110	ug/kg	21
Naphthalene	41000 E	110	ug/kg	15
Acenaphthylene	2200	110	ug/kg	21
Acenaphthene	8100	110	ug/kg	17
Fluorene	5900	110	ug/kg	16
Phenanthrene	16000	110	ug/kg	13
Anthracene	7200	520	ug/kg	19
Fluoranthene	35000	110	ug/kg	8.9
Pyrene	20000	110	ug/kg	28
Benzo (a) anthracene	17000	110	ug/kg	17
Chrysene	14000	110	ug/kg	19
Benzo (b) fluoranthene	18000	110	ug/kg	21
Benzo (k) fluoranthene	6100	110	ug/kg	22
Benzo (a) pyrene	15000	110	ug/kg	30
Indeno (1,2,3-cd) pyrene	8500	110	ug/kg	5.8
Dibenzo (a,h) anthracene	2200	110	ug/kg	23
Benzo (ghi) perylene	8200	110	ug/kg	7.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-007 Work Order #....: K73722AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 03:34
 Dilution Factor: 100 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 37 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	3300	1100	ug/kg	160
2-Methylnaphthalene	2800	1100	ug/kg	210
Naphthalene	87000	1100	ug/kg	150
Acenaphthylene	2700	1100	ug/kg	210
Acenaphthene	9900	1100	ug/kg	170
Fluorene	6600	1100	ug/kg	160
Phenanthrene	19000	1100	ug/kg	130
Anthracene	8700	5200	ug/kg	190
Fluoranthene	44000	1100	ug/kg	89
Pyrene	29000	1100	ug/kg	280
Benzo (a) anthracene	22000	1100	ug/kg	170
Chrysene	18000	1100	ug/kg	190
Benzo (b) fluoranthene	20000	1100	ug/kg	210
Benzo (k) fluoranthene	7500	1100	ug/kg	220
Benzo (a) pyrene	18000	1100	ug/kg	300
Indeno (1,2,3-cd) pyrene	9700	1100	ug/kg	58
Dibenzo (a,h) anthracene	2500	1100	ug/kg	230
Benzo (ghi) perylene	9500	1100	ug/kg	78

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.
 DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
 Results and reporting limits have been adjusted for dry weight.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C050210

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	BH-SED-13C-6	56	90	76	65	64	85	00
02	BH-SED-05-4	0 D	0 D	0 D	0 D	0 D	0 D	06
03	BH-SED-05-4 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
04	BH-SED-04-8	0 D	0 D	0 D	0 D	0 D	0 D	06
05	BH-SED-04-8 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
06	DUP-1	0 D	0 D	0 D	0 D	0 D	0 D	06
07	DUP-1 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
08	METHOD BLK. K747Q1AA	78	97	83	85	81	97	00
09	LCS K747Q1AC	77	94	86	90	85	112	00
10	BH-SED-05-4 D	0 D	0 D	0 D	0 D	0 D	0 D	06
11	BH-SED-05-4 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C060000

WO #: K747Q1AC

BATCH: 9065012

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Butyl benzyl phthalate	333	295	88	40 - 117	
Phenol	333	255	76	39 - 105	
2-Chlorophenol	333	280	84	40 - 105	
1,4-Dichlorobenzene	333	277	83	41 - 101	
N-Nitrosodi-n-propylamine	333	238	71	42 - 108	
1,2,4-Trichlorobenzene	333	302	91	41 - 105	
4-Chloro-3-methylphenol	333	292	88	43 - 110	
Acenaphthene	333	273	82	42 - 104	
4-Nitrophenol	333	329	99	27 - 131	
2,4-Dinitrotoluene	333	316	95	43 - 118	
Pentachlorophenol	333	278	83	13 - 125	
Pyrene	333	282	85	39 - 113	
4-Methylphenol	667	536	80	43 - 107	
Hexachloroethane	333	271	81	40 - 102	
Naphthalene	333	283	85	42 - 104	
4-Bromophenyl phenyl ethe	333	306	92	43 - 111	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-05-4

Level: (low/med) LOW

Lot #: C9C050210

WO #: K737M1AX

BATCH: 9065012

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	614	ND		0*	39 - 105	DIL
2-Chlorophenol	614	ND		0*	40 - 105	DIL
1,4-Dichlorobenzene	614	ND		0*	41 - 101	DIL
N-Nitrosodi-n-propylamine	614	ND		0*	42 - 108	DIL
1,2,4-Trichlorobenzene	614	ND		0*	41 - 105	DIL
4-Chloro-3-methylphenol	614	ND		0*	43 - 110	DIL
Acenaphthene	614	6600		0*	42 - 104	DIL
4-Nitrophenol	614	ND		0*	27 - 131	DIL
2,4-Dinitrotoluene	614	ND		0*	43 - 118	DIL
Pentachlorophenol	614	ND		0*	18 - 125	DIL
Pyrene	614	7700		0*	39 - 113	DIL
4-Methylphenol	1230	ND		0*	43 - 107	DIL
Hexachloroethane	614	ND		0*	40 - 102	DIL
Naphthalene	614	150000		0*	42 - 104	DIL
4-Bromophenyl phenyl ethe	614	ND		0*	43 - 111	DIL
Butyl benzyl phthalate	614	ND		0*	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-05-4

Level: (low/med) LOW

Lot #: C9C050210

WO #: K737M1A0

BATCH: 9065012

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	614		0*	0.0	40	39 - 105	DIL
2-Chlorophenol	614		0*	0.0	37	40 - 105	DIL
1,4-Dichlorobenzene	614		0*	0.0	32	41 - 101	DIL
N-Nitrosodi-n-propylamine	614		0*	0.0	32	42 - 108	DIL
1,2,4-Trichlorobenzene	614		0*	0.0	36	41 - 105	DIL
4-Chloro-3-methylphenol	614		0*	0.0	31	43 - 110	DIL
Acenaphthene	614		0*	0.0	34	42 - 104	DIL
4-Nitrophenol	614		0*	0.0	33	27 - 131	DIL
2,4-Dinitrotoluene	614		0*	0.0	33	48 - 118	DIL
Pentachlorophenol	614		0*	0.0	34	18 - 125	DIL
Pyrene	614		0*	0.0	28	39 - 113	DIL
4-Methylphenol	1230		0*	0.0	36	43 - 107	DIL
Hexachloroethane	614		0*	0.0	34	40 - 102	DIL
Naphthalene	614		0*	0.0	25	42 - 104	DIL
4-Bromophenyl phenyl ethe	614		0*	0.0	20	43 - 111	DIL
Butyl benzyl phthalate	614		0*	0.0	34	40 - 117	DIL

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K747Q1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0308001.

Lot Number: C9C050210

Date Analyzed: 03/08/09

Time Analyzed: 23:24

Matrix: SOLID

Date Extracted: 03/06/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level: (low/med) LOW

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

CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
=====	=====	=====	=====	=====
01 BH-SED-13C-6	K737H1AC	F0308003.	03/09/09	00:10
02 BH-SED-05-4	K737M1AC	F0308004.	03/09/09	00:33
03 BH-SED-05-4	K737M1AX S	F0308005.	03/09/09	00:55
04 BH-SED-05-4	K737M1A0 D	F0308006.	03/09/09	01:18
05 BH-SED-05-4	K737M2AC	F0308015.	03/09/09	02:49
06 BH-SED-04-8	K737V1AC	F0308007.	03/09/09	01:41
07 BH-SED-04-8	K737V2AC	F0308016.	03/09/09	03:12
08 DUP-1	K73721AC	F0308008.	03/09/09	02:04
09 DUP-1	K73722AC	F0308017.	03/09/09	03:34
10 CHECK SAMPLE	K747Q1AC C	F0308002.	03/08/09	23:47
11				
12				
13				
14				
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16				
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27				
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30				

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9C050210
MB Lot-Sample #: C9C060000-012

Work Order #...: K747Q1AA

Matrix.....: SOLID

Analysis Date...: 03/08/09
Dilution Factor: 0.5

Prep Date.....: 03/06/09
Prep Batch #...: 9065012
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 23:24
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1, 2, 3- cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a, h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	78	(27 - 110)
Terphenyl-d14	97	(21 - 130)
2-Fluorobiphenyl	83	(28 - 108)
2-Fluorophenol	85	(28 - 107)
Phenol-d5	81	(30 - 112)
2,4,6-Tribromophenol	97	(21 - 116)

NOTE(S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
Lab Code: TA Case No.: SAS No.: SDG No.: C9C050210
Lab File ID (Standard): F03080C2 Date Analyzed: 03/08/09
Instrument ID: 722 Time Analyzed: 2303

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	68832	4.43	248999	5.41	148775	6.76
UPPER LIMIT	137664	4.93	497998	5.91	297550	7.26
LOWER LIMIT	34416	3.93	124500	4.91	74388	6.26
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	68678	4.42	244174	5.41	149145	6.76
02 INTRA-LAB CH	78517	4.43	296077	5.41	174402	6.76
03 BH-SED-13C-6	77610	4.42	282061	5.41	167403	6.76
04 BH-SED-05-6	80664	4.43	314686	5.41	171453	6.76
05 BH-SED-05-6	77610	4.43	306660	5.42	170293	6.76
06 BH-SED-05-6	76042	4.43	308716	5.42	170254	6.76
07 BH-SED-04-8	84746	4.43	349509	5.41	198630	6.76
08 DUP-1	78219	4.43	291338	5.41	162612	6.76
09 BH-SED-05-6	58194	4.43	234957	5.41	142965	6.76
10 BH-SED-04-8	72143	4.43	287554	5.41	173182	6.76
11 DUP-1	62956	4.43	241908	5.41	150468	6.76
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
Lab Code: TA Case No.: SAS No.: SDG No.: C9C050210
Lab File ID (Standard): F03080C2 Date Analyzed: 03/08/09
Instrument ID: 722 Time Analyzed: 2303

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	236272	7.91	164728	10.25	121373	11.82
UPPER LIMIT	472544	8.41	329456	10.75	242746	12.32
LOWER LIMIT	118136	7.41	82364	9.75	60687	11.32
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	249543	7.90	182974	10.24	139119	11.81
02 INTRA-LAB CH	276557	7.91	216017	10.25	160207	11.81
03 BH-SED-13C-6	277379	7.91	198410	10.25	161897	11.81
04 BH-SED-05-6	268855	7.91	198257	10.24	163194	11.81
05 BH-SED-05-6	264855	7.91	195809	10.24	159511	11.81
06 BH-SED-05-6	267794	7.91	195136	10.24	162007	11.81
07 BH-SED-04-8	309457	7.91	231662	10.24	190451	11.81
08 DUP-1	267847	7.91	256747	10.25	225443	11.82
09 BH-SED-05-6	234270	7.90	184380	10.24	150893	11.80
10 BH-SED-04-8	271963	7.90	211371	10.24	172254	11.80
11 DUP-1	235783	7.91	182857	10.24	160741	11.80
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SKD-13C-6

TOTAL Metals

Lot-Sample #...: C9C050210-001

Date Sampled...: 03/04/09

Date Received...: 03/05/09

Matrix.....: SOLID

% Moisture.....: 42

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9066079						
Silver	0.12	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AQ
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0023	
Arsenic	8.2	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AD
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.016	
Beryllium	0.88	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AE
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0035	
Cadmium	0.79	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AF
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0086	
Chromium	31.1 J	0.19	mg/kg	SW846 6020	03/07-03/10/09	K737H1AG
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0076	
Copper	21.4	0.19	mg/kg	SW846 6020	03/07-03/10/09	K737H1AH
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Nickel	15.4	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AJ
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0065	
Lead	110 J	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AK
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0032	
Antimony	0.29 J	0.19	mg/kg	SW846 6020	03/07-03/10/09	K737H1AL
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0031	

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Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

TOTAL Metals

Lot-Sample #...: C9C050210-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.68	0.47	mg/kg	SW846 6020	03/07-03/10/09	K737H1AM
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.039	
Thallium	0.17	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AN
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0019	
Zinc	178 J	0.47	mg/kg	SW846 6020	03/07-03/10/09	K737H1AP
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011	
Prep Batch #...: 9071012						
Mercury	0.21	0.031	mg/kg	SW846 7471A	03/12/09	K737H1AR
		Dilution Factor: 0.55		Analysis Time...: 08:25	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0024	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: BH-SKD-05-4

TOTAL Metals

Lot-Sample #...: C9C050210-003

Date Sampled...: 03/04/09

% Moisture.....: 46

Date Received...: 03/05/09

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9066079						
Silver	0.35	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AQ
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Arsenic	8.6	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AD
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.017	
Beryllium	1.8	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AE
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0037	
Cadmium	1.6	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AF
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0092	
Chromium	51.6 J	0.20	mg/kg	SW846 6020	03/07-03/10/09	K737M1AG
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Copper	41.3	0.20	mg/kg	SW846 6020	03/07-03/10/09	K737M1AH
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0086	
Nickel	44.0	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AJ
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0069	
Lead	115 J	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AK
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0034	
Antimony	0.35 J	0.20	mg/kg	SW846 6020	03/07-03/10/09	K737M1AL
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0033	

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Maryland Environmental Service

Client Sample ID: BH-SED-05-4

TOTAL Metals

Lot-Sample #...: C9C050210-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	1.4	0.51	mg/kg	SW846 6020	03/07-03/10/09	K737M1AM
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.041	
Thallium	0.45	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AN
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0020	
Zinc	548 J	0.51	mg/kg	SW846 6020	03/07-03/10/09	K737M1AP
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.012	
Prep Batch #...: 9071012						
Mercury	0.17	0.030	mg/kg	SW846 7471A	03/12/09	K737M1AR
		Dilution Factor: 0.5		Analysis Time...: 08:27	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0023	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

TOTAL Metals

Lot-Sample #...: C9C050210-005

Date Sampled...: 03/04/09

Date Received...: 03/05/09

Matrix.....: SOLID

% Moisture.....: 59

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9066079						
Silver	3.8	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AQ
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0029	
Arsenic	61.3	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AD
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.020	
Beryllium	1.7	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AE
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0045	
Cadmium	9.1	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AF
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011	
Chromium	535 J	0.24	mg/kg	SW846 6020	03/07-03/10/09	K737V1AG
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0098	
Copper	414	0.24	mg/kg	SW846 6020	03/07-03/10/09	K737V1AH
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.010	
Nickel	54.8	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AJ
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0083	
Lead	951 J	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AK
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0041	
Antimony	2.5 J	0.24	mg/kg	SW846 6020	03/07-03/10/09	K737V1AL
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0040	

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Maryland Environmental Service

Client Sample ID: BH-SED-04-8

TOTAL Metals

Lot-Sample #....: C9C050210-005

Matrix.....: SOLID

REPORTING				PREPARATION-	WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Selenium	10.7	0.61	mg/kg	SW846 6020	03/07-03/10/09	K737V1AM
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.050	
Thallium	1.2	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AN
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Zinc	3230 J	6.1	mg/kg	SW846 6020	03/07-03/10/09	K737V1AP
		Dilution Factor: 5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.14	
Prep Batch #....: 9071012						
Mercury	2.7	0.081	mg/kg	SW846 7471A	03/12/09	K737V1AR
		Dilution Factor: 1		Analysis Time...: 09:37	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0061	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #...: C9C050210-007

Date Sampled...: 03/04/09

Date Received...: 03/05/09

Matrix.....: SOLID

% Moisture.....: 37

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9066079						
Silver	0.33	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AQ
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0023	
Arsenic	13.6	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AD
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.016	
Beryllium	0.73	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AE
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0035	
Cadmium	3.6	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AF
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0087	
Chromium	42.4 J	0.19	mg/kg	SW846 6020	03/07-03/10/09	K73721AG
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0076	
Copper	49.4	0.19	mg/kg	SW846 6020	03/07-03/10/09	K73721AH
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Nickel	18.8	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AJ
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0065	
Lead	446 J	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AK
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0032	
Antimony	0.85 J	0.19	mg/kg	SW846 6020	03/07-03/10/09	K73721AL
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0031	

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Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #....: C9C050210-007

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	2.6	0.48	mg/kg	SW846 6020	03/07-03/10/09	K73721AM
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.039	
Thallium	0.43	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AN
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0019	
Zinc	918 J	0.48	mg/kg	SW846 6020	03/07-03/10/09	K73721AP
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011	
Prep Batch #....: 9071012						
Mercury	0.44	0.031	mg/kg	SW846 7471A	03/12/09	K73721AR
		Dilution Factor: 0.6		Analysis Time...: 08:34	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0024	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C050210

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C070000-079 Prep Batch #...: 9066079						
Antimony	0.020 B	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Arsenic	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AA
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Beryllium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AC
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Cadmium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AD
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Chromium	0.056 B	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AE
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Copper	ND	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AF
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Lead	0.0086 B	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AH
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Nickel	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AG
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Selenium	ND	0.25	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AK
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Silver	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AN
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AL
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C050210

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	0.015 B	0.25	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AM
Dilution Factor: 0.5						
		Analysis Time...: 22:11	Analyst ID.....: 400149		Instrument ID...: ICP	

MB Lot-Sample #: C9C120000-012 Prep Batch #...: 9071012

Mercury	ND	0.016	mg/kg	SW846 7471A	03/12/09	K8D0J1AA
Dilution Factor: 0.5						
		Analysis Time...: 08:22	Analyst ID.....: 031043		Instrument ID...: HGH	

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C050210

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C070000-079 Prep Batch #....: 9066079					
Arsenic	91	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AP	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Beryllium	93	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AQ	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Cadmium	96	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AR	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Chromium	110	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AT	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Copper	112	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AU	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Nickel	112	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AV	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Lead	104	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AW	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Antimony	91	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AX	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Selenium	87	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AO	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Thallium	96	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1A1	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C050210

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	97	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1A2
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
Silver	108	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1A3
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
LCS Lot-Sample#: C9C120000-012 Prep Batch #....: 9071012					
Mercury	100	(80 - 120)	SW846 7471A	03/12/09	K8D0J1AC
Dilution Factor: 0.5 Analysis Time...: 08:24 Analyst ID.....: 031043					
Instrument ID...: HGHYDRA					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C050210

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C070000-079 Prep Batch #...: 9066079							
Arsenic	2.00	1.83	mg/kg	91	SW846 6020	03/07-03/10/09	K77LQ1AP
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Beryllium	2.50	2.31	mg/kg	93	SW846 6020	03/07-03/10/09	K77LQ1AQ
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Cadmium	2.50	2.39	mg/kg	96	SW846 6020	03/07-03/10/09	K77LQ1AR
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Chromium	10.0	11.0	mg/kg	110	SW846 6020	03/07-03/10/09	K77LQ1AT
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Copper	12.5	14.0	mg/kg	112	SW846 6020	03/07-03/10/09	K77LQ1AU
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Nickel	25.0	28.0	mg/kg	112	SW846 6020	03/07-03/10/09	K77LQ1AV
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Lead	1.00	1.04	mg/kg	104	SW846 6020	03/07-03/10/09	K77LQ1AW
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Antimony	25.0	22.8	mg/kg	91	SW846 6020	03/07-03/10/09	K77LQ1AX
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Selenium	0.500	0.434	mg/kg	87	SW846 6020	03/07-03/10/09	K77LQ1A0
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Thallium	2.50	2.40	mg/kg	96	SW846 6020	03/07-03/10/09	K77LQ1A1
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C050210

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	25.0	24.2	mg/kg	97	SW846 6020	03/07-03/10/09	K77LQ1A2
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Silver	2.50	2.70	mg/kg	108	SW846 6020	03/07-03/10/09	K77LQ1A3
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
LCS Lot-Sample#: C9C120000-012 Prep Batch #...: 9071012							
Mercury	0.208	0.208	mg/kg	100	SW846 7471A	03/12/09	K8D0J1AC
Dilution Factor: 0.5 Analysis Time...: 08:24 Analyst ID.....: 031043							
Instrument ID...: HGHYDRA							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C050210

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C050210-003 Prep Batch #....: 9066079							
						% Moisture.....: 46	
Antimony	52 N	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CG
	52 N	(75 - 125)	1.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1CH
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Arsenic	101	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A1
	82	(75 - 125)	6.2	(0-20)	SW846 6020	03/07-03/10/09	K737M1A2
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Beryllium	100	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A3
	103	(75 - 125)	2.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1A4
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Cadmium	98	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A5
	96	(75 - 125)	2.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1A6
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Chromium	175 N	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A7
	133 N	(75 - 125)	10	(0-20)	SW846 6020	03/07-03/10/09	K737M1A8
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Copper	120	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1A9
	87	(75 - 125)	12	(0-20)	SW846 6020	03/07-03/10/09	K737M1CA
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							
Lead	NC	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CE
	NC	(75 - 125)		(0-20)	SW846 6020	03/07-03/10/09	K737M1CF
Dilution Factor: 0.55							
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149							
MS Run #.....: 9066025							

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C050210

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	104	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CC
	108	(75 - 125)	2.0	(0-20)	SW846 6020	03/07-03/10/09	K737M1CD
					Dilution Factor: 0.55		
					Analysis Time...: 22:36	Instrument ID...: ICPMS2	Analyst ID.....: 400149
					MS Run #.....: 9066025		
Selenium	71 N	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CJ
	63 N	(75 - 125)	3.7	(0-20)	SW846 6020	03/07-03/10/09	K737M1CK
					Dilution Factor: 0.55		
					Analysis Time...: 22:36	Instrument ID...: ICPMS2	Analyst ID.....: 400149
					MS Run #.....: 9066025		
Silver	106	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CQ
	107	(75 - 125)	0.61	(0-20)	SW846 6020	03/07-03/10/09	K737M1CR
					Dilution Factor: 0.55		
					Analysis Time...: 22:36	Instrument ID...: ICPMS2	Analyst ID.....: 400149
					MS Run #.....: 9066025		
Thallium	95	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CL
	95	(75 - 125)	0.07	(0-20)	SW846 6020	03/07-03/10/09	K737M1CM
					Dilution Factor: 0.55		
					Analysis Time...: 22:36	Instrument ID...: ICPMS2	Analyst ID.....: 400149
					MS Run #.....: 9066025		
Zinc	NC	(75 - 125)			SW846 6020	03/07-03/10/09	K737M1CN
	NC	(75 - 125)		(0-20)	SW846 6020	03/07-03/10/09	K737M1CP
					Dilution Factor: 0.55		
					Analysis Time...: 22:36	Instrument ID...: ICPMS2	Analyst ID.....: 400149
					MS Run #.....: 9066025		

MS Lot-Sample #: C9C050210-003 Prep Batch #...: 9071012

% Moisture.....: 46

Mercury	56 N	(75 - 125)			SW846 7471A	03/12/09	K737M1CT
	84	(75 - 125)	15	(0-20)	SW846 7471A	03/12/09	K737M1CU
					Dilution Factor: 0.5		
					Analysis Time...: 08:29	Instrument ID...: HGHYDRA	Analyst ID.....: 031043
					MS Run #.....: 9071004		

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C050210

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C050210-003 Prep Batch #....: 9066079									
								% Moisture.....: 46	
Antimony									
	0.35	50.6	26.9 N	mg/kg	52		SW846 6020	03/07-03/10/09	K737M1CG
	0.35	50.6	26.5 N	mg/kg	52	1.1	SW846 6020	03/07-03/10/09	K737M1CH
Dilution Factor: 0.55									
Analysis Time...: 22:36					Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9066025									
Arsenic									
	8.6	4.05	12.7	mg/kg	101		SW846 6020	03/07-03/10/09	K737M1A1
	8.6	4.05	11.9	mg/kg	82	6.2	SW846 6020	03/07-03/10/09	K737M1A2
Dilution Factor: 0.55									
Analysis Time...: 22:36					Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9066025									
Beryllium									
	1.8	5.06	6.82	mg/kg	100		SW846 6020	03/07-03/10/09	K737M1A3
	1.8	5.06	6.97	mg/kg	103	2.1	SW846 6020	03/07-03/10/09	K737M1A4
Dilution Factor: 0.55									
Analysis Time...: 22:36					Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9066025									
Cadmium									
	1.6	5.06	6.58	mg/kg	98		SW846 6020	03/07-03/10/09	K737M1A5
	1.6	5.06	6.45	mg/kg	96	2.1	SW846 6020	03/07-03/10/09	K737M1A6
Dilution Factor: 0.55									
Analysis Time...: 22:36					Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9066025									
Chromium									
	51.6	20.3	87.0 N	mg/kg	175		SW846 6020	03/07-03/10/09	K737M1A7
	51.6	20.3	78.4 N	mg/kg	133	10	SW846 6020	03/07-03/10/09	K737M1A8
Dilution Factor: 0.55									
Analysis Time...: 22:36					Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9066025									
Copper									
	41.3	25.3	71.6	mg/kg	120		SW846 6020	03/07-03/10/09	K737M1A9
	41.3	25.3	63.3	mg/kg	87	12	SW846 6020	03/07-03/10/09	K737M1CA
Dilution Factor: 0.55									
Analysis Time...: 22:36					Instrument ID...: ICPMS2		Analyst ID.....: 400149		
MS Run #.....: 9066025									

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C050210

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Lead									
	115	2.03	129 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CE
	115	2.03	102 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CF
Dilution Factor: 0.55									
Analysis Time...: 22:36									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
MS Run #.....: 9066025									
Nickel									
	44.0	50.6	96.9	mg/kg	104		SW846 6020	03/07-03/10/09	K737M1CC
	44.0	50.6	98.9	mg/kg	108	2.0	SW846 6020	03/07-03/10/09	K737M1CD
Dilution Factor: 0.55									
Analysis Time...: 22:36									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
MS Run #.....: 9066025									
Selenium									
	1.4	1.01	2.12 N	mg/kg	71		SW846 6020	03/07-03/10/09	K737M1CJ
	1.4	1.01	2.04 N	mg/kg	63	3.7	SW846 6020	03/07-03/10/09	K737M1CK
Dilution Factor: 0.55									
Analysis Time...: 22:36									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
MS Run #.....: 9066025									
Silver									
	0.35	5.06	5.71	mg/kg	106		SW846 6020	03/07-03/10/09	K737M1CQ
	0.35	5.06	5.75	mg/kg	107	0.61	SW846 6020	03/07-03/10/09	K737M1CR
Dilution Factor: 0.55									
Analysis Time...: 22:36									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
MS Run #.....: 9066025									
Thallium									
	0.45	5.06	5.27	mg/kg	95		SW846 6020	03/07-03/10/09	K737M1CL
	0.45	5.06	5.28	mg/kg	95	0.07	SW846 6020	03/07-03/10/09	K737M1CM
Dilution Factor: 0.55									
Analysis Time...: 22:36									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
MS Run #.....: 9066025									
Zinc									
	548	50.6	625 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CN
	548	50.6	596 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CP
Dilution Factor: 0.55									
Analysis Time...: 22:36									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
MS Run #.....: 9066025									

MS Lot-Sample #: C9C050210-003 Prep Batch #....: 9071012

% Moisture.....: 46

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C050210

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Mercury	0.17	0.153	0.258	N mg/kg	56		SW846 7471A	03/12/09	K737M1CT
	0.17	0.153	0.301	mg/kg	84	15	SW846 7471A	03/12/09	K737M1CU
Dilution Factor: 0.5									
Analysis Time...: 08:29 Instrument ID...: HG:HYDRA Analyst ID.....: 031043									
MS Run #.....: 9071004									

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C050210

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13C-6	C9C050210 001	K737H1AT	0.98	mg/kg	0.17	0.86	1	3/10/2009 - 3/10/2009 10:07	9069068
BH-SED-05-4	C9C050210 003	K737M1AT	1.7	mg/kg	0.18	0.92	1	3/10/2009 - 3/10/2009 10:07	9069068
BH-SED-04-8	C9C050210 005	K737V1AT	17.9	mg/kg	0.23	1.2	1	3/10/2009 - 3/10/2009 10:07	9069068
DUP-1	C9C050210 007	K73721AT	2.7	mg/kg	0.15	0.79	1	3/10/2009 - 3/10/2009 10:07	9069068

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SM20 2540G
 Lot Number: C9C050210

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13C-6	C9C050210 001	K737H1AA	57.9	%	0.0	1.0	1	3/5/2009 - 3/6/2009 07:15	9064342
BH-SED-13C-TOC	C9C050210 002	K737L1AA	60.0	%	0.0	1.0	1	3/5/2009 - 3/6/2009 07:15	9064342
BH-SED-05-4	C9C050210 003	K737M1AA	54.3	%	0.0	1.0	1	3/5/2009 - 3/6/2009 07:15	9064342
BH-SED-05-TOC	C9C050210 004	K737Q1AA	58.5	%	0.0	1.0	1	3/5/2009 - 3/6/2009 07:15	9064342
BH-SED-04-8	C9C050210 005	K737V1AA	41.0	%	0.0	1.0	1	3/5/2009 - 3/6/2009 07:15	9064342
BH-SED-04-TOC	C9C050210 006	K737X1AA	81.7	%	0.0	1.0	1	3/5/2009 - 3/6/2009 07:15	9064342
DUP-1	C9C050210 007	K73721AA	63.0	%	0.0	1.0	1	3/5/2009 - 3/6/2009 07:15	9064342

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9C050210

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13C-TOC	C9C050210 002	K737L1AE	11600	mg/kg	343	1490	1.79	3/6/2009 - 3/6/2009 11:34	9065045
BH-SED-05-TOC	C9C050210 004	K737Q1AC	32200	mg/kg	372	1620	1.89	3/6/2009 - 3/6/2009 12:04	9065045
BH-SED-04-TOC	C9C050210 006	K737X1AC	881	mg/kg	132	575	0.94	3/6/2009 - 3/6/2009 12:25	9065045
DUP-1	C9C050210 007	K73721AU	29000	mg/kg	731	3180	4	3/6/2009 - 3/6/2009 12:35	9065045

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Report ID: C9C050210

Matrix: SOLID

Date/Time Received: 3/7/2009 10:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C100000068B	068 MB	K79AT1AA	ND	mg/kg	0.50	3/10/2009 - 3/10/2009 10:07	9069068	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Report ID: C9C050210

Matrix: SOLID

Date/Time Received: 3/5/2009 9:45:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-13C-TOC DUP	002 DUP	K737L1AH	59.7	%	1.0	3/5/2009 - 3/6/2009 07:15	9064342	0.39 / 20
BH-SED-05-4	003 DUP	K737M1C1	55.4	%	1.0	3/5/2009 - 3/6/2009 07:15	9064342	1.9 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: Maryland Environmental Service

Report ID: C9C050210

Matrix: SOLID

Date/Time Received: 3/5/2009 9:45:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C060000045B	045 MB	K749G1AA	ND	mg/kg	500	3/6/2009 - 3/6/2009 10:33	9065045	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C100000
 Date/Time Received: 3/7/2009 10:30:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K79AT1AC	111	41 - 159	3/10/2009 - 3/10/2009 10:06	9069068	
BH-SED-05-4	MS	K737M1CV	81	75 - 125	3/10/2009 - 3/10/2009 10:07	9069068	26 / 20
LAB MS/MSD	MS	K77HF1CQ	106	75 - 125	3/10/2009 - 3/10/2009 10:18	9069068	0.11 / 20
BH-SED-05-4	MSD	K737M1CW	110 *	75 - 125	3/10/2009 - 3/10/2009 10:07	9069068	26 / 20
LAB MS/MSD	MSD	K77HF1CR	106	75 - 125	3/10/2009 - 3/10/2009 10:18	9069068	0.11 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C060000
 Date/Time Received: 3/5/2009 9:45:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K749G1AC	103	75 - 125	3/6/2009 - 3/6/2009 10:43	9065045	1.9 / 20
BH-SED-13C-TOC	MSD	K737L1AG	89	75 - 125	3/6/2009 - 3/6/2009 11:54	9065045	18 / 20
DUPLICATE CHECK	LCSD	K749G1AD	101	75 - 125	3/6/2009 - 3/6/2009 10:53	9065045	1.9 / 20
BH-SED-13C-TOC	MS	K737L1AF	101	75 - 125	3/6/2009 - 3/6/2009 11:44	9065045	18 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C050210

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13C	C9C050210-002	Soil
1MS*	BH-SED-13CMS	C9C050210-002MS	Soil
1MSD*	BH-SED-13CMSD	C9C050210-002MSD	Soil
2	BH-SED-05	C9C050210-004	Soil
2MS**	BH-SED-05MS	C9C050210-004MS	Soil
2MSD**	BH-SED-05MSD	C9C050210-004MSD	Soil
3	BH-SED-04	C5C050210-006	Soil
4	DUP-1	C9C050210-007	Soil

* - MS/MSD - TOC only

** - MS/MSD - cyanide only

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
2	Cyanide	Ok/110%/Ok	K	All Samples

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13C-6 mg/kg	DUP-1 mg/kg	RPD	Qualifier
Cyanide	0.98	2.7	93%	None
TOC	11800	29000	84%	None

Compound Quantitation - No discrepancies were identified.

MES Sparrows Point 18001868

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Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C050210

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13C-6	C9C050210 001	K737H1AT	0.98	K mg/kg	0.17	0.88	1	3/10/2009 - 3/10/2009 10:07	9069068
BH-SED-05-4	C9C050210 003	K737M1AT	1.7	K mg/kg	0.18	0.92	1	3/10/2009 - 3/10/2009 10:07	9069068
BH-SED-04-8	C9C050210 005	K737V1AT	17.9	K mg/kg	0.23	1.2	1	3/10/2009 - 3/10/2009 10:07	9069068
DUP-1	C9C050210 007	K73721AT	2.7	K mg/kg	0.15	0.79	1	3/10/2009 - 3/10/2009 10:07	9069068

mw
 4/29/09

MES Sparrows Point 18001868

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TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C050210

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-13C-TOC	C9C050210 002	K737L1AE	11600	mg/kg	343	1490	1.79	3/6/2009 - 3/6/2009 11:34	9065045
BH-SED-05-TOC	C9C050210 004	K737Q1AC	32200	mg/kg	372	1620	1.89	3/6/2009 - 3/6/2009 12:04	9065045
BH-SED-04-TOC	C9C050210 006	K737X1AC	881	mg/kg	132	575	0.94	3/6/2009 - 3/6/2009 12:25	9065045
DUP-1	C9C050210 007	K73721AU	29000	mg/kg	731	3180	4	3/6/2009 - 3/6/2009 12:35	9065045

600
4/29/09

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C050210

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13C-6	C9C050210-001	Soil
2	BH-SED-05-4	C9C050210-003	Soil
2MS	BH-SED-05-4MS	C9C050210-003MS	Soil
2MSD	BH-SED-05-4MSD	C9C050210-003MSD	Soil
3	BH-SED-04-8	C9C050210-005	Soil
4	DUP-1	C9C050210-007	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
2	Antimony	52%/52%/Ok	L/UL	All Samples
	Chromium	175%/133%/Ok	K	
	Selenium	71%/63%/Ok	L/UL	
	Mercury	56%/Ok/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample exhibited acceptable %D values.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13C-6 mg/kg	DUP-1 mg/kg	RPD	Qualifier
Antimony	0.29	0.85	98%	None
Arsenic	8.2	13.6	50%	None
Beryllium	0.88	0.73	19%	None
Cadmium	0.79	3.6	128%	None
Chromium	31.1	42.4	31%	None
Copper	21.4	49.4	79%	None
Lead	110	446	121%	None
Mercury	0.21	0.44	71%	None
Nickel	15.4	18.8	20%	None
Selenium	0.68	2.6	117%	None
Silver	0.12	0.33	93%	None
Thallium	0.17	0.43	87%	None
Zinc	178	918	135%	None

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

TOTAL Metals

Lot-Sample #....: C9C050210-001

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

% Moisture.....: 42

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9066079						
Silver	0.12	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AQ
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0023	
Arsenic	8.2	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AD
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.016	
Beryllium	0.88	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AE
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0035	
Cadmium	0.79	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AF
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0086	
Chromium	31.1 <i>/K</i>	0.19	mg/kg	SW846 6020	03/07-03/10/09	K737H1AG
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0076	
Copper	21.4	0.19	mg/kg	SW846 6020	03/07-03/10/09	K737H1AH
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Nickel	15.4	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AJ
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0065	
Lead	110 <i>/</i>	0.095	mg/kg	SW846 6020	03/07-03/10/09	K737H1AK
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0032	
Antimony	0.29 <i>/L</i>	0.19	mg/kg	SW846 6020	03/07-03/10/09	K737H1AL
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0031	

(Continued on next page)

lew
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

TOTAL Metals

Lot-Sample #....: C9C050210-001

Matrix.....: SOLID

REPORTING				PREPARATION- WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE ORDER #
Selenium	0.68 L	0.47	mg/kg	SW846 6020	03/07-03/10/09 K737H1AM
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.039
Thallium	0.17	0.095	mg/kg	SW846 6020	03/07-03/10/09 K737H1AN
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0019
Zinc	178 J	0.47	mg/kg	SW846 6020	03/07-03/10/09 K737H1AP
		Dilution Factor: 0.55		Analysis Time...: 22:24	Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011
Prep Batch #....: 9071012					
Mercury	0.21 L	0.031	mg/kg	SW846 7471A	03/12/09 K737H1AR
		Dilution Factor: 0.55		Analysis Time...: 08:25	Analyst ID.....: 031043
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0024

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

lw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SKD-05-4

TOTAL Metals

Lot-Sample #....: C9C050210-003

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

% Moisture.....: 46

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9066079						
Silver	0.35	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AQ
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Arsenic	8.6	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AD
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.017	
Beryllium	1.8	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AE
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0037	
Cadmium	1.6	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AF
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0092	
Chromium	51.6 / K	0.20	mg/kg	SW846 6020	03/07-03/10/09	K737M1AG
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Copper	41.3	0.20	mg/kg	SW846 6020	03/07-03/10/09	K737M1AH
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0086	
Nickel	44.0	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AJ
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0069	
Lead	115 /	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AK
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0034	
Antimony	0.35 / L	0.20	mg/kg	SW846 6020	03/07-03/10/09	K737M1AL
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0033	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

TOTAL Metals

Lot-Sample #....: C9C050210-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	1.4 L	0.51	mg/kg	SW846 6020	03/07-03/10/09	K737M1AM
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.041	
Thallium	0.45	0.10	mg/kg	SW846 6020	03/07-03/10/09	K737M1AN
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0020	
Zinc	548 /	0.51	mg/kg	SW846 6020	03/07-03/10/09	K737M1AP
		Dilution Factor: 0.55		Analysis Time...: 22:28	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.012	
Prep Batch #....: 9071012						
Mercury	0.17 L	0.030	mg/kg	SW846 7471A	03/12/09	K737M1AR
		Dilution Factor: 0.5		Analysis Time...: 08:27	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0023	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

luo
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

TOTAL Metals

Lot-Sample #....: C9C050210-005

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

% Moisture.....: 59

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9066079						
Silver	3.8	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AQ
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0029	
Arsenic	61.3	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AD
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.020	
Beryllium	1.7	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AE
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0045	
Cadmium	9.1	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AF
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011	
Chromium	535 <i>AK</i>	0.24	mg/kg	SW846 6020	03/07-03/10/09	K737V1AG
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0098	
Copper	414	0.24	mg/kg	SW846 6020	03/07-03/10/09	K737V1AH
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.010	
Nickel	54.8	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AJ
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0083	
Lead	951 <i>✓</i>	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AK
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0041	
Antimony	2.5 <i>✓ L</i>	0.24	mg/kg	SW846 6020	03/07-03/10/09	K737V1AL
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0040	

(Continued on next page)

lew
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

TOTAL Metals

Lot-Sample #....: C9C050210-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	10.7 L	0.61	mg/kg	SW846 6020	03/07-03/10/09	K737V1AM
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.050	
Thallium	1.2	0.12	mg/kg	SW846 6020	03/07-03/10/09	K737V1AN
		Dilution Factor: 0.5		Analysis Time...: 22:45	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Zinc	3230 J	6.1	mg/kg	SW846 6020	03/07-03/10/09	K737V1AP
		Dilution Factor: 5		Analysis Time...: 22:49	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.14	
Prep Batch #....: 9071012						
Mercury	2.7 L	0.081	mg/kg	SW846 7471A	03/12/09	K737V1AR
		Dilution Factor: 1		Analysis Time...: 09:37	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0061	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

luo
4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #....: C9C050210-007

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

% Moisture.....: 37

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9066079						
Silver	0.33	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AQ
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0023	
Arsenic	13.6	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AD
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.016	
Beryllium	0.73	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AE
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0035	
Cadmium	3.6	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AF
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0087	
Chromium	42.4 <i>JK</i>	0.19	mg/kg	SW846 6020	03/07-03/10/09	K73721AG
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0076	
Copper	49.4	0.19	mg/kg	SW846 6020	03/07-03/10/09	K73721AH
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Nickel	18.8	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AJ
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0065	
Lead	446 <i>J</i>	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AK
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0032	
Antimony	0.85 <i>JL</i>	0.19	mg/kg	SW846 6020	03/07-03/10/09	K73721AL
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0031	

(Continued on next page)

lw
4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #....: C9C050210-007

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	2.6 L	0.48	mg/kg	SW846 6020	03/07-03/10/09	K73721AM
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.039	
Thallium	0.43	0.095	mg/kg	SW846 6020	03/07-03/10/09	K73721AN
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0019	
Zinc	918 J	0.48	mg/kg	SW846 6020	03/07-03/10/09	K73721AP
		Dilution Factor: 0.6		Analysis Time...: 23:08	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011	
Prep Batch #....: 9071012						
Mercury	0.44 L	0.031	mg/kg	SW846 7471A	03/12/09	K73721AR
		Dilution Factor: 0.6		Analysis Time...: 08:34	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0024	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

POLYNUCLEAR AROMATIC HYDRCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C050210

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13C-6	C9C050210-001	Soil
2	BH-SED-05-4	C9C050210-003	Soil
2DL	BH-SED-05-4DL	C9C050210-003DL	Soil
2DLMS	BH-SED-05-4DLMS	C9C050210-003DLMS	Soil
2DLMSD	BH-SED-05-4DLMSD	C9C050210-003DLMSD	Soil
3	BH-SED-04-8	C9C050210-005	Soil
3DL	BH-SED-04-8DL	C9C050210-005DL	Soil
4	DUP-1	C9C050210-007	Soil
4DL	DUP-1DL	C9C050210-007DL	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QCs were not included in this data package

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13C-6 ug/kg	DUP-1 ug/kg	RPD	Qualifier
1-Methylnaphthalene	340	2300	148%	None
2-Methylnaphthalene	180	2200	170%	None
Naphthalene	8400	87000	165%	None
Acenaphthylene	140	2200	176%	None
Acenaphthene	1100	8100	152%	None
Fluorene	560	5900	165%	None
Phenanthrene	1300	16000	170%	None
Anthracene	570	7200	171%	None
Fluoranthene	2700	35000	171%	None
Pyrene	1700	20000	169%	None
Benzo (a) anthracene	1000	17000	178%	None
Chrysene	770	14000	179%	None
Benzo (b) fluoranthene	780	18000	183%	None
Benzo (k) fluoranthene	440	6100	173%	None
Benzo (a) pyrene	720	15000	182%	None
Indeno (1,2,3-cd) pyrene	390	8500	182%	None
Dibenzo (a,h) anthracene	110	2200	181%	None
Benzo (g,h,i) perylene	410	8200	181%	None

Compound Quantitation - Several samples exhibited high concentrations of naphthalene and/or fluoranthene which exceeded the instrument calibration range and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting.

Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-001 Work Order #....: K737H1AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 10:45 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 00:10
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 42 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	340	58	ug/kg	8.7
2-Methylnaphthalene	180	58	ug/kg	11
Naphthalene	8400	58	ug/kg	8.4
Acenaphthylene	140	58	ug/kg	11
Acenaphthene	1100	58	ug/kg	9.2
Fluorene	560	58	ug/kg	8.7
Phenanthrene	1300	58	ug/kg	6.9
Anthracene	570	280	ug/kg	10
Fluoranthene	2700	58	ug/kg	4.9
Pyrene	1700	58	ug/kg	15
Benzo (a) anthracene	1000	58	ug/kg	9.2
Chrysene	770	58	ug/kg	10
Benzo (b) fluoranthene	780	58	ug/kg	12
Benzo (k) fluoranthene	440	58	ug/kg	12
Benzo (a) pyrene	720	58	ug/kg	16
Indeno (1,2,3-cd) pyrene	390	58	ug/kg	3.2
Dibenzo (a,h) anthracene	110	58	ug/kg	13
Benzo (ghi) perylene	410	58	ug/kg	4.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(27 - 110)
Terphenyl-d14	90	(21 - 130)
2-Fluorobiphenyl	76	(28 - 108)
2-Fluorophenol	65	(28 - 107)
Phenol-d5	64	(30 - 112)
2,4,6-Tribromophenol	85	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

LW
 4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Semivolatiles

Lot-Sample #...: C9C050210-003 Work Order #...: K737M1AC Matrix.....: SOLID
 Date Sampled...: 03/04/09 13:40 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #...: 9065012 Analysis Time...: 00:33
 Dilution Factor: 25 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 46 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2100	310	ug/kg	46
2-Methylnaphthalene	5400	310	ug/kg	60
Naphthalene	590000 150000 E	310	ug/kg	45
Acenaphthylene	850	310	ug/kg	61
Acenaphthene	6600	310	ug/kg	49
Fluorene	5400	310	ug/kg	46
Phenanthrene	16000	310	ug/kg	37
Anthracene	5200	1500	ug/kg	54
Fluoranthene	11000	310	ug/kg	26
Pyrene	7700	310	ug/kg	82
Benzo (a) anthracene	4900	310	ug/kg	49
Chrysene	3900	310	ug/kg	54
Benzo (b) fluoranthene	4700	310	ug/kg	62
Benzo (k) fluoranthene	1600	310	ug/kg	64
Benzo (a) pyrene	4100	310	ug/kg	86
Indeno (1,2,3-cd) pyrene	2300	310	ug/kg	17
Dibenzo (a,h) anthracene	500	310	ug/kg	68
Benzo (ghi) perylene	2200	310	ug/kg	23

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

LWO
 4/29/09

2DL

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Semivolatiles

Use original

Lot-Sample #....: C9C050210-003 Work Order #....: K737M2AC Matrix.....: SOLID
Date Sampled....: 03/04/09 13:40 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
Prep Batch #....: 9065012 Analysis Time...: 02:49
Dilution Factor: 500 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
% Moisture.....: 46 Analyst ID.....: 007062 Instrument ID...: 722
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	3400 J	6200	ug/kg	930
2-Methylnaphthalene	8600	6200	ug/kg	1200
Naphthalene	590000	6200	ug/kg	890
Acenaphthylene	1800 J	6200	ug/kg	1200
Acenaphthene	9700	6200	ug/kg	990
Fluorene	7200	6200	ug/kg	930
Phenanthrene	23000	6200	ug/kg	730
Anthracene	6700 J	30000	ug/kg	1100
Fluoranthene	16000	6200	ug/kg	520
Pyrene	10000	6200	ug/kg	1600
Benzo (a) anthracene	7100	6200	ug/kg	980
Chrysene	5500 J	6200	ug/kg	1100
Benzo (b) fluoranthene	6400	6200	ug/kg	1200
Benzo (k) fluoranthene	3500 J	6200	ug/kg	1300
Benzo (a) pyrene	6200	6200	ug/kg	1700
Indeno (1,2,3-cd) pyrene	4100 J	6200	ug/kg	340
Dibenzo (a,h) anthracene	ND	6200	ug/kg	1400
Benzo (ghi) perylene	4200 J	6200	ug/kg	450

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

4/29/09

3

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-005 Work Order #....: K737V1AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 15:55 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 01:41
 Dilution Factor: 250 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	26000	4100	ug/kg	620
2-Methylnaphthalene	71000	4100	ug/kg	800
Naphthalene	4400000 1600000 E	4100	ug/kg	590
Acenaphthylene	19000	4100	ug/kg	810
Acenaphthene	2500 J	4100	ug/kg	650
Fluorene	12000	4100	ug/kg	610
Phenanthrene	29000	4100	ug/kg	490
Anthracene	13000 J	20000	ug/kg	710
Fluoranthene	67000 47000 E	4100	ug/kg	340
Pyrene	33000	4100	ug/kg	1100
Benzo (a) anthracene	22000	4100	ug/kg	650
Chrysene	21000	4100	ug/kg	710
Benzo (b) fluoranthene	24000	4100	ug/kg	820
Benzo (k) fluoranthene	8200	4100	ug/kg	850
Benzo (a) pyrene	21000	4100	ug/kg	1100
Indeno (1,2,3-cd) pyrene	12000	4100	ug/kg	220
Dibenzo (a,h) anthracene	3400 J	4100	ug/kg	900
Benzo (ghi) perylene	12000	4100	ug/kg	300

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

4/29/09

3DL

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

GC/MS Semivolatiles

Use Original

Lot-Sample #....: C9C050210-005 Work Order #....: K737V2AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 15:55 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 03:12
 Dilution Factor: 2500 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 59 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	37000 J	41000	ug/kg	6200
2-Methylnaphthalene	93000	41000	ug/kg	8000
Naphthalene	4400000	41000	ug/kg	5900
Acenaphthylene	25000 J	41000	ug/kg	8100
Acenaphthene	ND	41000	ug/kg	6500
Fluorene	19000 J	41000	ug/kg	6100
Phenanthrene	44000	41000	ug/kg	4900
Anthracene	17000 J	200000	ug/kg	7100
Fluoranthene	67000	41000	ug/kg	3400
Pyrene	46000	41000	ug/kg	11000
Benzo (a) anthracene	35000 J	41000	ug/kg	6500
Chrysene	28000 J	41000	ug/kg	7100
Benzo (b) fluoranthene	33000 J	41000	ug/kg	8200
Benzo (k) fluoranthene	12000 J	41000	ug/kg	8500
Benzo (a) pyrene	29000 J	41000	ug/kg	11000
Indeno (1,2,3-cd) pyrene	16000 J	41000	ug/kg	2200
Dibenzo (a,h) anthracene	ND	41000	ug/kg	9000
Benzo (ghi) perylene	17000 J	41000	ug/kg	3000

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

WWS
4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #...: C9C050210-007 Work Order #...: K73721AC Matrix.....: SOLID
 Date Sampled...: 03/04/09 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #...: 9065012 Analysis Time...: 02:04
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 37 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	2300	110	ug/kg	16
2-Methylnaphthalene	2200	110	ug/kg	21
Naphthalene	87000 41000 E	110	ug/kg	15
Acenaphthylene	2200	110	ug/kg	21
Acenaphthene	8100	110	ug/kg	17
Fluorene	5900	110	ug/kg	16
Phenanthrene	16000	110	ug/kg	13
Anthracene	7200	520	ug/kg	19
Fluoranthene	35000	110	ug/kg	8.9
Pyrene	20000	110	ug/kg	28
Benzo(a)anthracene	17000	110	ug/kg	17
Chrysene	14000	110	ug/kg	19
Benzo(b)fluoranthene	18000	110	ug/kg	21
Benzo(k)fluoranthene	6100	110	ug/kg	22
Benzo(a)pyrene	15000	110	ug/kg	30
Indeno(1,2,3-cd)pyrene	8500	110	ug/kg	5.8
Dibenzo(a,h)anthracene	2200	110	ug/kg	23
Benzo(ghi)perylene	8200	110	ug/kg	7.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #....: C9C050210-007 Work Order #....: K73722AC Matrix.....: SOLID
 Date Sampled....: 03/04/09 Date Received...: 03/05/09 09:45 MS Run #.....: 9065004
 Prep Date.....: 03/06/09 Analysis Date...: 03/09/09
 Prep Batch #....: 9065012 Analysis Time...: 03:34
 Dilution Factor: 100 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 37 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

Use original

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	3300	1100	ug/kg	160
2-Methylnaphthalene	2800	1100	ug/kg	210
Naphthalene	87000	1100	ug/kg	150
Acenaphthylene	2700	1100	ug/kg	210
Acenaphthene	9900	1100	ug/kg	170
Fluorene	6600	1100	ug/kg	160
Phenanthrene	19000	1100	ug/kg	130
Anthracene	8700	5200	ug/kg	190
Fluoranthene	44000	1100	ug/kg	89
Pyrene	29000	1100	ug/kg	280
Benzo (a) anthracene	22000	1100	ug/kg	170
Chrysene	18000	1100	ug/kg	190
Benzo (b) fluoranthene	20000	1100	ug/kg	210
Benzo (k) fluoranthene	7500	1100	ug/kg	220
Benzo (a) pyrene	18000	1100	ug/kg	300
Indeno (1,2,3-cd) pyrene	9700	1100	ug/kg	58
Dibenzo (a,h) anthracene	2500	1100	ug/kg	230
Benzo (ghi) perylene	9500	1100	ug/kg	78

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

 LW
 4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C050210

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-13C-6	C9C050210-001	Soil
2	BH-SED-05-4	C9C050210-003	Soil
2MS	BH-SED-05-4MS	C9C050210-003MS	Soil
2MSD	BH-SED-05-4MSD	C9C050210-003MSD	Soil
3	BH-SED-04-8	C9C050210-005	Soil
4	DUP-1	C9C050210-007	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/05/09	Acrolein	0.043 RRF	L/R	All Samples

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
03/09/09	Acrolein	0.044 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
2	Trichloroethene	61%/Ok/27	L/UL
	Benzene	69%/Ok/21	L/UL
	Toluene	Ok/Ok/30	None for RPD alone
	Chlorobenzene	Ok/Ok/24	None for RPD alone

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-13C-6 ug/kg	DUP-1 ug/kg	RPD	Qualifier
Benzene	64	7.9 U	NC	None
Ethylbenzene	4.4	7.9 U	NC	None
Toluene	7.2	7.9 U	NC	None

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

GC/MS Volatiles

Lot-Sample #....: C9C050210-001	Work Order #....: K737H1AU	Matrix.....: SOLID
Date Sampled....: 03/04/09	Date Received...: 03/05/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #....: 9068066	Analysis Time...: 12:26	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.86 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 42	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	180	ug/kg	13
Acrylonitrile	ND	180	ug/kg	18
Benzene	64	8.9	ug/kg	1.2
Bromodichloromethane	ND	8.9	ug/kg	1.0
Bromoform	ND	8.9	ug/kg	0.79
Bromomethane	ND	8.9	ug/kg	1.3
2-Butanone (MEK)	ND	8.9	ug/kg	1.6
Carbon tetrachloride	ND	8.9	ug/kg	0.79
Chloroethane	ND	8.9	ug/kg	2.8
2-Chloroethyl vinyl ether	ND	18	ug/kg	1.4
Chloroform	ND	8.9	ug/kg	1.0
Chloromethane	ND	8.9	ug/kg	1.5
Dibromochloromethane	ND	8.9	ug/kg	1.3
1,2-Dichlorobenzene	ND	8.9	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.9	ug/kg	1.2
1,4-Dichlorobenzene	ND	8.9	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.9	ug/kg	1.1
Dichlorodifluoromethane	ND	8.9	ug/kg	1.2
1,1-Dichloroethane	ND	8.9	ug/kg	1.0
1,2-Dichloroethane	ND	8.9	ug/kg	1.1
1,1-Dichloroethene	ND	8.9	ug/kg	1.5
1,2-Dichloropropane	ND	8.9	ug/kg	0.97
cis-1,3-Dichloropropene	ND	8.9	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.9	ug/kg	1.1
Ethylbenzene	4.4 J	8.9	ug/kg	1.1
Methylene chloride	ND	8.9	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.9	ug/kg	1.3
Tetrachloroethene	ND	8.9	ug/kg	1.2
Toluene	7.2 J	8.9	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.9	ug/kg	0.86
1,1,2-Trichloroethane	ND	8.9	ug/kg	1.5
Trichloroethene	ND	8.9	ug/kg	1.2
Trichlorofluoromethane	ND	8.9	ug/kg	1.6
Vinyl chloride	ND	8.9	ug/kg	0.83

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-13C-6

GC/MS Volatiles

Lot-Sample #....: C9C050210-001 Work Order #....: K737H1AU

Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	89	(52 - 124)
Toluene-d8	101	(72 - 127)
4-Bromofluorobenzene	109	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Volatiles

Lot-Sample #....: C9C050210-003	Work Order #....: K737M1AU	Matrix.....: SOLID
Date Sampled....: 03/04/09	Date Received...: 03/05/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #....: 9068066	Analysis Time...: 07:54	
Dilution Factor: 1.08	Initial Wgt/Vol: 4.64 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 46	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	200	ug/kg	14
Acrylonitrile	ND	200	ug/kg	21
Benzene	ND UL	9.9	ug/kg	1.3
Bromodichloromethane	ND	9.9	ug/kg	1.1
Bromoform	ND	9.9	ug/kg	0.88
Bromomethane	ND	9.9	ug/kg	1.5
2-Butanone (MEK)	ND	9.9	ug/kg	1.8
Carbon tetrachloride	ND	9.9	ug/kg	0.89
Chloroethane	ND	9.9	ug/kg	3.1
2-Chloroethyl vinyl ether	ND	20	ug/kg	1.5
Chloroform	ND	9.9	ug/kg	1.2
Chloromethane	ND	9.9	ug/kg	1.7
Dibromochloromethane	ND	9.9	ug/kg	1.4
1,2-Dichlorobenzene	ND	9.9	ug/kg	1.6
1,3-Dichlorobenzene	ND	9.9	ug/kg	1.3
1,4-Dichlorobenzene	ND	9.9	ug/kg	1.3
trans-1,2-Dichloroethene	ND	9.9	ug/kg	1.2
Dichlorodifluoromethane	ND	9.9	ug/kg	1.3
1,1-Dichloroethane	ND	9.9	ug/kg	1.1
1,2-Dichloroethane	ND	9.9	ug/kg	1.2
1,1-Dichloroethene	ND	9.9	ug/kg	1.7
1,2-Dichloropropane	ND	9.9	ug/kg	1.1
cis-1,3-Dichloropropene	ND	9.9	ug/kg	1.3
trans-1,3-Dichloropropene	ND	9.9	ug/kg	1.2
Ethylbenzene	ND	9.9	ug/kg	1.3
Methylene chloride	ND	9.9	ug/kg	1.3
1,1,2,2-Tetrachloroethane	ND	9.9	ug/kg	1.4
Tetrachloroethene	ND	9.9	ug/kg	1.4
Toluene	ND	9.9	ug/kg	1.5
1,1,1-Trichloroethane	ND	9.9	ug/kg	0.97
1,1,2-Trichloroethane	ND	9.9	ug/kg	1.7
Trichloroethene	ND UL	9.9	ug/kg	1.3
Trichlorofluoromethane	ND	9.9	ug/kg	1.8
Vinyl chloride	ND	9.9	ug/kg	0.93

(Continued on next page)

2

Maryland Environmental Service

Client Sample ID: BH-SED-05-4

GC/MS Volatiles

Lot-Sample #....: C9C050210-003

Work Order #....: K737M1AU

Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	93	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

lw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-04-8

GC/MS Volatiles

Lot-Sample #....: C9C050210-005	Work Order #....: K737V1AU	Matrix.....: SOLID
Date Sampled....: 03/04/09	Date Received...: 03/05/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #....: 9068066	Analysis Time...: 12:50	
Dilution Factor: 0.91	Initial Wgt/Vol: 5.48 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 59	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND <i>R</i>	220	ug/kg	16
Acrylonitrile	ND	220	ug/kg	23
Benzene	53	11	ug/kg	1.5
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.98
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	2.0
Carbon tetrachloride	ND	11	ug/kg	0.99
Chloroethane	ND	11	ug/kg	3.4
2-Chloroethyl vinyl ether	ND	22	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.9
Dibromochloromethane	ND	11	ug/kg	1.6
1,2-Dichlorobenzene	ND	11	ug/kg	1.8
1,3-Dichlorobenzene	ND	11	ug/kg	1.5
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.5
1,1-Dichloroethane	ND	11	ug/kg	1.3
1,2-Dichloroethane	ND	11	ug/kg	1.4
1,1-Dichloroethene	ND	11	ug/kg	1.9
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	100	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.5
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.6
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	100	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.1
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.5
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

(Continued on next page)

3

Maryland Environmental Service

Client Sample ID: BH-SKD-04-8

GC/MS Volatiles

Lot-Sample #....: C9C050210-005 Work Order #....: K737V1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	91	(72 - 127)
4-Bromofluorobenzene	101	(63 - 120)
Dibromofluoromethane	89	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

luw
4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9C050210-007 Work Order #....: K73721AV Matrix.....: SOLID
 Date Sampled....: 03/04/09 Date Received...: 03/05/09 MS Run #.....: 9071074
 Prep Date.....: 03/12/09 Analysis Date...: 03/12/09
 Prep Batch #....: 9071060 Analysis Time...: 08:55
 Dilution Factor: 1 Initial Wgt/Vol: 4.98 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 37 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	160	ug/kg	11
Acrylonitrile	ND	160	ug/kg	16
Benzene	ND	7.9	ug/kg	1.1
Bromodichloromethane	ND	7.9	ug/kg	0.89
Bromoform	ND	7.9	ug/kg	0.70
Bromomethane	ND	7.9	ug/kg	1.2
2-Butanone (MEK)	ND	7.9	ug/kg	1.4
Carbon tetrachloride	ND	7.9	ug/kg	0.71
Chloroethane	ND	7.9	ug/kg	2.5
2-Chloroethyl vinyl ether	ND	16	ug/kg	1.2
Chloroform	ND	7.9	ug/kg	0.93
Chloromethane	ND	7.9	ug/kg	1.4
Dibromochloromethane	ND	7.9	ug/kg	1.1
1,2-Dichlorobenzene	ND	7.9	ug/kg	1.3
1,3-Dichlorobenzene	ND	7.9	ug/kg	1.0
1,4-Dichlorobenzene	ND	7.9	ug/kg	1.0
trans-1,2-Dichloroethene	ND	7.9	ug/kg	0.95
Dichlorodifluoromethane	ND	7.9	ug/kg	1.1
1,1-Dichloroethane	ND	7.9	ug/kg	0.91
1,2-Dichloroethane	ND	7.9	ug/kg	0.97
1,1-Dichloroethene	ND	7.9	ug/kg	1.3
1,2-Dichloropropane	ND	7.9	ug/kg	0.86
cis-1,3-Dichloropropene	ND	7.9	ug/kg	1.1
trans-1,3-Dichloropropene	ND	7.9	ug/kg	0.95
Ethylbenzene	ND	7.9	ug/kg	1.0
Methylene chloride	ND	7.9	ug/kg	1.1
1,1,2,2-Tetrachloroethane	ND	7.9	ug/kg	1.1
Tetrachloroethene	ND	7.9	ug/kg	1.1
Toluene	ND	7.9	ug/kg	1.2
1,1,1-Trichloroethane	ND	7.9	ug/kg	0.77
1,1,2-Trichloroethane	ND	7.9	ug/kg	1.3
Trichloroethene	ND	7.9	ug/kg	1.0
Trichlorofluoromethane	ND	7.9	ug/kg	1.5
Vinyl chloride	ND	7.9	ug/kg	0.75

(Continued on next page)

EW
4/29/09

4

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9C050210-007 Work Order #....: K73721AV Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(52 - 124)
Toluene-d8	90	(72 - 127)
4-Bromofluorobenzene	110	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

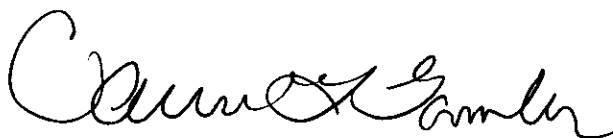
MES Sparrows Point 18001868

Lot #: C9C050215

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 30, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C050215

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 5, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

March 23, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006

Case: EAMSGS; SDG: 9C050215

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on March 6th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/06/09 ETR No: 130487			
787252	BH-SED-13C-6	03/04/09	SOLID
787253	BH-SED-05-4	03/04/09	SOLID
787254	BH-SED-04-8	03/04/09	SOLID
787255	DUP-1	03/04/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The samples were analyzed for particle size by ASTM D422 and moisture content by ASTM D2216.


Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,


for

Ron Pentkowski
Project Manager

Enclosure

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: E.A. Engineering

Project: _____

Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: _____

3/5/09

Coolers Opened and Unpacked on: _____

3/5/09

By: PRF

(Signature)

TestAmerica Pittsburgh Lot Number: _____

C9C050215

Yes No NA

1. Were custody seals on the outside of the cooler? _____

If YES, how many and where? Quantity _____ Location _____

Were signatures and date correct? _____

2. Were custody papers included inside the cooler? _____

3. Were custody papers properly filled out (ink, signed, match labels)? _____

4. Did you sign the custody papers in the appropriate place? _____

5. Was shippers packing slip attached to this form? _____

6. Were packing materials used? _____

If YES, what type? _____

Bubble Wrap

7. Were the samples received within the acceptable temperature range? _____

8. Were the samples appropriately preserved? _____

9. Were all bottles sealed in separate plastic bags? _____

10. Did all bottles arrive in good condition (unbroken)? _____

11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____

12. Did all bottle labels and/or tags agree with custody papers? _____

13. Were correct bottles used for tests indicated? _____

14. Were all VOA vials checked for the presence of air bubbles? _____

15. Was a sufficient amount of sample sent in each bottle? _____

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

Explain any discrepancies: *See Variance

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved

UP: Unpreserved

[illegible]

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

Comments:

[illegible][illegible]

Sample Lot Number**

[illegible]

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid

Hydrochloric Acid _____

Sulfuric Acid

Sodium Hydroxide

C9C050215

6

(1 - 22)

227
500

FedEx Express US Airbill

FedEx Tracking Number 8565 6932 6731

1 From This portion can be removed for Recipient's records.
Date 3/4/09 FedEx Tracking Number 856569326731
Sender's Name Todd Ward Phone 410 746 1200
Company E A ENGINEERING SCIENCE & TECH
Address 15 LOVETON CIR
City SPARKS GLENDE State MD ZIP 21152

2 Your Internal Billing Reference 1153406
3 To
Recipient's Name SAMPLE MANAGER Phone 410 746 1200
Company TEST ADDRESS - PITTSBURGH
Recipient's Address 301 ALMA DRIVE
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Address RIDE PARK
To request a package be held at a specific FedEx location, print FedEx address here.
City PITTSBURGH State PA ZIP 15234



8565 6932 6731

0326981304

Recipient's Copy

4a Express Package Service
☒ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.
☐ FedEx First Overnight
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
☐ FedEx 2Day
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.
* To most locations.
FedEx Envelope rate not available. Minimum charge: One-pound rate.
4b Express Freight Service
☐ FedEx 1Day Freight*
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 2Day Freight
Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 3Day Freight
Third business day.** Saturday Delivery NOT available.
* Call for Confirmation. ** To most locations.
5 Packaging
☐ FedEx Envelope*
☐ FedEx Pak*
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Surety Pak.
☐ FedEx Box
☐ FedEx Tube
☒ Other
* Declared value limit \$500.
6 Special Handling
Include FedEx address in Section 3.
☐ SATURDAY Delivery
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 2Day Freight.
☐ HOLD Weekday at FedEx Location
Not available for FedEx First Overnight.
☐ HOLD Saturday at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
One box must be checked.
☒ No
☐ Yes
As per attached Shipper's Declaration.
☐ Yes
Shipper's Declaration not required.
☐ Dry Ice
Dry ice, 9, UN 1845 _____ x _____ kg
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.
☐ Cargo Aircraft Only
7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.
☒ Sender
Acct. No. in Section 1 will be billed.
☐ Recipient
☐ Third Party
☐ Credit Card
☐ Cash/Check
Obtain Recip. Acct. No.
Total Packages 1 Total Weight 1.5
Total Charges
Credit Card Auth.

8 NEW Residential Delivery Signature Options
If you require a signature, check Direct or Indirect.
☐ No Signature Required
Package may be left without obtaining a signature for delivery.
☐ Direct Signature
Anyone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.
519
Rev. Date 8/05-Part 1158279-G/1994-2006 FedEx-PRINTED IN U.S.A.-SRS

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-03-05
Analytical Due Date: 2009-03-24
Report Due Date: 2009-03-25

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-13C-6 DATE SAMPLED: 20090304 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K73791AC

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K73791AA

METAL: XX

SMP#: 2 CLIENT ID: BH-SED-05-6 DATE SAMPLED: 20090304 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K738C1AC

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K738C1AA

METAL: XX

SMP#: 3 CLIENT ID: BH-SED-04-6 DATE SAMPLED: 20090304 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K738E1AC

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K738E1AA

METAL: XX

SMP#: 4 CLIENT ID: DUP-1 DATE SAMPLED: 20090304 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K738G1AC

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K738G1AA

METAL: XX

C9C050215

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-03-05
Analytical Due Date: 2009-03-24
Report Due Date: 2009-03-25

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY:

Patrick R. Jans

DATE: *3/5/09 1700*

RECEIVED FOR LAB BY:

Chris Kall

DATE: *3/6/09 1030*

DATA SUMMARY PACKAGE

TestAmerica
South Burlington, VT
Sample Data Summary
Package

9C050215



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-13C-6

Lab Name: TestAmerica Burlington

Contract: C9C050215

SDG No.: 9C050215

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 787252

Matrix: SOLID

Client: STLPAP

Date Received: 03/06/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/17/09		%	1	0.0	35.5	

Printed on: 03/23/09 10:16 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-05-4

Lab Name: TestAmerica Burlington

Contract: C9C050215

SDG No.: 9C050215

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 787253

Matrix: SOLID

Client: STLPAP

Date Received: 03/06/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/17/09		%	1	0.0	107.7	

Printed on: 03/23/09 10:16 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

DUP-1

Lab Name: TestAmerica Burlington

Contract: C9C050215

SDG No.: 9C050215

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 787255

Matrix: SOLID

Client: STLPAP

Date Received: 03/06/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/17/09		%	1	0.0	31.5	

Printed on: 03/23/09 10:16 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code:	STLPAP
ETR:	130487
SDG:	9C050215

Start Date:	3/17/2009
Start Time:	2000
End Date:	3/18/2009
Analyst:	MAP

[illegible]

Particle Size of Soils by ASTM D422

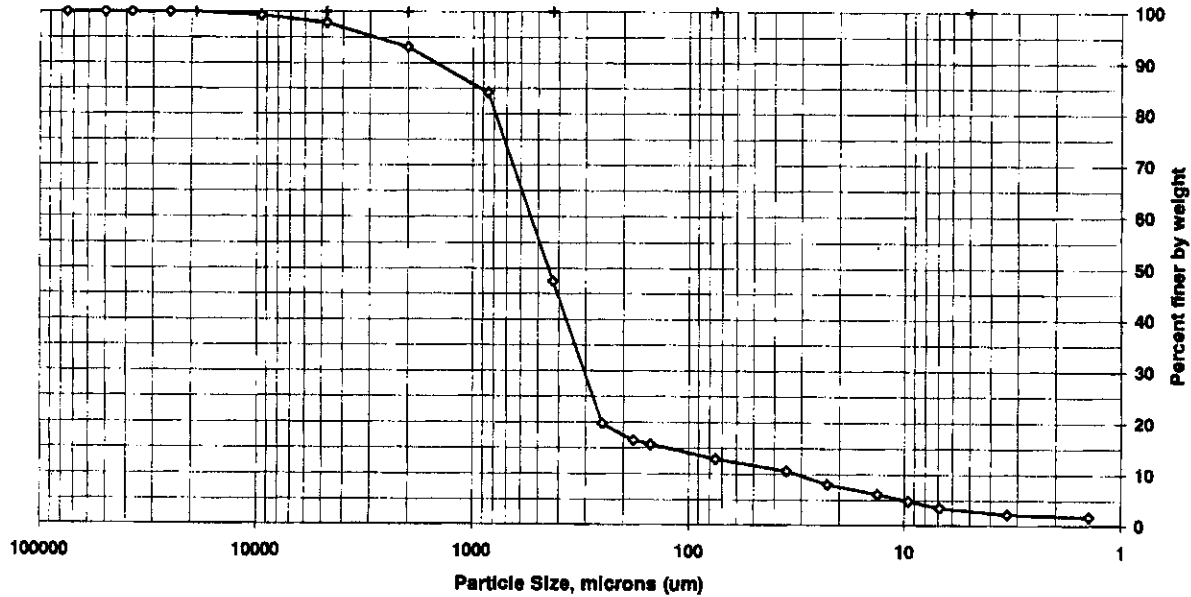
Client Code: STLPAP
 Sample ID: BH-SED-13C-6
 Lab ID: 787252

SDG: 9C050215
 ETR(s): 130487

Date Received: 3/6/2009
 Start Date: 3/10/2009
 End Date: 3/23/2009

Percent Solids: 73.8%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: shells
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.3	0.7
#4	4750	97.8	1.5
#10	2000	93.1	4.7
#20	850	84.1	8.9
#40	425	47.5	36.7
#60	250	19.7	27.7
#80	180	16.5	3.3
#100	150	15.7	0.8
#200	75	13.0	2.7
Hydrometer	35.2	10.7	2.3
	22.7	8.1	2.6
	13.3	6.2	1.9
	9.6	4.8	1.4
	6.9	3.5	1.3
	3.3	2.2	1.3
V	1.4	1.7	0.5

Soil Classification	Percent of Total Sample
Gravel	2.2
Sand	84.8
Coarse Sand	4.7
Medium Sand	45.6
Fine Sand	34.5
Silt	9.5
Clay	3.5

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with
 a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

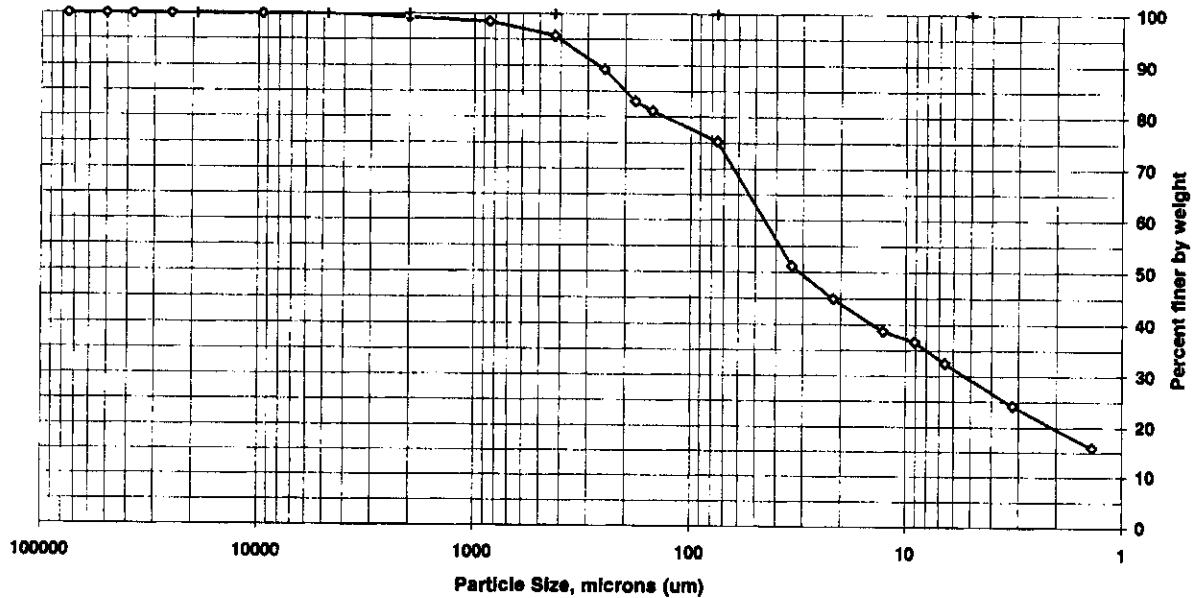
Client Code: STLPAP
 Sample ID: BH-SED-05-4
 Lab ID: 787253

SDG: 9C050215
 ETR(s): 130487

Date Received: 3/6/2009
 Start Date: 3/10/2009
 End Date: 3/23/2009

Percent Solids: 48.2%
 Specific Gravity: 2.650
 Maximum Particle Size: Crs sand

Non-soil material: shells
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.3	0.7
#20	850	98.4	0.8
#40	425	95.7	2.8
#60	250	89.3	6.4
#80	180	83.0	6.3
#100	150	81.1	1.9
#200	75	75.3	5.8
Hydrometer	33.8	51.2	24.1
	21.7	45.0	6.2
	12.7	38.7	6.2
	9.0	36.7	2.1
	6.6	32.5	4.1
	3.2	24.2	8.3
V	1.4	15.9	8.3

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	24.7
Coarse Sand	0.7
Medium Sand	3.6
Fine Sand	20.4
Silt	42.8
Clay	32.5

Preparation Method: **D2217**
 Dispersion Device: **Mechanical mixer with a metal paddle.**
 Dispersion Period: **1 minute**

Particle Size of Soils by ASTM D422

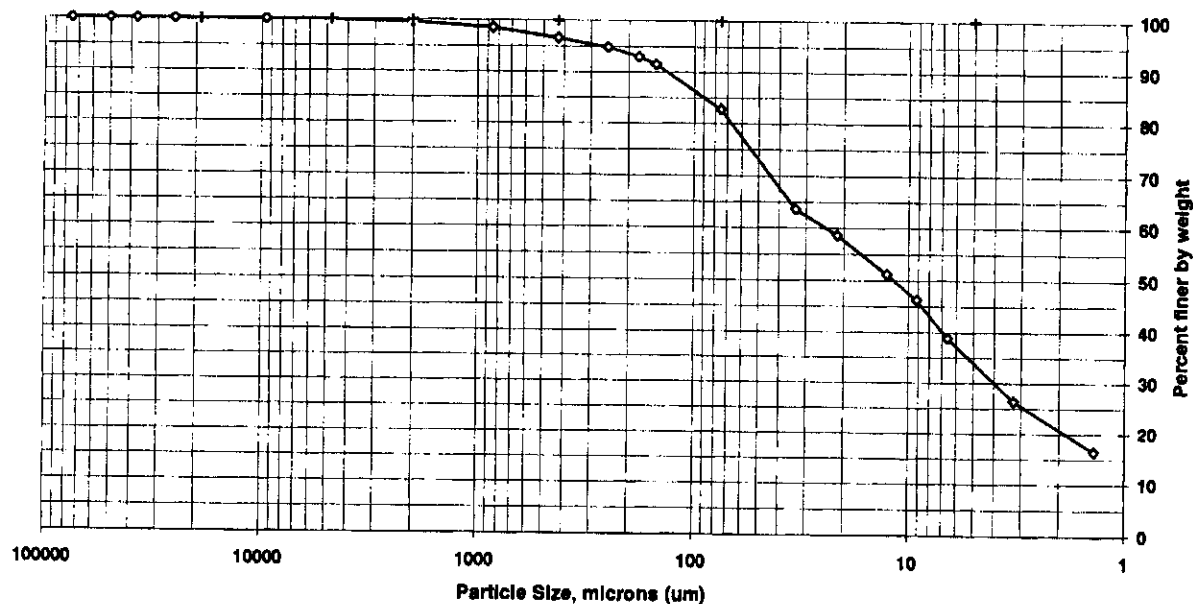
Client Code: STLPAP
 Sample ID: BH-SED-04-8
 Lab ID: 787254

SDG: 9C050215
 ETR(s): 130487

Date Received: 3/6/2009
 Start Date: 3/10/2009
 End Date: 3/23/2009

Percent Solids: 39.9%
 Specific Gravity: 2.650
 Maximum Particle Size: Crs sand

Non-soil material: na
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.6	0.4
#20	850	98.5	1.0
#40	425	96.7	1.9
#60	250	94.9	1.8
#80	180	93.0	1.9
#100	150	91.5	1.5
#200	75	82.7	8.8
Hydrometer	33.6	63.6	19.1
	21.5	58.7	5.0
	12.6	51.2	7.4
	9.2	46.3	5.0
	6.6	38.8	7.4
	3.2	26.4	12.4
V	1.4	16.5	9.9

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	17.3
Coarse Sand	0.4
Medium Sand	2.9
Fine Sand	13.9
Silt	43.9
Clay	38.8

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

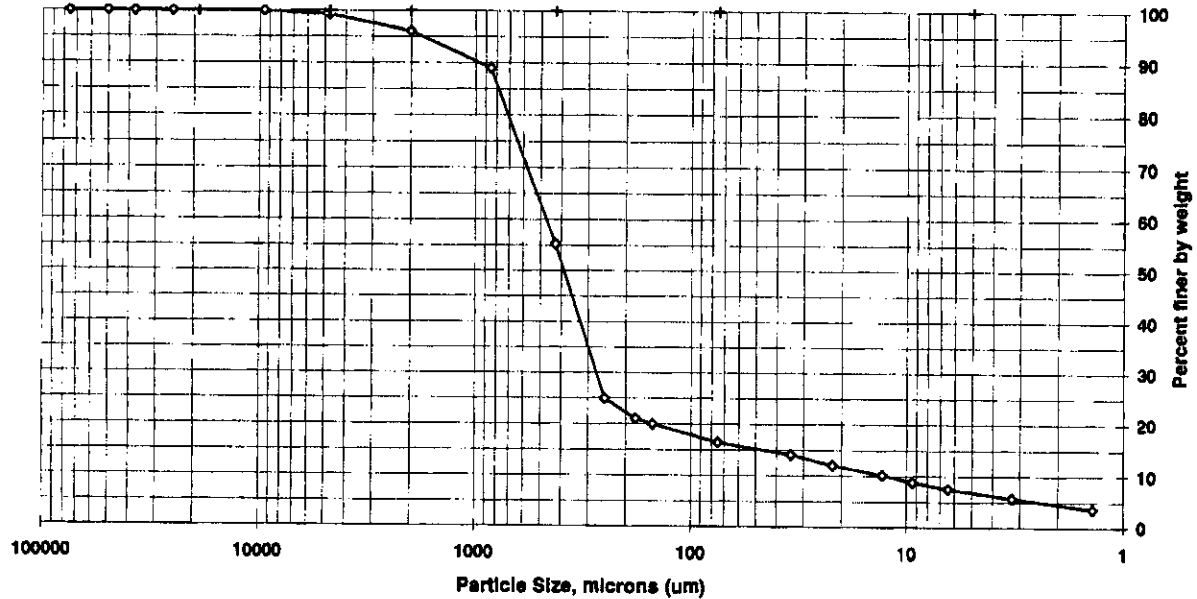
Client Code: STLPAP
 Sample ID: DUP-1
 Lab ID: 787255

SDG: 9C050215
 ETR(s): 130487

Date Received: 3/6/2009
 Start Date: 3/10/2009
 End Date: 3/23/2009

Percent Solids: 76.0%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: shells
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.3	0.7
#10	2000	96.1	3.2
#20	850	88.9	7.1
#40	425	55.3	33.6
#60	250	25.0	30.3
#80	180	21.0	4.0
#100	150	19.9	1.1
#200	75	16.5	3.4
Hydrometer	34.3	14.1	2.4
	22.0	12.1	2.0
	12.9	10.2	2.0
	9.4	8.9	1.3
	6.4	7.6	1.3
	3.3	5.7	1.8
V	1.4	3.7	2.1

Soil Classification	Percent of Total Sample
Gravel	0.7
Sand	82.8
Coarse Sand	3.2
Medium Sand	40.8
Fine Sand	38.8
Silt	8.9
Clay	7.6

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

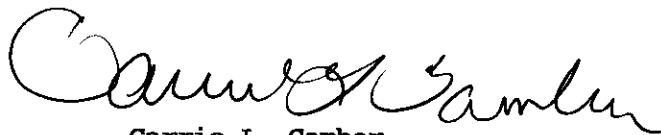
MES Sparrows Point 18001868

Lot #: C9C060295

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 30, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C060295

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 6, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory performed the moisture and the grain size analyses. All data is included in the data package.

TestAmerica Laboratories, Inc.

March 20, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9C060295

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on March 7th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/07/09 ETR No: 130511			
787574	BH-SED-07-6	03/05/09	SOLID
787575	BH-SED-08-10	03/05/09	SOLID
787576	DUP-2	03/05/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

There were no exceptions to the method quality control criteria during the analyses of these samples by ASTM D422 and ASTM D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, reading "Ron Pentkowski". The signature is fluid and cursive, with the first name "Ron" being more prominent.

Ron Pentkowski
Project Manager

Enclosure

[illegible]

Cooler Receipt Form
TestAmerica Pittsburgh

Client: E-A-Engineering

Project: 3/6/09

Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: _____

Coolers Opened and Unpacked on: _____

3/6/09

By: PRF

(Signature)

TestAmerica Pittsburgh Lot Number: _____

C9C060295

- | | Yes | No | NA |
|---|-------------------------------------|----|-------------------------------------|
| 1. Were custody seals on the outside of the cooler? _____ | | | <input checked="" type="checkbox"/> |
| If YES, how many and where? Quantity _____ Location _____ | | | |
| Were signatures and date correct? _____ | | | |
| 2. Were custody papers included inside the cooler? _____ | <input checked="" type="checkbox"/> | | |
| 3. Were custody papers properly filled out (ink, signed, match labels)? _____ | <input checked="" type="checkbox"/> | | |
| 4. Did you sign the custody papers in the appropriate place? _____ | <input checked="" type="checkbox"/> | | |
| 5. Was shippers packing slip attached to this form? _____ | <input checked="" type="checkbox"/> | | |
| 6. Were packing materials used? _____ | <input checked="" type="checkbox"/> | | |
| If YES, what type? <u>Bubble Wrap</u> | | | |
| 7. Were the samples received within the acceptable temperature range? _____ | <input checked="" type="checkbox"/> | | |
| 8. Were the samples appropriately preserved? _____ | <input checked="" type="checkbox"/> | | |
| 9. Were all bottles sealed in separate plastic bags? _____ | <input checked="" type="checkbox"/> | | |
| 10. Did all bottles arrive in good condition (unbroken)? _____ | <input checked="" type="checkbox"/> | | |
| 11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____ | <input checked="" type="checkbox"/> | | |
| 12. Did all bottle labels and/or tags agree with custody papers? _____ | <input checked="" type="checkbox"/> | | |
| 13. Were correct bottles used for tests indicated? _____ | <input checked="" type="checkbox"/> | | |
| 14. Were all VOA vials checked for the presence of air bubbles? _____ | <input checked="" type="checkbox"/> | | |
| 15. Was a sufficient amount of sample sent in each bottle? _____ | <input checked="" type="checkbox"/> | | |
| 16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO | | | |

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

UP: Unpreserved

[illegible]

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

Comments:

[illegible]

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

[illegible]

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

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

Nitric Acid _____
Sulfuric Acid _____

Hydrochloric Acid _____
Sodium Hydroxide _____

FedEx

Express

FedEx
Tracking
Number

8565 6932 6753

RECIPIENT: PEEL HERE

1 P

From This portion can be removed for Recipient's records.

Date 3/3/09

FedEx Tracking Number

856569326753

Sender's
Name

TOBEI WARD

Phone

712 772-1110

Company

E A ENGINEERING SCIENCE & TECH

Address

18 LOVETON CIR

Dept./Floor/Suite/Room

2

City

SPARKS GLENCOE

State

MD

ZIP

21152

3 Your Internal Billing Reference

To

Recipient's
Name

SHARON M. SAGANOWITZ

Phone

301 724-1118

Company

TOBEI WARD

Recipient's
Address

201 ALPHA DRIVE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

2100 14th

To request a package be held at a specific FedEx location, print FedEx address here.

City

SPARKS GLENCOE

State

MD

ZIP

21152

0326961324



8565 6932 6753



4a Express Package Service

☒ FedEx Priority Overnight
Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight
Next business afternoon.*
Saturday Delivery NOT available.

Packages up to 150 lbs.

☐ FedEx First Overnight
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.

☐ FedEx 2Day
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ FedEx Express Saver
Third business day.*
Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service

☐ FedEx 1Day Freight*
Next business day.** Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ FedEx 2Day Freight
Second business day.** Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

Packages over 150 lbs.

☐ FedEx 3Day Freight
Third business day.**
Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging

☐ FedEx
Envelope*

☐ FedEx Pak*
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.

☐ FedEx
Box

☐ FedEx
Tube

☐ Other

* Declared value limit \$500.

6 Special Handling

☐ SATURDAY Delivery
Not available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.

☐ HOLD Weekday
at FedEx Location
Not available for
FedEx First Overnight.

☐ HOLD Saturday
at FedEx Location
Available ONLY for FedEx Priority
Overnight and FedEx 2Day
to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☐ No

☐ Yes

As per attached
Shipper's Declaration.

☐ Yes

Shipper's Declaration
not required.

☐ Dry Ice

Dry Ice, 9, UN 1845

x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Ultimate Recpt.
Acct. No.

☐ Sender
Acct. No. in Section
1 will be billed.

☐ Recipient

☐ Third Party

☐ Credit Card

☐ Cash/Check

Total Packages

Total Weight

Total Charges

1

45.10

Your liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ No Signature
Required
Package may be left with-
out obtaining a signature
for delivery.

☐ Direct Signature
Anyone at recipient's
address may sign for delivery.
Fee applies.

☐ Indirect Signature
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 8/05-Part #158279-©1994-2005 FedEx-PRINTED IN U.S.A.-SRS

C9C060295

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-03-06
Analytical Due Date: 2009-03-25
Report Due Date: 2009-03-26

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-07-6 DATE SAMPLED: 20090305 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K760E1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K760E1AA METAL: XX

SMP#: 2 CLIENT ID: BH-SED-08-10 DATE SAMPLED: 20090305 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K760F1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K760F1AA METAL: XX

SMP#: 3 CLIENT ID: DUP-2 DATE SAMPLED: 20090305 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K760G1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K760G1AA METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: Ratish R. Davis DATE: 3/6/09 1700
RECEIVED FOR LAB BY: [Signature] DATE: 03/07/09 0950

DATA SUMMARY PACKAGE

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9C060295



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

DUP-2

Lab Name: TestAmerica Burlington

Contract: C9C060295

SDG No.: 9C060295

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 787576

Matrix: SOLID

Client: STLPAP

Date Received: 03/07/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/10/09		%	1	0.0	64.2	

Printed on: 03/17/09 10:20 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code:	STLPAP
ETR:	130511
SDG:	9C060295

Start Date:	03/10/2009
Start Time:	1900
End Date:	03/11/2009
Analyst:	MAP

[illegible]

Particle Size of Soils by ASTM D422

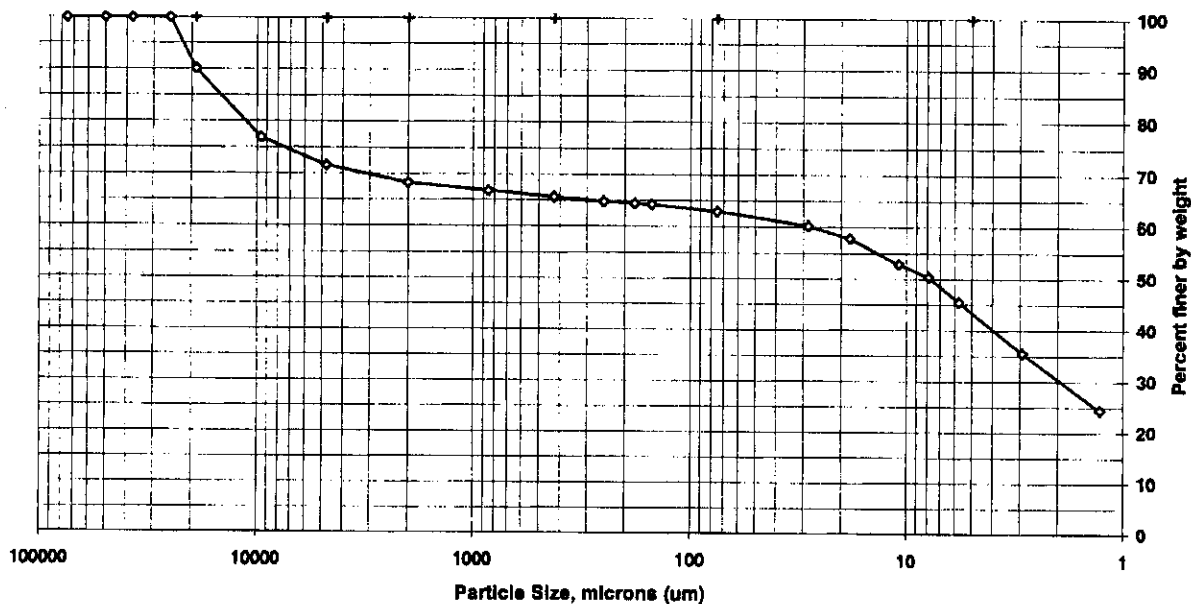
Client Code: STLPAP
 Sample ID: BH-SED-07-6
 Lab ID: 787574

SDG: 9C060295
 ETR(s): 130511

Date Received: 3/7/2009
 Start Date: 3/9/2009
 End Date: 3/17/2009

Percent Solids: 45.6%
 Specific Gravity: 2.650
 Maximum Particle Size: 25 mm

Non-soil material: shells
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	90.0	10.0
3/8 inch	9500	76.8	13.2
#4	4750	71.8	5.2
#10	2000	68.3	3.2
#20	850	66.7	1.6
#40	425	65.6	1.1
#60	250	64.8	0.8
#80	180	64.4	0.4
#100	150	64.2	0.2
#200	75	62.9	1.3
Hydrometer	28.4	60.2	2.7
	18.2	57.8	2.4
	10.8	52.9	4.9
	7.9	50.4	2.4
	5.7	45.5	4.9
	2.9	35.5	10.0
V	1.3	24.5	11.0

Soil Classification	Percent of Total Sample
Gravel	28.4
Sand	8.6
Coarse Sand	3.2
Medium Sand	2.7
Fine Sand	2.7
Silt	17.4
Clay	45.5

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

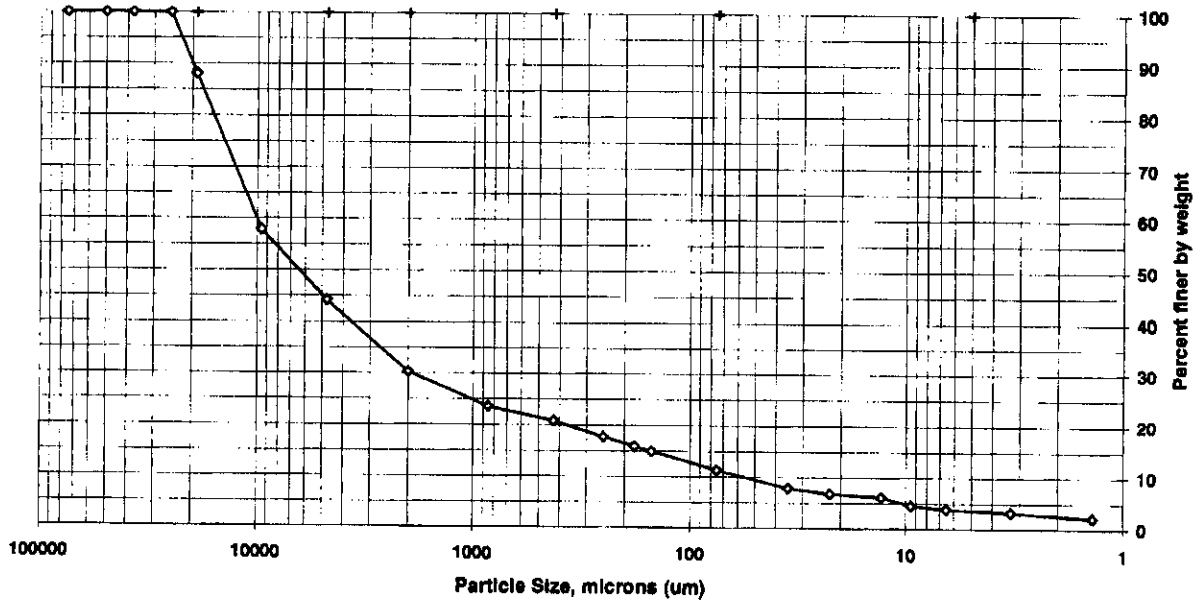
Client Code: STLPAP
 Sample ID: BH-SED-08-10
 Lab ID: 787575

SDG: 9C060295
 ETR(s): 130511

Date Received: 3/7/2009
 Start Date: 3/9/2009
 End Date: 3/17/2009

Percent Solids: 79.4%
 Specific Gravity: 2.650
 Maximum Particle Size: 25 mm

Non-soil material: na
 Shape (> #10): subangular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	88.0	12.0
3/8 inch	9500	57.9	30.1
#4	4750	44.2	13.6
#10	2000	30.3	13.9
#20	850	23.5	6.8
#40	425	20.8	2.7
#60	250	17.7	3.1
#80	180	16.0	1.8
#100	150	15.0	0.9
#200	75	11.3	3.7
Hydrometer	35.1	7.9	3.5
	22.4	6.8	1.1
	13.0	6.2	0.6
	9.5	4.5	1.7
	6.5	3.9	0.6
	3.3	3.3	0.6
V	1.4	2.2	1.1

Soil Classification	Percent of Total Sample
Gravel	55.8
Sand	32.9
Coarse Sand	13.9
Medium Sand	9.5
Fine Sand	9.5
Silt	7.5
Clay	3.9

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with
 a metal paddle.
 Dispersion Period: 1 minute

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

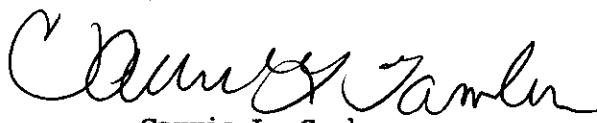
MES Sparrows Point 18001868

Lot #: C9C060297

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 30, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		--	--
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pttsburgh.doc

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C060297

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 6, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

The two jars submitted for sample DUP-2 had very different appearances. TOC was the only analysis requested from the small jar. All other analyses were requested from the large jar. Per discussions with Megan Simon, MES and Karin Olsen EA Engineering, the TOC result was reported from an aliquot from the large jar.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

Several continuing calibration standards had compounds with a %D >25%; but were within the expected performance range for these compounds.

GC/MS Semivolatiles:

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

Samples BH-SED-08-10 RE-1 and DUP-2 RE-1 had the surrogates diluted out.

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

The method blank for batch 9068068 had phenanthrene detected between the MDL and the reporting limit. The result was flagged with a "J" qualifier. Any sample in this batch that had this compound detected had the result flagged with a "B" qualifier.

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C060297

GC/MS Semivolatiles (cont.):

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

Metals:

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

General Chemistry:

Some samples were analyzed at a dilution for TOC.

METHODS SUMMARY

C9C060297

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
SM20	"STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
SW846	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9C060297

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K760J	001	BH-SED-07-6	03/05/09	10:25
K760M	002	BH-SED-07-TOC	03/05/09	10:30
K760Q	003	BH-SED-08-10	03/05/09	13:00
K760R	004	BH-SED-08-TOC	03/05/09	13:05
K760V	005	DUP-2	03/05/09	
K7604	006	EQBLINER	03/05/09	07:50
K7605	007	EQBSPLIT	03/05/09	08:05

NOTE(S) :

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

[illegible]

[illegible]

Cooler Receipt Form
TestAmerica Pittsburgh

Client: E-A. Engineering Project: 3/6/09 Quote: 82013
Cooler Rec'd & Opened for Temp. Check on: 3/6/09
Coolers Opened and Unpacked on: 3/6/09 By: PRF
TestAmerica Pittsburgh Lot Number: C9C060297 (Signature)

- | | Yes | No | NA |
|---|-------------------------------------|----|-------------------------------------|
| 1. Were custody seals on the outside of the cooler? _____ | | | <input checked="" type="checkbox"/> |
| If YES, how many and where? Quantity _____ Location _____ | | | |
| Were signatures and date correct? _____ | | | <input checked="" type="checkbox"/> |
| 2. Were custody papers included inside the cooler? _____ | <input checked="" type="checkbox"/> | | |
| 3. Were custody papers properly filled out (ink, signed, match labels)? _____ | <input checked="" type="checkbox"/> | | |
| 4. Did you sign the custody papers in the appropriate place? _____ | <input checked="" type="checkbox"/> | | |
| 5. Was shippers packing slip attached to this form? _____ | <input checked="" type="checkbox"/> | | |
| 6. Were packing materials used? _____ | <input checked="" type="checkbox"/> | | |
| If YES, what type? <u>Bubble Wrap</u> | | | |
| 7. Were the samples received within the acceptable temperature range? _____ | <input checked="" type="checkbox"/> | | |
| 8. Were the samples appropriately preserved? _____ | <input checked="" type="checkbox"/> | | |
| 9. Were all bottles sealed in separate plastic bags? _____ | <input checked="" type="checkbox"/> | | |
| 10. Did all bottles arrive in good condition (unbroken)? _____ | <input checked="" type="checkbox"/> | | |
| 11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____ | <input checked="" type="checkbox"/> | | |
| 12. Did all bottle labels and/or tags agree with custody papers? _____ | <input checked="" type="checkbox"/> | | |
| 13. Were correct bottles used for tests indicated? _____ | <input checked="" type="checkbox"/> | | |
| 14. Were all VOA vials checked for the presence of air bubbles? _____ | <input checked="" type="checkbox"/> | | |
| 15. Was a sufficient amount of sample sent in each bottle? _____ | <input checked="" type="checkbox"/> | | |
| 16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO | | | |

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

UP: Unpreserved

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

Comments:

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid

Sulfuric Acid

Hydrochloric Acid

Sodium Hydroxide

500

FedEx USA *bill*
ExpressFedEx
Tracking
Number

8565 6932 6753

RECIPIENT: PEEL HERE

1

This portion can be removed for Recipient's records.

Date 3/5/09

FedEx Tracking Number

856569326753

Sender's
Name

TODD WARD

Phone 710 796-1250

Company

E A ENGINEERING SCIENCE & TECH

Address 15 LOVETON CIR

Dept./Floor/Suite/Room

2

City SPARKS GLENCOEState MDZIP 21152

3

Your Internal Billing Reference

To

Recipient's
Name

SAMPLE MANAGEMENT

Phone 412 963-2428

Company

TEST AMERICA - PITTSBURGH

Recipient's
Address

301 ALPHA DRIVE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

RDC PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City

PITTSBURGH

State PAZIP 15238

0326961324



8565 6932 6753

Recipient's Copy

4a Express Package Service

☒ **FedEx Priority Overnight**
Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx Standard Overnight**
Next business afternoon.*
Saturday Delivery NOT available.

Packages up to 150 lbs.

☐ **FedEx First Overnight**
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.☐ **FedEx 2Day**
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx Express Saver**
Third business day.*
Saturday Delivery NOT available.* To most locations.
FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service

☐ **FedEx 1Day Freight***
Next business day.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.☐ **FedEx 2Day Freight**
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

Packages over 150 lbs.

☐ **FedEx 3Day Freight**
Third business day.*
Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging

☐ **FedEx Envelope***☐ **FedEx Pak***
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.☐ **FedEx Box**☐ **FedEx Tube**☒ **Other**
* Declared value limit \$500.

6 Special Handling

Include FedEx address in Section 3.

☐ **SATURDAY Delivery**Not available for:
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.☐ **HOLD Weekday
at FedEx Location**
Not available for:
FedEx First Overnight.☐ **HOLD Saturday
at FedEx Location**
Available ONLY for FedEx Priority
Overnight and FedEx 2Day
to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☒ **No**☐ **Yes**
As per attached
Shipper's Declaration.☐ **Yes**
Shipper's Declaration
not required.☐ **Dry Ice**

Dry Ice, S, UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ **Cargo Aircraft Only**

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip.
Acct. No. ☐☒ **Sender**
Acct. No. in Section
1 will be billed.☐ **Recipient**☐ **Third Party**☐ **Credit Card**☐ **Cash/Check**

Total Packages

Total Weight

1

45 lbs.

Total Charges

Credit Card Auth.

*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ **No Signature
Required**
Package may be left with-
out obtaining a signature
for delivery.☐ **Direct Signature**
Anyone at recipient's
address may sign for delivery.
Fee applies.☐ **Indirect Signature**
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 8/05-Part #158279-01/99-2005 FedEx-PRINTED IN U.S.A.-SRS

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-07-6

GC/MS Volatiles

Lot-Sample #....: C9C060297-001	Work Order #....: K760J1AU	Matrix.....: SOLID
Date Sampled....: 03/05/09	Date Received...: 03/06/09	MS Run #.....: 9071074
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071060	Analysis Time...: 09:44	
Dilution Factor: 0.89	Initial Wgt/Vol: 5.63 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 58	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.94
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.95
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.6
Chloroform	ND	11	ug/kg	1.2
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.4
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.4
Toluene	ND	11	ug/kg	1.5
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	1.9
Vinyl chloride	ND	11	ug/kg	1.0

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SKD-07-6

GC/MS Volatiles

Lot-Sample #...: C9C060297-001 Work Order #...: K760J1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	102	(52 - 124)
Toluene-d8	92	(72 - 127)
4-Bromofluorobenzene	111	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Volatiles

Lot-Sample #....: C9C060297-003	Work Order #....: K760Q1AU	Matrix.....: SOLID
Date Sampled....: 03/05/09	Date Received...: 03/06/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #....: 9068066	Analysis Time...: 14:04	
Dilution Factor: 1.02	Initial Wgt/Vol: 4.88 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 55	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	230	ug/kg	16
Acrylonitrile	ND	230	ug/kg	24
Benzene	ND	11	ug/kg	1.5
Bromodichloromethane	ND	11	ug/kg	1.3
Bromoform	ND	11	ug/kg	1.0
Bromomethane	ND	11	ug/kg	1.7
2-Butanone (MEK)	ND	11	ug/kg	2.0
Carbon tetrachloride	ND	11	ug/kg	1.0
Chloroethane	ND	11	ug/kg	3.5
2-Chloroethyl vinyl ether	ND	23	ug/kg	1.8
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.9
Dibromochloromethane	ND	11	ug/kg	1.6
1,2-Dichlorobenzene	ND	11	ug/kg	1.8
1,3-Dichlorobenzene	ND	11	ug/kg	1.5
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.4
Dichlorodifluoromethane	ND	11	ug/kg	1.5
1,1-Dichloroethane	ND	11	ug/kg	1.3
1,2-Dichloroethane	ND	11	ug/kg	1.4
1,1-Dichloroethene	ND	11	ug/kg	1.9
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.4
Ethylbenzene	ND	11	ug/kg	1.5
Methylene chloride	ND	11	ug/kg	1.5
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.6
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.7
1,1,1-Trichloroethane	ND	11	ug/kg	1.1
1,1,2-Trichloroethane	ND	11	ug/kg	1.9
Trichloroethene	ND	11	ug/kg	1.5
Trichlorofluoromethane	ND	11	ug/kg	2.1
Vinyl chloride	ND	11	ug/kg	1.1

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Volatiles

Lot-Sample #....: C9C060297-003 Work Order #....: K760Q1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	112	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #... : C9C060297-005	Work Order #... : K760V1AU	Matrix..... : SOLID
Date Sampled... : 03/05/09	Date Received... : 03/06/09	MS Run #..... : 9068106
Prep Date..... : 03/09/09	Analysis Date... : 03/09/09	
Prep Batch #... : 9068066	Analysis Time... : 14:28	
Dilution Factor : 0.97	Initial Wgt/Vol : 5.13 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 20	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	120	ug/kg	8.6
Acrylonitrile	ND	120	ug/kg	13
Benzene	ND	6.1	ug/kg	0.82
Bromodichloromethane	ND	6.1	ug/kg	0.68
Bromoform	ND	6.1	ug/kg	0.54
Bromomethane	ND	6.1	ug/kg	0.90
2-Butanone (MEK)	ND	6.1	ug/kg	1.1
Carbon tetrachloride	ND	6.1	ug/kg	0.54
Chloroethane	ND	6.1	ug/kg	1.9
2-Chloroethyl vinyl ether	ND	12	ug/kg	0.94
Chloroform	ND	6.1	ug/kg	0.71
Chloromethane	ND	6.1	ug/kg	1.0
Dibromochloromethane	ND	6.1	ug/kg	0.86
1,2-Dichlorobenzene	ND	6.1	ug/kg	0.97
1,3-Dichlorobenzene	ND	6.1	ug/kg	0.80
1,4-Dichlorobenzene	ND	6.1	ug/kg	0.77
trans-1,2-Dichloroethene	ND	6.1	ug/kg	0.72
Dichlorodifluoromethane	ND	6.1	ug/kg	0.81
1,1-Dichloroethane	ND	6.1	ug/kg	0.70
1,2-Dichloroethane	ND	6.1	ug/kg	0.75
1,1-Dichloroethene	ND	6.1	ug/kg	1.0
1,2-Dichloropropane	ND	6.1	ug/kg	0.66
cis-1,3-Dichloropropene	ND	6.1	ug/kg	0.82
trans-1,3-Dichloropropene	ND	6.1	ug/kg	0.73
Ethylbenzene	ND	6.1	ug/kg	0.78
Methylene chloride	ND	6.1	ug/kg	0.82
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg	0.87
Tetrachloroethene	ND	6.1	ug/kg	0.83
Toluene	ND	6.1	ug/kg	0.89
1,1,1-Trichloroethane	ND	6.1	ug/kg	0.59
1,1,2-Trichloroethane	ND	6.1	ug/kg	1.0
Trichloroethene	ND	6.1	ug/kg	0.80
Trichlorofluoromethane	ND	6.1	ug/kg	1.1
Vinyl chloride	ND	6.1	ug/kg	0.57

(Continued on next page)

Maryland Environmental Service

Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #...: C9C060297-005 Work Order #...: K760V1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	90	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: EQBLINER

GC/MS Volatiles

Lot-Sample #... : C9C060297-006	Work Order #... : K76041AA	Matrix..... : WATER
Date Sampled... : 03/05/09	Date Received... : 03/06/09	MS Run #..... : 9070123
Prep Date..... : 03/11/09	Analysis Date... : 03/11/09	
Prep Batch #... : 9070225	Analysis Time... : 13:14	
Dilution Factor: 1	Initial Wgt/Vol: 5 mL	Final Wgt/Vol... : 5 mL
Analyst ID..... : 034635	Instrument ID... : HP7	
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

(Continued on next page)

Maryland Environmental Service

Client Sample ID: EQBLINER

GC/MS Volatiles

Lot-Sample #....: C9C060297-006 Work Order #....: K76041AA Matrix.....: WATER

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	87	(62 - 123)
Toluene-d8	103	(80 - 120)
4-Bromofluorobenzene	93	(75 - 120)
Dibromofluoromethane	90	(80 - 120)

Maryland Environmental Service

Client Sample ID: EQBSPLIT

GC/MS Volatiles

Lot-Sample #....: C9C060297-007	Work Order #....: K76051AA	Matrix.....: WATER
Date Sampled....: 03/05/09	Date Received...: 03/06/09	MS Run #.....: 9070123
Prep Date.....: 03/11/09	Analysis Date...: 03/11/09	
Prep Batch #....: 9070225	Analysis Time...: 13:39	
Dilution Factor: 1	Initial Wgt/Vol: 5 mL	Final Wgt/Vol...: 5 mL
Analyst ID.....: 034635	Instrument ID...: HP7	
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

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Maryland Environmental Service

Client Sample ID: EQBSPLIT

GC/MS Volatiles

Lot-Sample #...: C9C060297-007 Work Order #...: K76051AA Matrix.....: WATER

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	83	(62 - 123)
Toluene-d8	103	(80 - 120)
4-Bromofluorobenzene	90	(75 - 120)
Dibromofluoromethane	86	(80 - 120)

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C060297

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	86	100	93	96	00
02	INTRA-LAB QC	90	96	109	93	00
03	BH-SED-07-6	102	92	111	96	00
04	BH-SED-08-10	86	102	112	93	00
05	DUP-2	85	99	103	90	00
06	METHOD BLK. K773J1AA	100	92	108	95	00
07	METHOD BLK. K8D2V1AA	96	93	108	94	00
08	LCS K773J1AC	102	107	119	98	00
09	LCS K8D2V1AC	94	102	118	89	00
10	LAB MS/MSD D	96	109	105	93	00
11	LAB MS/MSD D	90	97	110	85	00
12	LAB MS/MSD S	98	100	118	95	00
13	LAB MS/MSD S	101	105	119	94	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C060297

Extraction: XXA4EQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	101	90	102	98	00
02	LAB MS/MSD D	96	97	116	91	00
03	LAB MS/MSD S	102	108	118	96	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C060297

Extraction: XXI15QK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	EQBLINER	87	103	93	90	00
02	EQBSPLIT	83	103	90	86	00
03	INTRA-LAB QC	84	107	91	88	00
04	METHOD BLK. K8CMC1AA	90	100	89	91	00
05	LCS K8CMC1AC	93	104	97	93	00
06	LAB MS/MSD D	91	108	90	90	00
07	LAB MS/MSD S	84	107	91	89	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(62-123)
 (80-120)
 (75-120)
 (80-120)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C090000

WO #: K773J1AC

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	40.0	32.9	82	59 - 129	
Trichloroethene	40.0	31.7	79	76 - 119	
Benzene	40.0	34.2	86	77 - 120	
Toluene	40.0	39.0	97	78 - 124	
Chlorobenzene	40.0	39.4	99	79 - 120	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C110000

WO #: K8CMC1AC

BATCH: 9070225

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	40.0	41.4	104	69 - 127	
Trichloroethene	40.0	39.4	98	80 - 120	
Benzene	40.0	41.2	103	80 - 120	
Toluene	40.0	43.2	108	80 - 124	
Chlorobenzene	40.0	42.0	105	83 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120000

WO #: K8D2V1AC

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	31.3	78	59 - 129	
Trichloroethene	40.0	30.7	77	76 - 119	
Benzene	40.0	33.4	84	77 - 120	
Toluene	40.0	38.4	96	78 - 124	
Chlorobenzene	40.0	40.4	101	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C030265

WO #: K708C1AF

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	42.7	ND	36.8	86	59 - 129	
Trichloroethene	42.7	ND	35.9	84	76 - 119	
Benzene	42.7	ND	39.1	92	77 - 120	
Toluene	42.7	ND	46.6	109	78 - 124	
Chlorobenzene	42.7	ND	46.5	109	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: ___0___ out of ___0___ outside limits

Spike Recovery: ___0___ out of ___5___ outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C030265

WO #: K708C1AG

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
1,1-Dichloroethene	45.9	43.3	94	16	25	59 - 129	
Trichloroethene	45.9	38.9	85	8.1	21	76 - 119	
Benzene	45.9	43.0	94	9.7	20	77 - 120	
Toluene	45.9	46.9	102	0.78	21	78 - 124	
Chlorobenzene	45.9	48.4	105	4.0	20	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: ___0___ out of ___5___ outside limits

Spike Recovery: ___0___ out of ___5___ outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050210

WO #: K737M1CX

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	72.2	ND	48.8	68	59 - 129	
Trichloroethene	72.2	ND	44.3	61*	76 - 119	a
Benzene	72.2	ND	50.2	69*	77 - 120	a
Toluene	72.2	ND	56.8	79	78 - 124	
Chlorobenzene	72.2	ND	58.6	81	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limitsRPD: 0 out of 0 outside limitsSpike Recovery: 2 out of 5 outside limitsCOMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050210

WO #: K737M1C0

BATCH: 9068066

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,1-Dichloroethene	72.2	47.9	66	1.9	25	59 - 129	
Trichloroethene	72.2	58.3	81	27	*	21	76 - 119 p
Benzene	72.2	61.8	86	21	*	20	77 - 120 p
Toluene	72.2	76.9	106	30	*	21	78 - 124 p
Chlorobenzene	72.2	74.7	103	24	*	20	79 - 120 p

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

p Relative percent difference (RPD) is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 4 out of 5 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: C9C100236

WO #: K8AJ91AU

BATCH: 9070225

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	ND	38.6	96	69 - 127	
Trichloroethene	40.0	ND	38.9	97	80 - 120	
Benzene	40.0	ND	39.7	99	80 - 120	
Toluene	40.0	ND	43.7	109	80 - 124	
Chlorobenzene	40.0	ND	40.3	101	83 - 120	

NOTES (S) :

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

RPD: ___0___ out of ___0___ outside limits

Spike Recovery: ___0___ out of ___5___ outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: C9C100236

WO #: K8AJ91AV

BATCH: 9070225

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD %	QC LIMITS	QUAL
	(ug/L)	(ug/L)	% REC	% RPD	RPD REC
1,1-Dichloroethene	40.0	36.3	91	6.0	20 69 - 127
Trichloroethene	40.0	38.6	97	0.77	20 80 - 120
Benzene	40.0	39.7	99	0.020	20 80 - 120
Toluene	40.0	44.0	110	0.68	20 80 - 124
Chlorobenzene	40.0	41.8	104	3.7	20 83 - 120

NOTES(S):

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

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AF

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	40.0	ND	30.7	77	59 - 129	
Trichloroethene	40.0	ND	30.6	76	76 - 119	
Benzene	40.0	ND	33.9	85	77 - 120	
Toluene	40.0	ND	39.1	98	78 - 124	
Chlorobenzene	40.0	ND	40.5	101	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AG

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,1-Dichloroethene	40.0	30.4	76	0.81	25	59 - 129	
Trichloroethene	40.0	29.8	75*	2.4	21	76 - 119	a
Benzene	40.0	32.9	82	3.2	20	77 - 120	
Toluene	40.0	38.5	96	1.5	21	78 - 124	
Chlorobenzene	40.0	39.6	99	2.2	20	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 1 out of 5 outside limits

COMMENTS:

FORM III

K773J1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3030901.D

Lot Number: C9C060297

Date Analyzed: 03/09/09

Time Analyzed: 07:05

Matrix: SOLID

Date Extracted: 03/09/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	K708C1AE	3030910.D	03/09/09	11:12
02	LAB MS/MSD	K708C1AF S	3030908.D	03/09/09	10:22
03	LAB MS/MSD	K708C1AG D	3030909.D	03/09/09	10:47
04	INTRA-LAB QC	K737M1AU	3030903.D	03/09/09	07:54
05	LAB MS/MSD	K737M1CX S	3030905.D	03/09/09	08:43
06	LAB MS/MSD	K737M1C0 D	3030907.D	03/09/09	09:33
07	BH-SED-08-10	K760Q1AU	3030917.D	03/09/09	14:04
08	DUP-2	K760V1AU	3030918.D	03/09/09	14:28
09	CHECK SAMPLE	K773J1AC C	3030906.D	03/09/09	09:08
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COMMENTS:

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C060297
MB Lot-Sample #: C9C090000-066

Work Order #...: K773J1AA

Matrix.....: SOLID

Analysis Date...: 03/09/09
Dilution Factor: 1

Prep Date.....: 03/09/09
Prep Batch #...: 9068066
Initial Wgt/Vol: 5 g
Analyst ID.....: 010099

Analysis Time...: 07:05
Final Wgt/Vol...: 5 mL
Instrument ID...: HP3

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acrolein	ND	100	ug/kg	SW846	8260B
Acrylonitrile	ND	100	ug/kg	SW846	8260B
Benzene	ND	5.0	ug/kg	SW846	8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846	8260B
Bromoform	ND	5.0	ug/kg	SW846	8260B
Bromomethane	ND	5.0	ug/kg	SW846	8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846	8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846	8260B
Chloroethane	ND	5.0	ug/kg	SW846	8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846	8260B
Chloroform	ND	5.0	ug/kg	SW846	8260B
Chloromethane	ND	5.0	ug/kg	SW846	8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846	8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
Ethylbenzene	ND	5.0	ug/kg	SW846	8260B
Methylene chloride	ND	5.0	ug/kg	SW846	8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846	8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846	8260B
Toluene	ND	5.0	ug/kg	SW846	8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
Trichloroethene	ND	5.0	ug/kg	SW846	8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846	8260B
Vinyl chloride	ND	5.0	ug/kg	SW846	8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	100	(52 - 124)
Toluene-d8	92	(72 - 127)
4-Bromofluorobenzene	108	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C060297

Work Order #...: K773J1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	95	(68 - 121)		

NOTE(S) :

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

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K8CMC1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 7031102.D

Lot Number: C9C060297

Date Analyzed: 03/11/09

Time Analyzed: 08:41

Matrix: WATER

Date Extracted: 03/11/09

GC Column: RTX-624 ID: .18

Extraction Method: 5030B

Instrument ID: HP7

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	EQBLINER	K76041AA	7031112.D	03/11/09	13:14
02	EQBSPLIT	K76051AA	7031113.D	03/11/09	13:39
03	INTRA-LAB QC	K8AJ91AT	7031104.D	03/11/09	09:27
04	LAB MS/MSD	K8AJ91AU S	7031105.D	03/11/09	09:53
05	LAB MS/MSD	K8AJ91AV D	7031106.D	03/11/09	10:18
06	CHECK SAMPLE	K8CMC1AC C	7031107.D	03/11/09	10:45
07					
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COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C060297
MB Lot-Sample #: C9C110000-225

Work Order #...: K8CMC1AA

Matrix.....: WATER

Analysis Date...: 03/11/09
Dilution Factor: 1

Prep Date.....: 03/11/09
Prep Batch #...: 9070225
Initial Wgt/Vol: 5 mL
Analyst ID.....: 034635

Analysis Time...: 08:41
Final Wgt/Vol...: 5 mL
Instrument ID...: HP7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/L	SW846 8260B
Acrylonitrile	ND	100	ug/L	SW846 8260B
Benzene	ND	5.0	ug/L	SW846 8260B
Bromodichloromethane	ND	5.0	ug/L	SW846 8260B
Bromoform	ND	5.0	ug/L	SW846 8260B
Bromomethane	ND	5.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Chloroethane	ND	5.0	ug/L	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
Chloromethane	ND	5.0	ug/L	SW846 8260B
Dibromochloromethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
Ethylbenzene	ND	5.0	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	5.0	ug/L	SW846 8260B
Toluene	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/L	SW846 8260B
Trichloroethene	ND	5.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/L	SW846 8260B
Vinyl chloride	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	90	(62 - 123)
Toluene-d8	100	(80 - 120)
4-Bromofluorobenzene	89	(75 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C060297

Work Order #...: K8CMC1AA

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	91	(80 - 120)		

NOTE (S) :

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

K8D2V1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3031201.D

Lot Number: C9C060297

Date Analyzed: 03/12/09

Time Analyzed: 06:52

Matrix: SOLID

Date Extracted: 03/12/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	K74TN1AE	3031202.D	03/12/09	07:17
02	LAB MS/MSD	K74TN1AF S	3031204.D	03/12/09	08:06
03	LAB MS/MSD	K74TN1AG D	3031209.D	03/12/09	10:08
04	BH-SED-07-6	K760J1AU	3031208.D	03/12/09	09:44
05	CHECK SAMPLE	K8D2V1AC C	3031203.D	03/12/09	07:41
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COMMENTS:

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: C9C060297
MB Lot-Sample #: C9C120000-060

Work Order #....: K8D2V1AA

Matrix.....: SOLID

Analysis Date...: 03/12/09
Dilution Factor: 1

Prep Date.....: 03/12/09

Prep Batch #....: 9071060

Analysis Time...: 06:52

Initial Wgt/Vol: 5 g

Final Wgt/Vol...: 5 mL

Analyst ID.....: 010099

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acrolein	ND	100	ug/kg		SW846 8260B
Acrylonitrile	ND	100	ug/kg		SW846 8260B
Benzene	ND	5.0	ug/kg		SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg		SW846 8260B
Bromoform	ND	5.0	ug/kg		SW846 8260B
Bromomethane	ND	5.0	ug/kg		SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg		SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg		SW846 8260B
Chloroethane	ND	5.0	ug/kg		SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg		SW846 8260B
Chloroform	ND	5.0	ug/kg		SW846 8260B
Chloromethane	ND	5.0	ug/kg		SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg		SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg		SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg		SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg		SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg		SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg		SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg		SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg		SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg		SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg		SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg		SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg		SW846 8260B
Ethylbenzene	ND	5.0	ug/kg		SW846 8260B
Methylene chloride	ND	5.0	ug/kg		SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg		SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg		SW846 8260B
Toluene	ND	5.0	ug/kg		SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg		SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg		SW846 8260B
Trichloroethene	ND	5.0	ug/kg		SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg		SW846 8260B
Vinyl chloride	ND	5.0	ug/kg		SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	93	(72 - 127)
4-Bromofluorobenzene	108	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C060297

Work Order #...: K8D2V1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	94	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C060297
 Lab File ID (Standard): 2C30309 Date Analyzed: 03/09/09
 Instrument ID: HP3 Time Analyzed: 0622
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	280004	7.40	67911	10.49	168165	12.81
UPPER LIMIT	560008	7.60	135822	10.69	336330	13.01
LOWER LIMIT	140002	7.20	33956	10.29	84083	12.61
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	329830	7.41	78924	10.49	168846	12.81
02 INTRA-LAB CH	263026	7.40	62945	10.49	148577	12.81
03 BH-SED-08-10	521766	7.41	119060	10.49	235545	12.81
04 DUP-2	554842	7.41	128400	10.49	226591	12.81
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22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C060297
 Lab File ID (Standard): CC70311 Date Analyzed: 03/11/09
 Instrument ID: HP7 Time Analyzed: 0634
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	99458	10.58	159349	12.91	449192	7.50
UPPER LIMIT	198916	10.78	318698	13.11	898384	7.70
LOWER LIMIT	49729	10.38	79675	12.71	224596	7.30
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	180769	10.59	295409	12.91	803060	7.50
02 INTRA-LAB CH	104827	10.58	179633	12.91	451892	7.50
03 EQBLINER	110509	10.59	181729	12.91	493883	7.51
04 EQBSPLIT	109572	10.59	173278	12.91	497968	7.50
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22						

IS1 (CBZ) = Chlorobenzene-d5
 IS2 (DCB) = 1,4-Dichlorobenzene-d4
 IS3 = Fluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C060297
 Lab File ID (Standard): 1C30312 Date Analyzed: 03/12/09
 Instrument ID: HP3 Time Analyzed: 0542
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	340820	7.40	81548	10.49	183892	12.81
UPPER LIMIT	681640	7.60	163096	10.69	367784	13.01
LOWER LIMIT	170410	7.20	40774	10.29	91946	12.61
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	446400	7.40	107113	10.49	209407	12.81
02 INTRA-LAB CH	319203	7.40	77050	10.49	184286	12.81
03 BH-SED-07-6	391853	7.40	94618	10.49	181863	12.81
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IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-07-6

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-001 Work Order #....: K760J1AC Matrix.....: SOLID
 Date Sampled....: 03/05/09 10:25 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #....: 9068010 Analysis Time...: 02:26
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	150	40	ug/kg	6.0
2-Methylnaphthalene	320	40	ug/kg	7.8
Naphthalene	8200 E	40	ug/kg	5.8
Acenaphthylene	160	40	ug/kg	7.9
Acenaphthene	210	40	ug/kg	6.4
Fluorene	180	40	ug/kg	6.0
Phenanthrene	610	40	ug/kg	4.7
Anthracene	320	200	ug/kg	7.0
Fluoranthene	1800	40	ug/kg	3.4
Pyrene	1200	40	ug/kg	11
Benzo (a) anthracene	920	40	ug/kg	6.3
Chrysene	780	40	ug/kg	6.9
Benzo (b) fluoranthene	1100	40	ug/kg	8.0
Benzo (k) fluoranthene	460	40	ug/kg	8.3
Benzo (a) pyrene	980	40	ug/kg	11
Indeno (1,2,3-cd) pyrene	580	40	ug/kg	2.2
Dibenzo (a,h) anthracene	180	40	ug/kg	8.7
Benzo (ghi) perylene	620	40	ug/kg	2.9

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	53	(27 - 110)
Terphenyl-d14	63	(21 - 130)
2-Fluorobiphenyl	66	(28 - 108)
2-Fluorophenol	58	(28 - 107)
Phenol-d5	53	(30 - 112)
2,4,6-Tribromophenol	75	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Maryland Environmental Service

Client Sample ID: BH-SED-07-6

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-001 Work Order #....: K760J2AC Matrix.....: SOLID
 Date Sampled....: 03/05/09 10:25 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #....: 9068010 Analysis Time...: 04:17
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	190	80	ug/kg	12
2-Methylnaphthalene	370	80	ug/kg	16
Naphthalene	9800	80	ug/kg	12
Acenaphthylene	160	80	ug/kg	16
Acenaphthene	210	80	ug/kg	13
Fluorene	180	80	ug/kg	12
Phenanthrene	630	80	ug/kg	9.5
Anthracene	320 J	390	ug/kg	14
Fluoranthene	1700	80	ug/kg	6.7
Pyrene	1200	80	ug/kg	21
Benzo (a) anthracene	950	80	ug/kg	13
Chrysene	760	80	ug/kg	14
Benzo (b) fluoranthene	1100	80	ug/kg	16
Benzo (k) fluoranthene	450	80	ug/kg	17
Benzo (a) pyrene	1000	80	ug/kg	22
Indeno (1,2,3-cd) pyrene	610	80	ug/kg	4.4
Dibenzo (a,h) anthracene	180	80	ug/kg	17
Benzo (ghi) perylene	650	80	ug/kg	5.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(27 - 110)
Terphenyl-d14	64	(21 - 130)
2-Fluorobiphenyl	65	(28 - 108)
2-Fluorophenol	68	(28 - 107)
Phenol-d5	60	(30 - 112)
2,4,6-Tribromophenol	61	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-003 Work Order #....: K760Q1AC Matrix.....: SOLID
 Date Sampled....: 03/05/09 13:00 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #....: 9068010 Analysis Time...: 02:48
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 55 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	72	37	ug/kg	5.6
2-Methylnaphthalene	200	37	ug/kg	7.3
Naphthalene	12000 E	37	ug/kg	5.4
Acenaphthylene	180	37	ug/kg	7.4
Acenaphthene	39	37	ug/kg	6.0
Fluorene	58	37	ug/kg	5.6
Phenanthrene	270	37	ug/kg	4.4
Anthracene	230	180	ug/kg	6.5
Fluoranthene	1700	37	ug/kg	3.1
Pyrene	1200	37	ug/kg	9.9
Benzo (a) anthracene	1200	37	ug/kg	5.9
Chrysene	1100	37	ug/kg	6.5
Benzo (b) fluoranthene	1400	37	ug/kg	7.5
Benzo (k) fluoranthene	590	37	ug/kg	7.7
Benzo (a) pyrene	1400	37	ug/kg	10
Indeno (1,2,3-cd) pyrene	790	37	ug/kg	2.0
Dibenzo (a,h) anthracene	210	37	ug/kg	8.2
Benzo (ghi) perylene	900	37	ug/kg	2.7

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(27 - 110)
Terphenyl-d14	68	(21 - 130)
2-Fluorobiphenyl	66	(28 - 108)
2-Fluorophenol	56	(28 - 107)
Phenol-d5	56	(30 - 112)
2,4,6-Tribromophenol	78	(21 - 116)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Semivolatiles

Lot-Sample #...: C9C060297-003 Work Order #...: K760Q2AC Matrix.....: SOLID
 Date Sampled...: 03/05/09 13:00 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #...: 9068010 Analysis Time...: 04:39
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 55 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	88 J	150	ug/kg	22
2-Methylnaphthalene	240	150	ug/kg	29
Naphthalene	17000	150	ug/kg	22
Acenaphthylene	200	150	ug/kg	30
Acenaphthene	53 J	150	ug/kg	24
Fluorene	ND	150	ug/kg	22
Phenanthrene	310	150	ug/kg	18
Anthracene	250 J	740	ug/kg	26
Fluoranthene	1800	150	ug/kg	13
Pyrene	1300	150	ug/kg	39
Benzo (a) anthracene	1300	150	ug/kg	24
Chrysene	1200	150	ug/kg	26
Benzo (b) fluoranthene	1600	150	ug/kg	30
Benzo (k) fluoranthene	570	150	ug/kg	31
Benzo (a) pyrene	1400	150	ug/kg	42
Indeno (1,2,3-cd) pyrene	870	150	ug/kg	8.2
Dibenzo (a,h) anthracene	240	150	ug/kg	33
Benzo (ghi) perylene	940	150	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: DUP-2

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-005	Work Order #....: K760V1AC	Matrix.....: SOLID
Date Sampled....: 03/05/09	Date Received...: 03/06/09 09:40	MS Run #.....: 9068002
Prep Date.....: 03/09/09	Analysis Date...: 03/10/09	
Prep Batch #....: 9068010	Analysis Time...: 03:55	
Dilution Factor: 2.5	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 20	Analyst ID.....: 007062	Instrument ID...: 722
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	44	21	ug/kg	3.2
2-Methylnaphthalene	120	21	ug/kg	4.1
Naphthalene	7900 E	21	ug/kg	3.0
Acenaphthylene	51	21	ug/kg	4.2
Acenaphthene	20 J	21	ug/kg	3.4
Fluorene	36	21	ug/kg	3.2
Phenanthrene	110	21	ug/kg	2.5
Anthracene	64 J	100	ug/kg	3.7
Fluoranthene	490	21	ug/kg	1.8
Pyrene	330	21	ug/kg	5.6
Benzo (a) anthracene	270	21	ug/kg	3.3
Chrysene	220	21	ug/kg	3.7
Benzo (b) fluoranthene	330	21	ug/kg	4.2
Benzo (k) fluoranthene	120	21	ug/kg	4.4
Benzo (a) pyrene	290	21	ug/kg	5.8
Indeno (1,2,3-cd) pyrene	180	21	ug/kg	1.1
Dibenzo (a,h) anthracene	50	21	ug/kg	4.6
Benzo (ghi) perylene	210	21	ug/kg	1.5

SURROGATE	PERCENT		RECOVERY	
	RECOVERY		LIMITS	
Nitrobenzene-d5	46		(27 - 110)	
Terphenyl-d14	58		(21 - 130)	
2-Fluorobiphenyl	58		(28 - 108)	
2-Fluorophenol	59		(28 - 107)	
Phenol-d5	56		(30 - 112)	
2,4,6-Tribromophenol	66		(21 - 116)	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: DUP-2

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-005 Work Order #....: K760V2AC Matrix.....: SOLID
 Date Sampled....: 03/05/09 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #....: 9068010 Analysis Time...: 05:01
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 20 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	41 J	84	ug/kg	13
2-Methylnaphthalene	110	84	ug/kg	16
Naphthalene	11000	84	ug/kg	12
Acenaphthylene	50 J	84	ug/kg	17
Acenaphthene	ND	84	ug/kg	13
Fluorene	34 J	84	ug/kg	13
Phenanthrene	110	84	ug/kg	10
Anthracene	69 J	410	ug/kg	15
Fluoranthene	500	84	ug/kg	7.1
Pyrene	340	84	ug/kg	22
Benzo (a) anthracene	270	84	ug/kg	13
Chrysene	220	84	ug/kg	15
Benzo (b) fluoranthene	360	84	ug/kg	17
Benzo (k) fluoranthene	110	84	ug/kg	17
Benzo (a) pyrene	290	84	ug/kg	23
Indeno (1,2,3-cd) pyrene	180	84	ug/kg	4.6
Dibenzo (a,h) anthracene	ND	84	ug/kg	18
Benzo (ghi) perylene	240	84	ug/kg	6.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: EQBLINER

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-006 Work Order #....: K76041AC Matrix.....: WATER
 Date Sampled....: 03/05/09 07:50 Date Received...: 03/06/09 09:40 MS Run #.....:
 Prep Date.....: 03/09/09 Analysis Date...: 03/11/09
 Prep Batch #....: 9068068 Analysis Time...: 05:27
 Dilution Factor: 0.94 Initial Wgt/Vol: 1060 mL Final Wgt/Vol...: 1 mL
 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.016
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	0.090 J	0.19	ug/L	0.026
Acenaphthylene	ND	0.19	ug/L	0.0080
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0093
Phenanthrene	0.073 J,B	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0081
Fluoranthene	ND	0.19	ug/L	0.0094
Pyrene	ND	0.19	ug/L	0.010
Benzo (a) anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo (b) fluoranthene	ND	0.19	ug/L	0.015
Benzo (k) fluoranthene	ND	0.19	ug/L	0.015
Benzo (a) pyrene	ND	0.19	ug/L	0.011
Indeno (1,2,3-cd) pyrene	ND	0.19	ug/L	0.015
Dibenzo (a,h) anthracene	ND	0.19	ug/L	0.012
Benzo (ghi) perylene	ND	0.19	ug/L	0.0081

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	72	(23 - 112)
Terphenyl-d14	96	(10 - 132)
2-Fluorobiphenyl	81	(19 - 107)
2-Fluorophenol	68	(10 - 111)
Phenol-d5	63	(15 - 112)
2,4,6-Tribromophenol	86	(16 - 122)

NOTE (S) :

J Estimated result. Result is less than RL.

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

Maryland Environmental Service

Client Sample ID: EQBSPLIT

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-007 Work Order #....: K76051AC Matrix.....: WATER
 Date Sampled....: 03/05/09 08:05 Date Received...: 03/06/09 09:40 MS Run #.....:
 Prep Date.....: 03/09/09 Analysis Date...: 03/11/09
 Prep Batch #....: 9068068 Analysis Time...: 05:50
 Dilution Factor: 0.94 Initial Wgt/Vol: 1060 mL Final Wgt/Vol...: 1 mL
 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.016
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	0.10 J	0.19	ug/L	0.026
Acenaphthylene	ND	0.19	ug/L	0.0080
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0093
Phenanthrene	0.086 J,B	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0081
Fluoranthene	ND	0.19	ug/L	0.0094
Pyrene	ND	0.19	ug/L	0.010
Benzo (a) anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo (b) fluoranthene	ND	0.19	ug/L	0.015
Benzo (k) fluoranthene	ND	0.19	ug/L	0.015
Benzo (a) pyrene	ND	0.19	ug/L	0.011
Indeno (1,2,3-cd) pyrene	ND	0.19	ug/L	0.015
Dibenzo (a,h) anthracene	ND	0.19	ug/L	0.012
Benzo (ghi) perylene	ND	0.19	ug/L	0.0081

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(23 - 112)
Terphenyl-d14	83	(10 - 132)
2-Fluorobiphenyl	70	(19 - 107)
2-Fluorophenol	65	(10 - 111)
Phenol-d5	61	(15 - 112)
2,4,6-Tribromophenol	77	(16 - 122)

NOTE (S) :

J Estimated result. Result is less than RL.

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

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C060297

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-07-6	53	63	66	58	53	75	00
02	BH-SED-07-6 RE-1	63	64	65	68	60	61	00
03	BH-SED-08-10	52	68	66	56	56	78	00
04	BH-SED-08-10 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
05	DUP-2	46	58	58	59	56	66	00
06	DUP-2 RE-1	0 D	0 D	0 D	0 D	0 D	0 D	06
07	METHOD BLK. K770M1AA	73	99	75	80	77	92	00
08	LCS K770M1AC	62	77	69	71	68	89	00
09	BH-SED-08-10 D	55	75	75	65	62	83	00
10	BH-SED-08-10 S	40	64	57	51	50	67	00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C060297

Extraction: XXI514201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	EQBLINER	72	96	81	68	63	86	00
02	EQBSPLIT	64	83	70	65	61	77	00
03	METHOD BLK. K773M1AA	70	89	80	72	71	85	00
04	LCS K773M1AC	70	87	84	71	69	100	00
05	LCSD K773M1AD	69	74	79	70	67	91	00

<u>SURROGATES</u>	<u>QC LIMITS</u>
SRG01 = Nitrobenzene-d5	(23-112)
SRG02 = Terphenyl-d14	(10-132)
SRG03 = 2-Fluorobiphenyl	(19-107)
SRG04 = 2-Fluorophenol	(10-111)
SRG05 = Phenol-d5	(15-112)
SRG06 = 2,4,6-Tribromophenol	(16-122)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C090000

WO #: K770M1AC

BATCH: 9068010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
4-Methylphenol	667	426	64	43 - 107	
Hexachloroethane	333	213	64	40 - 102	
Naphthalene	333	233	70	42 - 104	
4-Bromophenyl phenyl ethe	333	251	75	43 - 111	
Phenol	333	203	61	39 - 105	
2-Chlorophenol	333	223	67	40 - 105	
1,4-Dichlorobenzene	333	220	66	41 - 101	
N-Nitrosodi-n-propylamine	333	188	56	42 - 108	
1,2,4-Trichlorobenzene	333	244	73	41 - 105	
4-Chloro-3-methylphenol	333	236	71	43 - 110	
Acenaphthene	333	218	65	42 - 104	
4-Nitrophenol	333	254	76	27 - 131	
2,4-Dinitrotoluene	333	246	74	48 - 118	
Pentachlorophenol	333	216	65	18 - 125	
Pyrene	333	224	67	39 - 113	
Butyl benzyl phthalate	333	224	67	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C090000

WO #: K773M1AC

BATCH: 9068068

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Phenol	20.0	12.5	62	32 - 95	
2-Chlorophenol	20.0	14.4	72	31 - 99	
1,4-Dichlorobenzene	20.0	14.0	70	34 - 93	
N-Nitrosodi-n-propylamine	20.0	12.2	61	34 - 101	
1,2,4-Trichlorobenzene	20.0	15.5	77	34 - 96	
4-Chloro-3-methylphenol	20.0	16.0	80	35 - 104	
Acenaphthene	20.0	16.4	82	35 - 99	
4-Nitrophenol	20.0	17.5	88	29 - 115	
2,4-Dinitrotoluene	20.0	20.3	102	37 - 115	
Pentachlorophenol	20.0	11.1	55	15 - 111	
Pyrene	20.0	15.9	79	35 - 106	
4-Methylphenol	40.0	27.7	69	32 - 100	
Hexachloroethane	20.0	13.1	65	32 - 94	
Naphthalene	20.0	15.2	76	35 - 97	
4-Bromophenyl phenyl ethe	20.0	17.7	89	37 - 104	
Butyl benzyl phthalate	20.0	17.5	88	36 - 108	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C090000

WO #: K773M1AD

BATCH: 9068068

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2-Chlorophenol	20.0	14.3	71	31 - 99	
1,4-Dichlorobenzene	20.0	13.6	68	34 - 93	
N-Nitrosodi-n-propylamine	20.0	11.7	59	34 - 101	
1,2,4-Trichlorobenzene	20.0	15.6	78	34 - 96	
4-Chloro-3-methylphenol	20.0	15.6	78	35 - 104	
Acenaphthene	20.0	15.4	77	35 - 99	
4-Nitrophenol	20.0	15.9	80	29 - 115	
2,4-Dinitrotoluene	20.0	18.0	90	37 - 115	
Pentachlorophenol	20.0	10.1	50	15 - 111	
Pyrene	20.0	14.6	73	35 - 106	
4-Methylphenol	40.0	26.3	66	32 - 100	
Hexachloroethane	20.0	12.8	64	32 - 94	
Naphthalene	20.0	15.0	75	35 - 97	
4-Bromophenyl phenyl ethe	20.0	16.3	81	37 - 104	
Butyl benzyl phthalate	20.0	15.6	78	36 - 108	
Phenol	20.0	12.2	61	32 - 95	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-08-10

Level: (low/med) LOW

Lot #: C9C060297

WO #: K760Q1AV

BATCH: 9068010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	743	11	350	46	39 - 105	
2-Chlorophenol	743	ND	370	50	40 - 105	
1,4-Dichlorobenzene	743	ND	325	44	41 - 101	
N-Nitrosodi-n-propylamine	743	ND	323	43	42 - 108	
1,2,4-Trichlorobenzene	743	ND	368	50	41 - 105	
4-Chloro-3-methylphenol	743	ND	481	65	43 - 110	
Acenaphthene	743	39	463	57	42 - 104	
4-Nitrophenol	743	ND	454	61	27 - 131	
2,4-Dinitrotoluene	743	ND	495	67	48 - 118	
Pentachlorophenol	743	ND	228	31	18 - 125	
Pyrene	743	1200	1550	48	39 - 113	
4-Methylphenol	1490	26	800	52	43 - 107	
Hexachloroethane	743	ND	224	30*	40 - 102	a
Naphthalene	743	12000	11400	0*	42 - 104	a
4-Bromophenyl phenyl ethe	743	ND	500	67	43 - 111	
Butyl benzyl phthalate	743	28	490	62	40 - 117	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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

RPD: 0 out of 0 outside limitsSpike Recovery: 2 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-08-10

Level: (low/med) LOW

Lot #: C9C060297

WO #: K760Q1AW

BATCH: 9068010

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	743	444	58	24	40	39 - 105	
2-Chlorophenol	743	454	61	21	37	40 - 105	
1,4-Dichlorobenzene	743	428	58	27	32	41 - 101	
N-Nitrosodi-n-propylamine	743	389	52	19	32	42 - 108	
1,2,4-Trichlorobenzene	743	498	67	30	36	41 - 105	
4-Chloro-3-methylphenol	743	562	76	16	31	43 - 110	
Acenaphthene	743	594	75	25	34	42 - 104	
4-Nitrophenol	743	558	75	21	33	27 - 131	
2,4-Dinitrotoluene	743	657	88	28	33	48 - 118	
Pentachlorophenol	743	271	37	17	34	18 - 125	
Pyrene	743	1750	75	12	28	39 - 113	
4-Methylphenol	1490	969	63	19	36	43 - 107	
Hexachloroethane	743	268	36*	18	34	40 - 102	a
Naphthalene	743	15300	484*	0.0	25	42 - 104	a
4-Bromophenyl phenyl ethe	743	598	81	18	20	43 - 111	
Butyl benzyl phthalate	743	555	71	12	34	40 - 117	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limitsSpike Recovery: 2 out of 16 outside limits

COMMENTS:

FORM III

K770M1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0309005.

Lot Number: C9C060297

Date Analyzed: 03/10/09

Time Analyzed: 01:42

Matrix: SOLID

Date Extracted:03/09/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level:(low/med) LOW

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

CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
=====	=====	=====	=====	=====
01 BH-SED-07-6	K760J1AC	F0309007.	03/10/09	02:26
02 BH-SED-07-6	K760J2AC	F0309023.	03/10/09	04:17
03 BH-SED-08-10	K760Q1AC	F0309008.	03/10/09	02:48
04 BH-SED-08-10	K760Q1AV S	F0309009.	03/10/09	03:10
05 BH-SED-08-10	K760Q1AW D	F0309010.	03/10/09	03:33
06 BH-SED-08-10	K760Q2AC	F0309024.	03/10/09	04:39
07 DUP-2	K760V1AC	F0309011.	03/10/09	03:55
08 DUP-2	K760V2AC	F0309025.	03/10/09	05:01
09 CHECK SAMPLE	K770M1AC C	F0309006.	03/10/09	02:04
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29				
30				

COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9C060297
MB Lot-Sample #: C9C090000-010

Work Order #...: K770M1AA

Matrix.....: SOLID

Analysis Date...: 03/10/09
Dilution Factor: 0.5

Prep Date.....: 03/09/09
Prep Batch #...: 9068010
Initial Wgt/Vol: 30 g
Analyst ID.....: 007062

Analysis Time...: 01:42
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a,h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	73	(27 - 110)
Terphenyl-d14	99	(21 - 130)
2-Fluorobiphenyl	75	(28 - 108)
2-Fluorophenol	80	(28 - 107)
Phenol-d5	77	(30 - 112)
2,4,6-Tribromophenol	92	(21 - 116)

NOTE (S) :

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

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K773M1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: F0311007.

Lot Number: C9C060297

Date Analyzed: 03/11/09

Time Analyzed: 04:18

Matrix: WATER

Date Extracted: 03/09/09

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 722

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	EQBLINER	K76041AC	F0311010.	03/11/09	05:27
02	EQBSPLIT	K76051AC	F0311011.	03/11/09	05:50
03	CHECK SAMPLE	K773M1AC C	F0311008.	03/11/09	04:41
04	DUPLICATE CHECK	K773M1AD L	F0311009.	03/11/09	05:04
05					
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29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9C060297
MB Lot-Sample #: C9C090000-068

Work Order #...: K773M1AA

Matrix.....: WATER

Analysis Date...: 03/11/09
Dilution Factor: 1

Prep Date.....: 03/09/09
Prep Batch #...: 9068068
Initial Wgt/Vol: 1000 mL
Analyst ID.....: 007062

Analysis Time...: 04:18
Final Wgt/Vol...: 1 mL
Instrument ID...: 722

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
1-Methylnaphthalene	ND	0.20	ug/L	SW846 8270C
Naphthalene	ND	0.20	ug/L	SW846 8270C
Acenaphthylene	ND	0.20	ug/L	SW846 8270C
Acenaphthene	ND	0.20	ug/L	SW846 8270C
Fluorene	ND	0.20	ug/L	SW846 8270C
Phenanthrene	0.10 J	0.20	ug/L	SW846 8270C
Anthracene	ND	0.20	ug/L	SW846 8270C
Fluoranthene	ND	0.20	ug/L	SW846 8270C
Pyrene	ND	0.20	ug/L	SW846 8270C
Benzo (a) anthracene	ND	0.20	ug/L	SW846 8270C
Chrysene	ND	0.20	ug/L	SW846 8270C
Benzo (b) fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo (k) fluoranthene	ND	0.20	ug/L	SW846 8270C
Benzo (a) pyrene	ND	0.20	ug/L	SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	0.20	ug/L	SW846 8270C
Dibenzo (a,h) anthracene	ND	0.20	ug/L	SW846 8270C
Benzo (ghi) perylene	ND	0.20	ug/L	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	70	(23 - 112)
Terphenyl-d14	89	(10 - 132)
2-Fluorobiphenyl	80	(19 - 107)
2-Fluorophenol	72	(10 - 111)
Phenol-d5	71	(15 - 112)
2,4,6-Tribromophenol	85	(16 - 122)

NOTE (S) :

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

J Estimated result. Result is less than RL.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C060297
 Lab File ID (Standard): F03090C2 Date Analyzed: 03/09/09
 Instrument ID: 722 Time Analyzed: 2334

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	71120	4.43	262355	5.41	155147	6.76
UPPER LIMIT	142240	4.93	524710	5.91	310294	7.26
LOWER LIMIT	35560	3.93	131178	4.91	77574	6.26
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	74480	4.42	276439	5.41	175684	6.75
02 INTRA-LAB CH	81384	4.43	298345	5.41	181023	6.75
03 BH-SED-07-6	67081	4.43	231601	5.41	126889	6.76
04 BH-SED-08-10	68038	4.43	238442	5.41	141049	6.75
05 BH-SED-08-10	80895	4.43	331089	5.41	190271	6.76
06 BH-SED-08-10	67316	4.43	247009	5.41	137230	6.75
07 DUP-2	66525	4.43	267133	5.41	152152	6.75
08 BH-SED-07-6	63469	4.43	227868	5.41	141099	6.76
09 BH-SED-08-10	57434	4.43	223047	5.41	141744	6.76
10 DUP-2	59828	4.43	241172	5.41	144215	6.75
11						
12						
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20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9C060297

Lab File ID (Standard): F03090C2

Date Analyzed: 03/09/09

Instrument ID: 722

Time Analyzed: 2334

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	252481	7.90	183512	10.23	141794	11.79
UPPER LIMIT	504962	8.40	367024	10.73	283588	12.29
LOWER LIMIT	126241	7.40	91756	9.73	70897	11.29
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	305376	7.90	214324	10.22	150889	11.78
02 INTRA-LAB CH	280772	7.90	209367	10.22	161008	11.78
03 BH-SED-07-6	203441	7.90	184954	10.22	175267	11.78
04 BH-SED-08-10	223285	7.90	196100	10.22	190794	11.79
05 BH-SED-08-10	286666	7.90	191919	10.22	185668	11.78
06 BH-SED-08-10	219237	7.90	192447	10.22	190615	11.79
07 DUP-2	247940	7.90	218025	10.22	217826	11.78
08 BH-SED-07-6	235586	7.90	205874	10.22	190970	11.78
09 BH-SED-08-10	232873	7.89	191139	10.22	188293	11.78
10 DUP-2	240706	7.90	203760	10.21	199529	11.77
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19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C060297
 Lab File ID (Standard): F03110C1 Date Analyzed: 03/11/09
 Instrument ID: 722 Time Analyzed: 0053

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	49458	4.42	179383	5.41	99165	6.75
UPPER LIMIT	98916	4.92	358766	5.91	198330	7.25
LOWER LIMIT	24729	3.92	89692	4.91	49583	6.25
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	56771	4.43	202506	5.41	115383	6.75
02 INTRA-LAB CH	55389	4.43	199952	5.41	109195	6.75
03 INTRA-LAB CH	61610	4.43	216099	5.41	121527	6.75
04 EQBLINER	64619	4.43	219204	5.41	122907	6.76
05 EQBSPLIT	56559	4.43	199890	5.41	113915	6.75
06						
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17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C060297
 Lab File ID (Standard): F03110C1 Date Analyzed: 03/11/09
 Instrument ID: 722 Time Analyzed: 0053

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	170407	7.89	133841	10.21	116170	11.76
UPPER LIMIT	340814	8.39	267682	10.71	232340	12.26
LOWER LIMIT	85204	7.39	66921	9.71	58085	11.26
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	190254	7.89	159388	10.21	130216	11.76
02 INTRA-LAB CH	180301	7.89	161121	10.20	130893	11.76
03 INTRA-LAB CH	203100	7.89	169854	10.21	136941	11.76
04 EQBLINER	194646	7.89	147211	10.21	122074	11.77
05 EQBSPLIT	177330	7.89	148314	10.20	125494	11.76
06						
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19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-07-6

TOTAL Metals

Lot-Sample #...: C9C060297-001

Matrix.....: SOLID

Date Sampled...: 03/05/09

Date Received...: 03/06/09

% Moisture.....: 58

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9066079						
Silver	0.30	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0029	
Arsenic	19.0	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AD
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.020	
Beryllium	1.3	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AE
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0044	
Cadmium	1.0	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AF
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011	
Chromium	68.5 J	0.24	mg/kg	SW846 6020	03/07-03/10/09	K760J1AG
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0095	
Copper	47.8	0.24	mg/kg	SW846 6020	03/07-03/10/09	K760J1AH
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.010	
Nickel	34.0	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Lead	112 J	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AK
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0041	
Antimony	0.43 J	0.24	mg/kg	SW846 6020	03/07-03/10/09	K760J1AL
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0039	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-07-6

TOTAL Metals

Lot-Sample #....: C9C060297-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	1.9	0.60	mg/kg	SW846 6020	03/07-03/10/09	K760J1AM
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.048	
Thallium	0.24	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AN
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Zinc	245 J	0.60	mg/kg	SW846 6020	03/07-03/10/09	K760J1AP
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.014	

Prep Batch #....: 9071012

Mercury	0.31	0.039	mg/kg	SW846 7471A	03/12/09	K760J1AR
		Dilution Factor: 0.5		Analysis Time...: 08:36	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0030	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

TOTAL Metals

Lot-Sample #....: C9C060297-003

Matrix.....: SOLID

Date Sampled....: 03/05/09

Date Received...: 03/06/09

% Moisture.....: 55

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #....: 9066079						
Silver	1.4	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0027
Arsenic	38.8	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AD
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.018
Beryllium	1.2	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AE
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0041
Cadmium	2.5	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AF
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.010
Chromium	327 J	0.22	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AG
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0089
Copper	424	0.22	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AH
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0095
Nickel	44.5	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0076
Lead	265 J	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AK
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0038
Antimony	1.6 J	0.22	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AL
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0037

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Maryland Environmental Service

Client Sample ID: BH-SED-08-10

TOTAL Metals

Lot-Sample #....: C9C060297-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	6.9	0.56	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AM
		Dilution Factor: 0.5		Analysis Time...: 23:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.045	
Thallium	0.45	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AN
		Dilution Factor: 0.5		Analysis Time...: 23:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0022	
Zinc	736 J	0.56	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AP
		Dilution Factor: 0.5		Analysis Time...: 23:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.013	

Prep Batch #....: 9071012

Mercury	0.26	0.037	mg/kg	SW846 7471A	03/12/09	K760Q1AR
		Dilution Factor: 0.5		Analysis Time...: 08:37	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0028	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #...: C9C060297-005

Matrix.....: SOLID

Date Sampled...: 03/05/09

Date Received...: 03/06/09

% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9066079						
Silver	0.20	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0015	
Arsenic	11.4	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AD
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.010	
Beryllium	0.62	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AE
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0023	
Cadmium	0.67	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AF
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0057	
Chromium	52.4 J	0.13	mg/kg	SW846 6020	03/07-03/10/09	K760V1AG
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0050	
Copper	43.2	0.13	mg/kg	SW846 6020	03/07-03/10/09	K760V1AH
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0053	
Nickel	19.9	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0043	
Lead	37.8 J	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AK
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0021	
Antimony	0.23 J	0.13	mg/kg	SW846 6020	03/07-03/10/09	K760V1AL
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0021	

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Maryland Environmental Service

Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #....: C9C060297-005

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Selenium	0.89	0.31	mg/kg	SW846 6020	03/07-03/10/09	K760V1AM
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.025	
Thallium	0.14	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AN
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0013	
Zinc	143 J	0.31	mg/kg	SW846 6020	03/07-03/10/09	K760V1AP
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0073	

Prep Batch #....: 9071012

Mercury	0.20	0.033	mg/kg	SW846 7471A	03/12/09	K760V1AR
		Dilution Factor: 0.8		Analysis Time...: 08:42	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0025	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C060297

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C070000-079 Prep Batch #...: 9066079						
Antimony	0.020 B	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Arsenic	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AA
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Beryllium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AC
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Cadmium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AD
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Chromium	0.056 B	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AE
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Copper	ND	0.10	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AF
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Lead	0.0086 B	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AH
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Nickel	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AG
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Selenium	ND	0.25	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AK
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Silver	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AN
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AL
		Dilution Factor: 0.5				
		Analysis Time...: 22:11		Analyst ID.....: 400149	Instrument ID...: ICP	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C060297

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	0.015 B	0.25	mg/kg	SW846 6020	03/07-03/10/09	K77LQ1AM
Dilution Factor: 0.5						
Analysis Time...: 22:11		Analyst ID.....: 400149		Instrument ID...: ICP		

MB Lot-Sample #: C9C120000-012 Prep Batch #...: 9071012

Mercury	ND	0.016	mg/kg	SW846 7471A	03/12/09	K8D0J1AA
Dilution Factor: 0.5						
Analysis Time...: 08:22		Analyst ID.....: 031043		Instrument ID...: HGH		

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C060297

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C070000-079 Prep Batch #....: 9066079					
Arsenic	91	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AP	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Beryllium	93	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AQ	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Cadmium	96	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AR	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Chromium	110	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AT	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Copper	112	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AU	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Nickel	112	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AV	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Lead	104	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AW	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Antimony	91	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AX	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Selenium	87	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1AO	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			
Thallium	96	(80 - 120)	SW846 6020	03/07-03/10/09 K77LQ1A1	
		Dilution Factor: 0.5		Analysis Time...: 22:15	Analyst ID.....: 400149
		Instrument ID...: ICPMS2			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C060297

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	97	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1A2
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
Silver	108	(80 - 120)	SW846 6020	03/07-03/10/09	K77LQ1A3
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149					
Instrument ID...: ICPMS2					
LCS Lot-Sample#: C9C120000-012 Prep Batch #....: 9071012					
Mercury	100	(80 - 120)	SW846 7471A	03/12/09	K8D0J1AC
Dilution Factor: 0.5 Analysis Time...: 08:24 Analyst ID.....: 031043					
Instrument ID...: HGHYDRA					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C060297

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C070000-079 Prep Batch #....: 9066079							
Arsenic	2.00	1.83	mg/kg	91	SW846 6020	03/07-03/10/09	K77LQ1AP
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Beryllium	2.50	2.31	mg/kg	93	SW846 6020	03/07-03/10/09	K77LQ1AQ
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Cadmium	2.50	2.39	mg/kg	96	SW846 6020	03/07-03/10/09	K77LQ1AR
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Chromium	10.0	11.0	mg/kg	110	SW846 6020	03/07-03/10/09	K77LQ1AT
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Copper	12.5	14.0	mg/kg	112	SW846 6020	03/07-03/10/09	K77LQ1AU
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Nickel	25.0	28.0	mg/kg	112	SW846 6020	03/07-03/10/09	K77LQ1AV
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Lead	1.00	1.04	mg/kg	104	SW846 6020	03/07-03/10/09	K77LQ1AW
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Antimony	25.0	22.8	mg/kg	91	SW846 6020	03/07-03/10/09	K77LQ1AX
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Selenium	0.500	0.434	mg/kg	87	SW846 6020	03/07-03/10/09	K77LQ1A0
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		
Thallium	2.50	2.40	mg/kg	96	SW846 6020	03/07-03/10/09	K77LQ1A1
					Dilution Factor: 0.5	Analysis Time...: 22:15	Analyst ID.....: 400149
					Instrument ID...: ICPMS2		

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C060297

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	25.0	24.2	mg/kg	97	SW846 6020	03/07-03/10/09	K77LQ1A2
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
Silver	2.50	2.70	mg/kg	108	SW846 6020	03/07-03/10/09	K77LQ1A3
Dilution Factor: 0.5 Analysis Time...: 22:15 Analyst ID.....: 400149							
Instrument ID...: ICPMS2							
LCS Lot-Sample#: C9C120000-012 Prep Batch #....: 9071012							
Mercury	0.208	0.208	mg/kg	100	SW846 7471A	03/12/09	K8D0J1AC
Dilution Factor: 0.5 Analysis Time...: 08:24 Analyst ID.....: 031043							
Instrument ID...: HGHYDRA							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C060297

Date Sampled...: 03/04/09

Date Received...: 03/05/09

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C050210-003 Prep Batch #...: 9066079						
Antimony	52 N	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CG
	52 N	(75 - 125) 1.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1CH
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Arsenic	101	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1A1
	82	(75 - 125) 6.2	(0-20)	SW846 6020	03/07-03/10/09	K737M1A2
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Beryllium	100	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1A3
	103	(75 - 125) 2.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1A4
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Cadmium	98	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1A5
	96	(75 - 125) 2.1	(0-20)	SW846 6020	03/07-03/10/09	K737M1A6
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Chromium	175 N	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1A7
	133 N	(75 - 125) 10	(0-20)	SW846 6020	03/07-03/10/09	K737M1A8
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Copper	120	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1A9
	87	(75 - 125) 12	(0-20)	SW846 6020	03/07-03/10/09	K737M1CA
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Lead	NC	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CE
	NC	(75 - 125)	(0-20)	SW846 6020	03/07-03/10/09	K737M1CF
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C060297

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	104	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CC
	108	(75 - 125)	2.0 (0-20)	SW846 6020	03/07-03/10/09	K737M1CD
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Selenium	71 N	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CJ
	63 N	(75 - 125)	3.7 (0-20)	SW846 6020	03/07-03/10/09	K737M1CK
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Silver	106	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CQ
	107	(75 - 125)	0.61 (0-20)	SW846 6020	03/07-03/10/09	K737M1CR
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Thallium	95	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CL
	95	(75 - 125)	0.07 (0-20)	SW846 6020	03/07-03/10/09	K737M1CM
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						
Zinc	NC	(75 - 125)		SW846 6020	03/07-03/10/09	K737M1CN
	NC	(75 - 125)	(0-20)	SW846 6020	03/07-03/10/09	K737M1CP
Dilution Factor: 0.55						
Analysis Time...: 22:36 Instrument ID...: ICPMS2 Analyst ID.....: 400149						
MS Run #.....: 9066025						

MS Lot-Sample #: C9C050210-003 Prep Batch #...: 9071012

% Moisture.....: 46

Mercury	56 N	(75 - 125)		SW846 7471A	03/12/09	K737M1CT
	84	(75 - 125)	15 (0-20)	SW846 7471A	03/12/09	K737M1CU
Dilution Factor: 0.5						
Analysis Time...: 08:29 Instrument ID...: HGHYDRA Analyst ID.....: 031043						
MS Run #.....: 9071004						

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C060297

Matrix.....: SOLID

Date Sampled....: 03/04/09

Date Received...: 03/05/09

PARAMETER	AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C050210-003 Prep Batch #....: 9066079

% Moisture.....: 46

Antimony

0.35	50.6	26.9 N	mg/kg	52		SW846 6020	03/07-03/10/09	K737M1CG
0.35	50.6	26.5 N	mg/kg	52	1.1	SW846 6020	03/07-03/10/09	K737M1CH
Dilution Factor: 0.55								
Analysis Time...: 22:36			Instrument ID...: ICPMS2			Analyst ID.....: 400149		
MS Run #.....: 9066025								

Arsenic

8.6	4.05	12.7	mg/kg	101		SW846 6020	03/07-03/10/09	K737M1A1
8.6	4.05	11.9	mg/kg	82	6.2	SW846 6020	03/07-03/10/09	K737M1A2
Dilution Factor: 0.55								
Analysis Time...: 22:36			Instrument ID...: ICPMS2			Analyst ID.....: 400149		
MS Run #.....: 9066025								

Beryllium

1.8	5.06	6.82	mg/kg	100		SW846 6020	03/07-03/10/09	K737M1A3
1.8	5.06	6.97	mg/kg	103	2.1	SW846 6020	03/07-03/10/09	K737M1A4
Dilution Factor: 0.55								
Analysis Time...: 22:36			Instrument ID...: ICPMS2			Analyst ID.....: 400149		
MS Run #.....: 9066025								

Cadmium

1.6	5.06	6.58	mg/kg	98		SW846 6020	03/07-03/10/09	K737M1A5
1.6	5.06	6.45	mg/kg	96	2.1	SW846 6020	03/07-03/10/09	K737M1A6
Dilution Factor: 0.55								
Analysis Time...: 22:36			Instrument ID...: ICPMS2			Analyst ID.....: 400149		
MS Run #.....: 9066025								

Chromium

51.6	20.3	87.0 N	mg/kg	175		SW846 6020	03/07-03/10/09	K737M1A7
51.6	20.3	78.4 N	mg/kg	133	10	SW846 6020	03/07-03/10/09	K737M1A8
Dilution Factor: 0.55								
Analysis Time...: 22:36			Instrument ID...: ICPMS2			Analyst ID.....: 400149		
MS Run #.....: 9066025								

Copper

41.3	25.3	71.6	mg/kg	120		SW846 6020	03/07-03/10/09	K737M1A9
41.3	25.3	63.3	mg/kg	87	12	SW846 6020	03/07-03/10/09	K737M1CA
Dilution Factor: 0.55								
Analysis Time...: 22:36			Instrument ID...: ICPMS2			Analyst ID.....: 400149		
MS Run #.....: 9066025								

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C060297

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Lead									
	115	2.03	129 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CE
	115	2.03	102 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CF
Dilution Factor: 0.55									
Analysis Time...: 22:36									
MS Run #.....: 9066025									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Nickel									
	44.0	50.6	96.9	mg/kg	104		SW846 6020	03/07-03/10/09	K737M1CC
	44.0	50.6	98.9	mg/kg	108	2.0	SW846 6020	03/07-03/10/09	K737M1CD
Dilution Factor: 0.55									
Analysis Time...: 22:36									
MS Run #.....: 9066025									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Selenium									
	1.4	1.01	2.12 N	mg/kg	71		SW846 6020	03/07-03/10/09	K737M1CJ
	1.4	1.01	2.04 N	mg/kg	63	3.7	SW846 6020	03/07-03/10/09	K737M1CK
Dilution Factor: 0.55									
Analysis Time...: 22:36									
MS Run #.....: 9066025									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Silver									
	0.35	5.06	5.71	mg/kg	106		SW846 6020	03/07-03/10/09	K737M1CQ
	0.35	5.06	5.75	mg/kg	107	0.61	SW846 6020	03/07-03/10/09	K737M1CR
Dilution Factor: 0.55									
Analysis Time...: 22:36									
MS Run #.....: 9066025									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Thallium									
	0.45	5.06	5.27	mg/kg	95		SW846 6020	03/07-03/10/09	K737M1CL
	0.45	5.06	5.28	mg/kg	95	0.07	SW846 6020	03/07-03/10/09	K737M1CM
Dilution Factor: 0.55									
Analysis Time...: 22:36									
MS Run #.....: 9066025									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									
Zinc									
	548	50.6	625 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CN
	548	50.6	596 NC	mg/kg			SW846 6020	03/07-03/10/09	K737M1CP
Dilution Factor: 0.55									
Analysis Time...: 22:36									
MS Run #.....: 9066025									
Instrument ID...: ICPMS2									
Analyst ID.....: 400149									

MS Lot-Sample #: C9C050210-003 Prep Batch #....: 9071012

% Moisture.....: 46

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C060297

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Mercury	0.17	0.153	0.258	N mg/kg	56		SW846 7471A	03/12/09	K737M1CT
	0.17	0.153	0.301	mg/kg	84	15	SW846 7471A	03/12/09	K737M1CU
Dilution Factor: 0.5									
Analysis Time...: 08:29									
Instrument ID...: HGHYDRA									
Analyst ID.....: 031043									
MS Run #.....: 9071004									

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C060297

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-07-6	C9C060297 001	K760J1AT	1.7	mg/kg	0.21	1.2	1	3/10/2009 - 3/10/2009 10:14	9069068
BH-SED-08-10	C9C060297 003	K760Q1AT	3.0	mg/kg	0.19	1.1	1	3/10/2009 - 3/10/2009 10:14	9069068
DUP-2	C9C060297 005	K760V1AT	ND	mg/kg	0.11	0.63	1	3/10/2009 - 3/10/2009 10:14	9069068

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Lot Number: C9C060297

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-07-6	C9C060297 001	K760J1AA	42.0	%	0.0	1.0	1	3/9/2009 - 3/10/2009 00:00	9068021
BH-SED-07-TOC	C9C060297 002	K760M1AA	84.7	%	0.0	1.0	1	3/9/2009 - 3/10/2009 00:00	9068021
BH-SED-08-10	C9C060297 003	K760Q1AA	44.9	%	0.0	1.0	1	3/9/2009 - 3/10/2009 00:00	9068021
BH-SED-08-TOC	C9C060297 004	K760R1AA	78.9	%	0.0	1.0	1	3/9/2009 - 3/10/2009 00:00	9068021
DUP-2	C9C060297 005	K760V1AA	79.8	%	0.0	1.0	1	3/9/2009 - 3/10/2009 00:00	9068021

MES Sparrows Point 18001868

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Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C060297

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-07-TOC	C9C060297 002	K760M1AC	247 B	mg/kg	73.3	319	0.54	3/11/2009 - 3/11/2009 12:14	9070101
BH-SED-08-TOC	C9C060297 004	K760R1AC	22300	mg/kg	153	665	1.05	3/11/2009 - 3/11/2009 12:24	9070101
DUP-2	C9C060297 005	K760V1AV	15300	mg/kg	306	1330	2.12	3/11/2009 - 3/11/2009 13:15	9070101

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Report ID: C9C060297
 Date/Time Received: 3/7/2009 10:30:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C100000068B	068 MB	K79AT1AA	ND	mg/kg	0.50	3/10/2009 - 3/10/2009 10:07	9069068	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: SM20 2540G
Report ID: C9C060297
Date/Time Received: 3/3/2009 5:35:00PM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	002 DUP	K708C1AH	88.9	%	1.0	3/9/2009 - 3/10/2009 00:00	9068021	2.0 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Report ID: C9C060297
 Date/Time Received: 3/6/2009 9:40:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C110000101B	101 MB	K8CCC1AA	ND	mg/kg	1250	3/11/2009 - 3/11/2009 11:44	9070101	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C050210
 Date/Time Received: 3/5/2009 9:45:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
LAB MS/MSD	MSD	K737M1CW	110 *	75 - 125	3/10/2009 - 3/10/2009 10:07	9069068	26 / 20
LAB MS/MSD	MSD	K77HF1CR	106	75 - 125	3/10/2009 - 3/10/2009 10:18	9069068	0.11 / 20
CHECK SAMPLE	LCS	K79AT1AC	111	41 - 159	3/10/2009 - 3/10/2009 10:06	9069068	
LAB MS/MSD	MS	K737M1CV	81	75 - 125	3/10/2009 - 3/10/2009 10:07	9069068	26 / 20
LAB MS/MSD	MS	K77HF1CQ	106	75 - 125	3/10/2009 - 3/10/2009 10:18	9069068	0.11 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C110000
 Date/Time Received: 3/6/2009 9:40:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K8CCC1AC	101	75 - 125	3/11/2009 - 3/11/2009 11:54	9070101	3.5 / 20
DUPLICATE CHECK	LCSD	K8CCC1AD	97	75 - 125	3/11/2009 - 3/11/2009 12:04	9070101	3.5 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)

USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C060297

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-07-6	C9C060297-001	Soil
2	BH-SED-08-10	C9C060297-003	Soil
3	DUP-2	C9C060297-005	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
Reference	Cyanide	Ok/110%/Ok	K	All samples

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-08-10 mg/kg	DUP-2 mg/kg	RPD	Qualifier
TOC	22300	15300	37%	None
Cyanide	3.0	0.63 U	NC	None

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

MES Sparrows Point 18001868

Cyanide, Total

1-3

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C060297

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-07-6	C9C060297 001	K760J1AT	1.7	K mg/kg	0.21	1.2	1	3/10/2009 - 3/10/2009 10:14	9069068
BH-SED-08-10	C9C060297 003	K760Q1AT	3.0	K mg/kg	0.19	1.1	1	3/10/2009 - 3/10/2009 10:14	9069068
DUP-2	C9C060297 005	K760V1AT	ND	K mg/kg	0.11	0.63	1	3/10/2009 - 3/10/2009 10:14	9069068

MES Sparrows Point 18001868

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TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: EPA Lloyd Kahn
Lot Number: C9C060297

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-07-TOC	C9C060297 002	K760M1AC	247	mg/kg	73.3	319	0.54	3/11/2009 - 3/11/2009 12:14	9070101
BH-SED-08-TOC	C9C060297 004	K760R1AC	22300	mg/kg	153	665	1.05	3/11/2009 - 3/11/2009 12:24	9070101
DUP-2	C9C060297 005	K760V1AV	15300	mg/kg	306	1330	2.12	3/11/2009 - 3/11/2009 13:15	9070101

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C060297

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-07-6	C9C060297-001	Soil
2	BH-SED-08-10	C9C060297-003	Soil
3	DUP-2	C9C060297-005	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
Reference	Antimony	52%/52%/Ok	L/UL	All samples
	Chromium	175%/133%/Ok	K	
	Selenium	71%/63%/Ok	L/UL	
	Mercury	56%/Ok/OK	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution samples were not included in this data package.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-08-10 mg/kg	DUP-2 mg/kg	RPD	Qualifier
Silver	1.4	0.20	150%	None
Arsenic	38.8	11.4	109%	None
Beryllium	1.2	0.62	64%	None
Cadmium	2.5	0.67	115%	None
Chromium	327	52.4	145%	None
Copper	424	43.2	163%	None
Nickel	44.5	19.9	76%	None
Lead	265	37.8	150%	None
Antimony	1.6	0.23	150%	None
Selenium	6.9	0.89	154%	None
Thallium	0.45	0.14	105%	None
Zinc	736	143	135%	None
Mercury	0.26	0.20	26%	None

Compound Quantitation - No discrepancies were not identified.

Maryland Environmental Service

Client Sample ID: BH-SED-07-6

TOTAL Metals

Lot-Sample #....: C9C060297-001

Matrix.....: SOLID

Date Sampled....: 03/05/09

Date Received...: 03/06/09

% Moisture.....: 58

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9066079						
Silver	0.30	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0029	
Arsenic	19.0	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AD
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.020	
Beryllium	1.3	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AE
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0044	
Cadmium	1.0	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AF
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.011	
Chromium	68.5 <i>JK</i>	0.24	mg/kg	SW846 6020	03/07-03/10/09	K760J1AG
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0095	
Copper	47.8	0.24	mg/kg	SW846 6020	03/07-03/10/09	K760J1AH
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.010	
Nickel	34.0	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0081	
Lead	112 <i>J</i>	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AK
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0041	
Antimony	0.43 <i>JL</i>	0.24	mg/kg	SW846 6020	03/07-03/10/09	K760J1AL
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0039	

(Continued on next page)

Lee
5/2/09

Maryland Environmental Service

Client Sample ID: BH-SED-07-6

TOTAL Metals

Lot-Sample #...: C9C060297-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	1.9 L	0.60	mg/kg	SW846 6020	03/07-03/10/09	K760J1AM
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.048	
Thallium	0.24	0.12	mg/kg	SW846 6020	03/07-03/10/09	K760J1AN
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0024	
Zinc	245 J	0.60	mg/kg	SW846 6020	03/07-03/10/09	K760J1AP
		Dilution Factor: 0.5		Analysis Time...: 23:12	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.014	
Prep Batch #...: 9071012						
Mercury	0.31 L	0.039	mg/kg	SW846 7471A	03/12/09	K760J1AR
		Dilution Factor: 0.5		Analysis Time...: 08:36	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0030	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

Just
5/26/09

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

TOTAL Metals

Lot-Sample #....: C9C060297-003

Matrix.....: SOLID

Date Sampled....: 03/05/09

Date Received...: 03/06/09

% Moisture.....: 55

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9066079						
Silver	1.4	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0027
Arsenic	38.8	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AD
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.018
Beryllium	1.2	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AE
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0041
Cadmium	2.5	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AF
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.010
Chromium	327 J K	0.22	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AG
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0089
Copper	424	0.22	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AH
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0095
Nickel	44.5	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0076
Lead	265 J	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AK
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0038
Antimony	1.6 J L	0.22	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AL
		Dilution Factor: 0.5		Analysis Time...: 23:16		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0037

(Continued on next page)

2

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

TOTAL Metals

Lot-Sample #....: C9C060297-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	6.9 L	0.56	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AM
		Dilution Factor: 0.5		Analysis Time...: 23:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.045	
Thallium	0.45	0.11	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AN
		Dilution Factor: 0.5		Analysis Time...: 23:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0022	
Zinc	736 J	0.56	mg/kg	SW846 6020	03/07-03/10/09	K760Q1AP
		Dilution Factor: 0.5		Analysis Time...: 23:16	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.013	
Prep Batch #....: 9071012						
Mercury	0.26 L	0.037	mg/kg	SW846 7471A	03/12/09	K760Q1AR
		Dilution Factor: 0.5		Analysis Time...: 08:37	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0028	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

5/26/09

Maryland Environmental Service

3

Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #....: C9C060297-005

Matrix.....: SOLID

Date Sampled....: 03/05/09

Date Received...: 03/06/09

% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9066079						
Silver	0.20	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AQ
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0015
Arsenic	11.4	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AD
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.010
Beryllium	0.62	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AE
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0023
Cadmium	0.67	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AF
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0057
Chromium	52.4 <i>PK</i>	0.13	mg/kg	SW846 6020	03/07-03/10/09	K760V1AG
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0050
Copper	43.2	0.13	mg/kg	SW846 6020	03/07-03/10/09	K760V1AH
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0053
Nickel	19.9	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AJ
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0043
Lead	37.8 <i>P</i>	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AK
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0021
Antimony	0.23 <i>PL</i>	0.13	mg/kg	SW846 6020	03/07-03/10/09	K760V1AL
		Dilution Factor: 0.5		Analysis Time...: 23:21		Analyst ID.....: 400149
		Instrument ID...: ICPMS2		MS Run #.....: 9066025		MDL.....: 0.0021

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WJ
5/26/09

Maryland Environmental Service

Client Sample ID: DUP-2

TOTAL Metals

Lot-Sample #...: C9C060297-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	0.89 L	0.31	mg/kg	SW846 6020	03/07-03/10/09	K760V1AM
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.025	
Thallium	0.14	0.063	mg/kg	SW846 6020	03/07-03/10/09	K760V1AN
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0013	
Zinc	143 J	0.31	mg/kg	SW846 6020	03/07-03/10/09	K760V1AP
		Dilution Factor: 0.5		Analysis Time...: 23:21	Analyst ID.....: 400149	
		Instrument ID...: ICPMS2		MS Run #.....: 9066025	MDL.....: 0.0073	
Prep Batch #...: 9071012						
Mercury	0.20 L	0.033	mg/kg	SW846 7471A	03/12/09	K760V1AR
		Dilution Factor: 0.8		Analysis Time...: 08:42	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0025	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

POLYNUCLEAR AROMATIC HYDRCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C060297

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-07-6	C9C060297-001	Soil
1DL	BH-SED-07-6DL	C9C060297-001DL	Soil
2	BH-SED-08-10	C9C060297-003	Soil
2MS	BH-SED-08-10MS	C9C060297-003MS	Soil
2MSD	BH-SED-08-10MSD	C9C060297-003MSD	Soil
2DL	BH-SED-08-10DL	C9C060297-003DL	Soil
3	DUP-2	C9C060297-005	Soil
3DL	DUP-2DL	C9C060297-005DL	Soil
4	EQBLINER	C9C060297-006	Water
5	EQBSPLIT	C9C060297-007	Water

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 7 days for water samples, 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values except the following.

MS/MSD Sample ID	Compound	MS/MSD %R/RPD	Qualifier
2	Naphthalene	0%/484%/0	None - 4X Rule

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks exhibited the following contamination.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
MBLK	Phenanthrene	0.10	0.50	B	4, 5

Field, Equipment Blank - Field QC results are summarized below.

Blank ID	Compound	Conc. ug/L	Action Level ug/kg	Qualifier	Affected Samples
EQBLINER	Naphthalene	0.090	15	None	All >5X
EQBSPLIT	Naphthalene	0.10	16.67	None	All >5X

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-08-10 ug/kg	DUP-2 ug/kg	RPD	Qualifier
1-Methylnaphthalene	72	44	48%	None
2-Methylnaphthalene	200	120	50%	None
Naphthalene	17000	11000	43%	None
Acenaphthylene	180	51	112%	None
Acenaphthene	39	20	64%	None
Fluorene	58	36	47%	None
Phenanthrene	270	110	84%	None
Anthracene	230	64	113%	None
Fluoranthene	1700	490	111%	None
Pyrene	1200	330	114%	None
Benzo (a) anthracene	1200	270	127%	None
Chrysene	1100	220	133%	None
Benzo (b) fluoranthene	1400	330	124%	None
Benzo (k) fluoranthene	590	120	132%	None
Benzo (a) pyrene	1400	290	131%	None
Indeno (1,2,3-cd) pyrene	790	180	126%	None

Dibenzo (a,h) anthracene	210	50	123%	None
Benzo (g,h,i) perylene	900	210	124%	None

Compound Quantitation - Several samples exhibited high concentrations of naphthalene and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for naphthalene should be used for reporting.

Maryland Environmental Service

Client Sample ID: BH-SKD-07-6

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-001 Work Order #....: K760J1AC Matrix.....: SOLID
 Date Sampled....: 03/05/09 10:25 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #....: 9068010 Analysis Time...: 02:26
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	150	40	ug/kg	6.0
2-Methylnaphthalene	320	40	ug/kg	7.8
Naphthalene	9800 8200 E	40	ug/kg	5.8
Acenaphthylene	160	40	ug/kg	7.9
Acenaphthene	210	40	ug/kg	6.4
Fluorene	180	40	ug/kg	6.0
Phenanthrene	610	40	ug/kg	4.7
Anthracene	320	200	ug/kg	7.0
Fluoranthene	1800	40	ug/kg	3.4
Pyrene	1200	40	ug/kg	11
Benzo (a) anthracene	920	40	ug/kg	6.3
Chrysene	780	40	ug/kg	6.9
Benzo (b) fluoranthene	1100	40	ug/kg	8.0
Benzo (k) fluoranthene	460	40	ug/kg	8.3
Benzo (a) pyrene	980	40	ug/kg	11
Indeno (1,2,3-cd) pyrene	580	40	ug/kg	2.2
Dibenzo (a,h) anthracene	180	40	ug/kg	8.7
Benzo (ghi) perylene	620	40	ug/kg	2.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(27 - 110)
Terphenyl-d14	63	(21 - 130)
2-Fluorobiphenyl	66	(28 - 108)
2-Fluorophenol	58	(28 - 107)
Phenol-d5	53	(30 - 112)
2,4,6-Tribromophenol	75	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

Maryland Environmental Service

Client Sample ID: BH-SKD-07-6

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-001 Work Order #....: K760J2AC Matrix.....: SOLID
 Date Sampled....: 03/05/09 10:25 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #....: 9068010 Analysis Time...: 04:17
 Dilution Factor: 5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 58 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

Use original

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	190	80	ug/kg	12
2-Methylnaphthalene	370	80	ug/kg	16
Naphthalene	9800	80	ug/kg	12
Acenaphthylene	160	80	ug/kg	16
Acenaphthene	210	80	ug/kg	13
Fluorene	180	80	ug/kg	12
Phenanthrene	630	80	ug/kg	9.5
Anthracene	320 J	390	ug/kg	14
Fluoranthene	1700	80	ug/kg	6.7
Pyrene	1200	80	ug/kg	21
Benzo (a) anthracene	950	80	ug/kg	13
Chrysene	760	80	ug/kg	14
Benzo (b) fluoranthene	1100	80	ug/kg	16
Benzo (k) fluoranthene	450	80	ug/kg	17
Benzo (a) pyrene	1000	80	ug/kg	22
Indeno (1,2,3-cd) pyrene	610	80	ug/kg	4.4
Dibenzo (a, h) anthracene	180	80	ug/kg	17
Benzo (ghi) perylene	650	80	ug/kg	5.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(27 - 110)
Terphenyl-d14	64	(21 - 130)
2-Fluorobiphenyl	65	(28 - 108)
2-Fluorophenol	68	(28 - 107)
Phenol-d5	60	(30 - 112)
2,4,6-Tribromophenol	61	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

EW
5/2/09

2

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-003 Work Order #....: K760Q1AC Matrix.....: SOLID
 Date Sampled....: 03/05/09 13:00 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #....: 9068010 Analysis Time...: 02:48
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 55 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	72	37	ug/kg	5.6
2-Methylnaphthalene	200	37	ug/kg	7.3
Naphthalene	17000 12000 E	37	ug/kg	5.4
Acenaphthylene	180	37	ug/kg	7.4
Acenaphthene	39	37	ug/kg	6.0
Fluorene	58	37	ug/kg	5.6
Phenanthrene	270	37	ug/kg	4.4
Anthracene	230	180	ug/kg	6.5
Fluoranthene	1700	37	ug/kg	3.1
Pyrene	1200	37	ug/kg	9.9
Benzo (a) anthracene	1200	37	ug/kg	5.9
Chrysene	1100	37	ug/kg	6.5
Benzo (b) fluoranthene	1400	37	ug/kg	7.5
Benzo (k) fluoranthene	590	37	ug/kg	7.7
Benzo (a) pyrene	1400	37	ug/kg	10
Indeno (1,2,3-cd) pyrene	790	37	ug/kg	2.0
Dibenzo (a,h) anthracene	210	37	ug/kg	8.2
Benzo (ghi) perylene	900	37	ug/kg	2.7

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(27 - 110)
Terphenyl-d14	68	(21 - 130)
2-Fluorobiphenyl	66	(28 - 108)
2-Fluorophenol	56	(28 - 107)
Phenol-d5	56	(30 - 112)
2,4,6-Tribromophenol	78	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

100
5/26/09

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-003 Work Order #....: K760Q2AC Matrix.....: SOLID
Date Sampled....: 03/05/09 13:00 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
Prep Batch #....: 9068010 Analysis Time...: 04:39
Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
% Moisture.....: 55 Analyst ID.....: 007062 Instrument ID...: 722
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	88 J	150	ug/kg	22
2-Methylnaphthalene	240	150	ug/kg	29
Naphthalene	17000	150	ug/kg	22
Acenaphthylene	200	150	ug/kg	30
Acenaphthene	53 J	150	ug/kg	24
Fluorene	ND	150	ug/kg	22
Phenanthrene	310	150	ug/kg	18
Anthracene	250 J	740	ug/kg	26
Fluoranthene	1800	150	ug/kg	13
Pyrene	1300	150	ug/kg	39
Benzo (a) anthracene	1300	150	ug/kg	24
Chrysene	1200	150	ug/kg	26
Benzo (b) fluoranthene	1600	150	ug/kg	30
Benzo (k) fluoranthene	570	150	ug/kg	31
Benzo (a) pyrene	1400	150	ug/kg	42
Indeno (1,2,3-cd) pyrene	870	150	ug/kg	8.2
Dibenzo (a,h) anthracene	240	150	ug/kg	33
Benzo (ghi) perylene	940	150	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

use original

Maryland Environmental Service

Client Sample ID: DUP-2

GC/MS Semivolatiles

Lot-Sample #...: C9C060297-005 Work Order #...: K760V1AC Matrix.....: SOLID
 Date Sampled...: 03/05/09 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
 Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
 Prep Batch #...: 9068010 Analysis Time...: 03:55
 Dilution Factor: 2.5 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 20 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	44	21	ug/kg	3.2
2-Methylnaphthalene	120	21	ug/kg	4.1
Naphthalene	1100 7900 E	21	ug/kg	3.0
Acenaphthylene	51	21	ug/kg	4.2
Acenaphthene	20 J	21	ug/kg	3.4
Fluorene	36	21	ug/kg	3.2
Phenanthrene	110	21	ug/kg	2.5
Anthracene	64 J	100	ug/kg	3.7
Fluoranthene	490	21	ug/kg	1.8
Pyrene	330	21	ug/kg	5.6
Benzo (a) anthracene	270	21	ug/kg	3.3
Chrysene	220	21	ug/kg	3.7
Benzo (b) fluoranthene	330	21	ug/kg	4.2
Benzo (k) fluoranthene	120	21	ug/kg	4.4
Benzo (a) pyrene	290	21	ug/kg	5.8
Indeno (1,2,3-cd) pyrene	180	21	ug/kg	1.1
Dibenzo (a,h) anthracene	50	21	ug/kg	4.6
Benzo (ghi) perylene	210	21	ug/kg	1.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	46	(27 - 110)
Terphenyl-d14	58	(21 - 130)
2-Fluorobiphenyl	58	(28 - 108)
2-Fluorophenol	59	(28 - 107)
Phenol-d5	56	(30 - 112)
2,4,6-Tribromophenol	66	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

E Estimated result. Result concentration exceeds the calibration range.

J Estimated result. Result is less than RL.

less
5/26/09
55

Maryland Environmental Service

3DL

Client Sample ID: DUP-2

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-005 Work Order #....: K760V2AC Matrix.....: SOLID
Date Sampled....: 03/05/09 Date Received...: 03/06/09 09:40 MS Run #.....: 9068002
Prep Date.....: 03/09/09 Analysis Date...: 03/10/09
Prep Batch #....: 9068010 Analysis Time...: 05:01
Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
% Moisture.....: 20 Analyst ID.....: 007062 Instrument ID...: 722
Method.....: SW846 8270C

Use original

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	41 J	84	ug/kg	13
2-Methylnaphthalene	110	84	ug/kg	16
Naphthalene	11000	84	ug/kg	12
Acenaphthylene	50 J	84	ug/kg	17
Acenaphthene	ND	84	ug/kg	13
Fluorene	34 J	84	ug/kg	13
Phenanthrene	110	84	ug/kg	10
Anthracene	69 J	410	ug/kg	15
Fluoranthene	500	84	ug/kg	7.1
Pyrene	340	84	ug/kg	22
Benzo (a) anthracene	270	84	ug/kg	13
Chrysene	220	84	ug/kg	15
Benzo (b) fluoranthene	360	84	ug/kg	17
Benzo (k) fluoranthene	110	84	ug/kg	17
Benzo (a) pyrene	290	84	ug/kg	23
Indeno (1,2,3-cd) pyrene	180	84	ug/kg	4.6
Dibenzo (a,h) anthracene	ND	84	ug/kg	18
Benzo (ghi) perylene	240	84	ug/kg	6.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: EQBLINER

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-006 Work Order #....: K76041AC Matrix.....: WATER
 Date Sampled....: 03/05/09 07:50 Date Received...: 03/06/09 09:40 MS Run #.....:
 Prep Date.....: 03/09/09 Analysis Date...: 03/11/09
 Prep Batch #....: 9068068 Analysis Time...: 05:27
 Dilution Factor: 0.94 Initial Wgt/Vol: 1060 mL Final Wgt/Vol...: 1 mL
 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.016
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	0.090 J	0.19	ug/L	0.026
Acenaphthylene	ND	0.19	ug/L	0.0080
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0093
Phenanthrene	0.073 J, B	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0081
Fluoranthene	ND	0.19	ug/L	0.0094
Pyrene	ND	0.19	ug/L	0.010
Benzo (a) anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo (b) fluoranthene	ND	0.19	ug/L	0.015
Benzo (k) fluoranthene	ND	0.19	ug/L	0.015
Benzo (a) pyrene	ND	0.19	ug/L	0.011
Indeno (1,2,3-cd) pyrene	ND	0.19	ug/L	0.015
Dibenzo (a,h) anthracene	ND	0.19	ug/L	0.012
Benzo (ghi) perylene	ND	0.19	ug/L	0.0081

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	72	(23 - 112)
Terphenyl-d14	96	(10 - 132)
2-Fluorobiphenyl	81	(19 - 107)
2-Fluorophenol	68	(10 - 111)
Phenol-d5	63	(15 - 112)
2,4,6-Tribromophenol	86	(16 - 122)

NOTE(S) :

J Estimated result. Result is less than RL.

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

Maryland Environmental Service

Client Sample ID: EQBSPLIT

GC/MS Semivolatiles

Lot-Sample #....: C9C060297-007 Work Order #....: K76051AC Matrix.....: WATER
 Date Sampled....: 03/05/09 08:05 Date Received...: 03/06/09 09:40 MS Run #.....:
 Prep Date.....: 03/09/09 Analysis Date...: 03/11/09
 Prep Batch #....: 9068068 Analysis Time...: 05:50
 Dilution Factor: 0.94 Initial Wgt/Vol: 1060 mL Final Wgt/Vol...: 1 mL
 Analyst ID.....: 007062 Instrument ID...: 722
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.016
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	0.10 J	0.19	ug/L	0.026
Acenaphthylene	ND	0.19	ug/L	0.0080
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0093
Phenanthrene	0.086 J, B	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0081
Fluoranthene	ND	0.19	ug/L	0.0094
Pyrene	ND	0.19	ug/L	0.010
Benzo(a)anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo(b)fluoranthene	ND	0.19	ug/L	0.015
Benzo(k)fluoranthene	ND	0.19	ug/L	0.015
Benzo(a)pyrene	ND	0.19	ug/L	0.011
Indeno(1,2,3-cd)pyrene	ND	0.19	ug/L	0.015
Dibenzo(a,h)anthracene	ND	0.19	ug/L	0.012
Benzo(ghi)perylene	ND	0.19	ug/L	0.0081

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64	(23 - 112)
Terphenyl-d14	83	(10 - 132)
2-Fluorobiphenyl	70	(19 - 107)
2-Fluorophenol	65	(10 - 111)
Phenol-d5	61	(15 - 112)
2,4,6-Tribromophenol	77	(16 - 122)

NOTE(S):

J Estimated result. Result is less than RL.

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

5/2/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C060297

Client: Maryland Environmental Service, Millersville, MD Date: May 2, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-07-6	C9C060297-001	Soil
2	BH-SED-08-10	C9C060297-003	Soil
3	DUP-2	C9C060297-005	Soil
4	EQBLINER	C9C060297-006	Water
5	EQBSPLIT	C9C060297-007	Water

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for preserved water and soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
12/08/08	Acrolein	0.022 RRF	L/R	4, 5
01/06/09	Acrolein	0.043 RRF	L/R	1-3

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
03/09/09	Acrolein	0.044 RRF	None	See ICAL
03/11/09	Acrolein	0.033 RRF	None	See ICAL
	2-Chloroethyl vinyl ether	55.2%	J/UJ	4, 5

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC results are summarized below.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
EQBLINER	None - ND	-	-	-	-
EQBSPLIT	None - ND	-	-	-	-

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-08-10 ug/kg	DUP-2 ug/kg	RPD	Qualifier
None	ND	ND	-	-

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SKD-07-6

GC/MS Volatiles

Lot-Sample #....: C9C060297-001 Work Order #....: K760J1AU Matrix.....: SOLID
 Date Sampled....: 03/05/09 Date Received...: 03/06/09 MS Run #.....: 9071074
 Prep Date.....: 03/12/09 Analysis Date...: 03/12/09
 Prep Batch #....: 9071060 Analysis Time...: 09:44
 Dilution Factor: 0.89 Initial Wgt/Vol: 5.63 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 58 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.94
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.95
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.6
Chloroform	ND	11	ug/kg	1.2
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.4
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.4
Toluene	ND	11	ug/kg	1.5
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	1.9
Vinyl chloride	ND	11	ug/kg	1.0

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Maryland Environmental Service

Client Sample ID: BH-SED-07-6

GC/MS Volatiles

Lot-Sample #...: C9C060297-001 Work Order #...: K760J1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	102	(52 - 124)
Toluene-d8	92	(72 - 127)
4-Bromofluorobenzene	111	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

low
5/2/09

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Volatiles

Lot-Sample #....: C9C060297-003	Work Order #....: K760Q1AU	Matrix.....: SOLID
Date Sampled....: 03/05/09	Date Received...: 03/06/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #....: 9068066	Analysis Time...: 14:04	
Dilution Factor: 1.02	Initial Wgt/Vol: 4.88 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 55	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	230	ug/kg	16
Acrylonitrile	ND	230	ug/kg	24
Benzene	ND	11	ug/kg	1.5
Bromodichloromethane	ND	11	ug/kg	1.3
Bromoform	ND	11	ug/kg	1.0
Bromomethane	ND	11	ug/kg	1.7
2-Butanone (MEK)	ND	11	ug/kg	2.0
Carbon tetrachloride	ND	11	ug/kg	1.0
Chloroethane	ND	11	ug/kg	3.5
2-Chloroethyl vinyl ether	ND	23	ug/kg	1.8
Chloroform	ND	11	ug/kg	1.3
Chloromethane	ND	11	ug/kg	1.9
Dibromochloromethane	ND	11	ug/kg	1.6
1,2-Dichlorobenzene	ND	11	ug/kg	1.8
1,3-Dichlorobenzene	ND	11	ug/kg	1.5
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.4
Dichlorodifluoromethane	ND	11	ug/kg	1.5
1,1-Dichloroethane	ND	11	ug/kg	1.3
1,2-Dichloroethane	ND	11	ug/kg	1.4
1,1-Dichloroethene	ND	11	ug/kg	1.9
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.5
trans-1,3-Dichloropropene	ND	11	ug/kg	1.4
Ethylbenzene	ND	11	ug/kg	1.5
Methylene chloride	ND	11	ug/kg	1.5
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.6
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.7
1,1,1-Trichloroethane	ND	11	ug/kg	1.1
1,1,2-Trichloroethane	ND	11	ug/kg	1.9
Trichloroethene	ND	11	ug/kg	1.5
Trichlorofluoromethane	ND	11	ug/kg	2.1
Vinyl chloride	ND	11	ug/kg	1.1

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2

Maryland Environmental Service

Client Sample ID: BH-SED-08-10

GC/MS Volatiles

Lot-Sample #....: C9C060297-003 Work Order #....: K760Q1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	112	(63 - 120)
Dibromofluoromethane	93	(68 - 121)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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5/26/09

Maryland Environmental Service

Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #....: C9C060297-005	Work Order #....: K760V1AU	Matrix.....: SOLID
Date Sampled....: 03/05/09	Date Received...: 03/06/09	MS Run #.....: 9068106
Prep Date.....: 03/09/09	Analysis Date...: 03/09/09	
Prep Batch #....: 9068066	Analysis Time...: 14:28	
Dilution Factor: 0.97	Initial Wgt/Vol: 5.13 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 20	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	120	ug/kg	8.6
Acrylonitrile	ND	120	ug/kg	13
Benzene	ND	6.1	ug/kg	0.82
Bromodichloromethane	ND	6.1	ug/kg	0.68
Bromoform	ND	6.1	ug/kg	0.54
Bromomethane	ND	6.1	ug/kg	0.90
2-Butanone (MEK)	ND	6.1	ug/kg	1.1
Carbon tetrachloride	ND	6.1	ug/kg	0.54
Chloroethane	ND	6.1	ug/kg	1.9
2-Chloroethyl vinyl ether	ND	12	ug/kg	0.94
Chloroform	ND	6.1	ug/kg	0.71
Chloromethane	ND	6.1	ug/kg	1.0
Dibromochloromethane	ND	6.1	ug/kg	0.86
1,2-Dichlorobenzene	ND	6.1	ug/kg	0.97
1,3-Dichlorobenzene	ND	6.1	ug/kg	0.80
1,4-Dichlorobenzene	ND	6.1	ug/kg	0.77
trans-1,2-Dichloroethene	ND	6.1	ug/kg	0.72
Dichlorodifluoromethane	ND	6.1	ug/kg	0.81
1,1-Dichloroethane	ND	6.1	ug/kg	0.70
1,2-Dichloroethane	ND	6.1	ug/kg	0.75
1,1-Dichloroethene	ND	6.1	ug/kg	1.0
1,2-Dichloropropane	ND	6.1	ug/kg	0.66
cis-1,3-Dichloropropene	ND	6.1	ug/kg	0.82
trans-1,3-Dichloropropene	ND	6.1	ug/kg	0.73
Ethylbenzene	ND	6.1	ug/kg	0.78
Methylene chloride	ND	6.1	ug/kg	0.82
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg	0.87
Tetrachloroethene	ND	6.1	ug/kg	0.83
Toluene	ND	6.1	ug/kg	0.89
1,1,1-Trichloroethane	ND	6.1	ug/kg	0.59
1,1,2-Trichloroethane	ND	6.1	ug/kg	1.0
Trichloroethene	ND	6.1	ug/kg	0.80
Trichlorofluoromethane	ND	6.1	ug/kg	1.1
Vinyl chloride	ND	6.1	ug/kg	0.57

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3

Maryland Environmental Service

Client Sample ID: DUP-2

GC/MS Volatiles

Lot-Sample #....: C9C060297-005 Work Order #....: K760V1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	85	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	90	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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5/2/09

Maryland Environmental Service

Client Sample ID: EQBLINER

GC/MS Volatiles

Lot-Sample #....: C9C060297-006 Work Order #....: K76041AA Matrix.....: WATER
 Date Sampled....: 03/05/09 Date Received...: 03/06/09 MS Run #.....: 9070123
 Prep Date.....: 03/11/09 Analysis Date...: 03/11/09
 Prep Batch #....: 9070225 Analysis Time...: 13:14
 Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol...: 5 mL
 Analyst ID.....: 034635 Instrument ID...: HP7
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND u	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

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Maryland Environmental Service

Client Sample ID: EQBLINER

GC/MS Volatiles

Lot-Sample #...: C9C060297-006 Work Order #...: K76041AA Matrix.....: WATER

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	87	(62 - 123)
Toluene-d8	103	(80 - 120)
4-Bromofluorobenzene	93	(75 - 120)
Dibromofluoromethane	90	(80 - 120)

HW
5/2/09

Maryland Environmental Service

Client Sample ID: EQBSPLIT

GC/MS Volatiles

Lot-Sample #....: C9C060297-007 Work Order #....: K76051AA Matrix.....: WATER
 Date Sampled....: 03/05/09 Date Received...: 03/06/09 MS Run #.....: 9070123
 Prep Date.....: 03/11/09 Analysis Date...: 03/11/09
 Prep Batch #....: 9070225 Analysis Time...: 13:39
 Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol...: 5 mL
 Analyst ID.....: 034635 Instrument ID...: HP7
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND u J	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

(Continued on next page)

QW
5/26/09

5

Maryland Environmental Service

Client Sample ID: EQBSPLIT

GC/MS Volatiles

Lot-Sample #...: C9C060297-007 Work Order #...: K76051AA

Matrix.....: WATER

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	83	(62 - 123)
Toluene-d8	103	(80 - 120)
4-Bromofluorobenzene	90	(75 - 120)
Dibromofluoromethane	86	(80 - 120)

low
5/2/09

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9C100191

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 25, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\denubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE

EA Engineering

Sparrows Point

LOT # C9C100191

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 10, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in calibration verification standard 1C30312; but were within expected performance range for these compounds: 1,2,3-trichloropropane 25.3%, 1,2-dibromo-3-chloropropane 36.7%, acetone 27.1%, acrolein 49.4%, bromochloromethane 30.4%, and methyl acetate 36.8%.

GC/MS Semivolatiles:

Due to the concentration of target compounds detected, sample BH-SED-03E-2 was analyzed at a dilution.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

Metals:

The serial dilution of sample BH-SED-03E-2 was outside of the percent difference control limits for arsenic, cadmium, copper, selenium, and zinc. The results were flagged with an "E" qualifier.

CASE NARRATIVE

**EA Engineering
Sparrows Point**

LOT # C9C100191

Metals (cont):

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

The method blank had chromium and zinc detected above the reporting limit. The associated sample had chromium and zinc detected at a concentration that was greater than 10X the concentrations detected in the method blank. All data was reported.

For the matrix spike and matrix spike duplicate, arsenic, chromium, lead, selenium, and zinc recoveries were not calculated due to the concentration of analyte in the sample being >4 times the concentration of spike added.

The matrix spike recovered outside of the control limits for cadmium.

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

General Chemistry:

The sample was analyzed at a dilution for TOC.

METHODS SUMMARY

C9C100191

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9C100191

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K795D	001	BH-SED-03E-2	03/09/09	10:30
K795K	002	BH-SED-03E-TOC	03/09/09	10:35

NOTE (S) :

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

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA Engineering Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 3/10/09

Coolers Opened and Unpacked on: 3/10/09 By: PLF

(Signature)

TestAmerica Pittsburgh Lot Number: C9400191

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

UP: Unpreserved

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

Comments:

Lot Number**[illegible]

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

Sodium Hydroxide

232

500

FedEx *US Airbill*
ExpressFedEx
Tracking
Number

8565 6932 6786

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.Date 3/9/09

FedEx Tracking Number

856569326786

0212-0722-5

Sender's
NameTODD WARD

Phone

410 746-1250

Company

E A ENGINEERING SCIENCE & TECH

Address

15 LOVETON CIR

Dept./Floor/Suite/Room

City

SPARKS GLENCOE

State

MD

ZIP

21152**2 Your Internal Billing Reference**1453406.0002.0007A**3 To**Recipient's
NameSAMPLE MANAGEMENT

Phone

412 963-2428

Company

TEST AMERICA - PITTSBURGHRecipient's
Address301 ALPHA DRIVE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

RIDG PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City

PITTSBURGH

State

PA

ZIP

15238

0326961324



8565 6932 6786

Recipient's Copy**4a Express Package Service**

Packages up to 150 lbs.

☒ **FedEx Priority Overnight**

Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx Standard Overnight**

Next business afternoon.* Saturday Delivery NOT available.

☐ **FedEx First Overnight**

Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

☐ **FedEx 2Day**

Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx Express Saver**

Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service

Packages over 150 lbs.

☐ **FedEx 1Day Freight***

Next business day.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx 2Day Freight**

Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx 3Day Freight**

Third business day.* Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging☐ **FedEx Envelope***☐ **FedEx Pak***

Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.

☐ **FedEx Box**☐ **FedEx Tube**☒ **Other**

* Declared value with \$500.

6 Special Handling

Include FedEx address in Section 3.

☐ **SATURDAY Delivery**

Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☐ **HOLD Weekday**

at FedEx Location. Not available for FedEx First Overnight.

☐ **HOLD Saturday**

at FedEx Location. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods?

One box must be checked.

☒ **No**☐ **Yes**

As per attached Shipper's Declaration.

☐ **Yes**

Shipper's Declaration not required.

☐ **Dry Ice**

Dry Ice, 9, UN 1845

x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ **Cargo Aircraft Only****7 Payment Bill to:**

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip. Acct. No.

☒ **Sender**

Acct. No. in Section 1 will be billed.

☐ **Recipient**☐ **Third Party**☐ **Credit Card**☐ **Cash/Check**

Total Packages

Total Weight

Total Charges

Credit Card Auth.

*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ **No Signature Required**

Package may be left without obtaining a signature for delivery.

☐ **Direct Signature**

Anyone at recipient's address may sign for delivery. Fee applies.

☐ **Indirect Signature**

If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

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Rev. Date 8/05-Part #158278-©1994-2005 FedEx-PRINTED IN U.S.A.-SRS

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

GC/MS Volatiles

Lot-Sample #....: C9C100191-001	Work Order #....: K795D1AU	Matrix.....: SOLID
Date Sampled....: 03/09/09	Date Received...: 03/10/09	MS Run #.....: 9071074
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071060	Analysis Time...: 10:32	
Dilution Factor: 1.04	Initial Wgt/Vol: 4.81 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 63	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	280	ug/kg	20
Acrylonitrile	ND	280	ug/kg	29
Benzene	ND	14	ug/kg	1.9
Bromodichloromethane	ND	14	ug/kg	1.6
Bromoform	ND	14	ug/kg	1.2
Bromomethane	ND	14	ug/kg	2.1
2-Butanone (MEK)	ND	14	ug/kg	2.5
Carbon tetrachloride	ND	14	ug/kg	1.2
Chloroethane	ND	14	ug/kg	4.3
2-Chloroethyl vinyl ether	ND	28	ug/kg	2.2
Chloroform	ND	14	ug/kg	1.6
Chloromethane	ND	14	ug/kg	2.4
Dibromochloromethane	ND	14	ug/kg	2.0
1,2-Dichlorobenzene	ND	14	ug/kg	2.2
1,3-Dichlorobenzene	ND	14	ug/kg	1.8
1,4-Dichlorobenzene	ND	14	ug/kg	1.8
trans-1,2-Dichloroethene	ND	14	ug/kg	1.7
Dichlorodifluoromethane	ND	14	ug/kg	1.9
1,1-Dichloroethane	ND	14	ug/kg	1.6
1,2-Dichloroethane	ND	14	ug/kg	1.7
1,1-Dichloroethene	ND	14	ug/kg	2.4
1,2-Dichloropropane	ND	14	ug/kg	1.5
cis-1,3-Dichloropropene	ND	14	ug/kg	1.9
trans-1,3-Dichloropropene	ND	14	ug/kg	1.7
Ethylbenzene	ND	14	ug/kg	1.8
Methylene chloride	ND	14	ug/kg	1.9
1,1,2,2-Tetrachloroethane	ND	14	ug/kg	2.0
Tetrachloroethene	ND	14	ug/kg	1.9
Toluene	ND	14	ug/kg	2.0
1,1,1-Trichloroethane	ND	14	ug/kg	1.4
1,1,2-Trichloroethane	ND	14	ug/kg	2.3
Trichloroethene	ND	14	ug/kg	1.8
Trichlorofluoromethane	ND	14	ug/kg	2.6
Vinyl chloride	ND	14	ug/kg	1.3

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

GC/MS Volatiles

Lot-Sample #...: C9C100191-001 Work Order #...: K795D1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	79	(52 - 124)
Toluene-d8	103	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	90	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C100191

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	90	96	109	93	00
02	BH-SED-03E-2	79	103	103	90	00
03	METHOD BLK. K8D2V1AA	96	93	108	94	00
04	LCS K8D2V1AC	94	102	118	89	00
05	LAB MS/MSD D	90	97	110	85	00
06	LAB MS/MSD S	101	105	119	94	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120000

WO #: K8D2V1AC

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	31.3	78	59 - 129	
Trichloroethene	40.0	30.7	77	76 - 119	
Benzene	40.0	33.4	84	77 - 120	
Toluene	40.0	38.4	96	78 - 124	
Chlorobenzene	40.0	40.4	101	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AF

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	40.0	ND	30.7	77	59 - 129	
Trichloroethene	40.0	ND	30.6	76	76 - 119	
Benzene	40.0	ND	33.9	85	77 - 120	
Toluene	40.0	ND	39.1	98	78 - 124	
Chlorobenzene	40.0	ND	40.5	101	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AG

BATCH: 9071060

COMPOUND	SPIKE	MSD	MSD	QC LIMITS		QUAL
	ADDED (ug/kg)	CONCENT. (ug/kg)	% REC	% RPD	RPD REC	
1,1-Dichloroethene	40.0	30.4	76	0.81	25 59 - 129	
Trichloroethene	40.0	29.8	75*	2.4	21 76 - 119	a
Benzene	40.0	32.9	82	3.2	20 77 - 120	
Toluene	40.0	38.5	96	1.5	21 78 - 124	
Chlorobenzene	40.0	39.6	99	2.2	20 79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 1 out of 5 outside limits

COMMENTS:

FORM III

K8D2V1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3031201.D

Lot Number: C9C100191

Date Analyzed: 03/12/09

Time Analyzed: 06:52

Matrix: SOLID

Date Extracted: 03/12/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	INTRA-LAB QC	K74TN1AE	3031202.D	03/12/09	07:17
02	LAB MS/MSD	K74TN1AF S	3031204.D	03/12/09	08:06
03	LAB MS/MSD	K74TN1AG D	3031209.D	03/12/09	10:08
04	BH-SED-03E-2	K795D1AU	3031210.D	03/12/09	10:32
05	CHECK SAMPLE	K8D2V1AC C	3031203.D	03/12/09	07:41
06					
07					
08					
09					
10					
11					
12					
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29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C100191
MB Lot-Sample #: C9C120000-060

Work Order #...: K8D2V1AA

Matrix.....: SOLID

Analysis Date...: 03/12/09
Dilution Factor: 1

Prep Date.....: 03/12/09

Prep Batch #...: 9071060

Analysis Time...: 06:52

Initial Wgt/Vol: 5 g

Final Wgt/Vol...: 5 mL

Analyst ID.....: 010099

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
1,2-Dichloroethane-d4	96	(52 - 124)		
Toluene-d8	93	(72 - 127)		
4-Bromofluorobenzene	108	(63 - 120)		

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C100191

Work Order #...: K8D2V1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	94	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C100191
 Lab File ID (Standard): 1C30312 Date Analyzed: 03/12/09
 Instrument ID: HP3 Time Analyzed: 0542
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	340820	7.40	81548	10.49	183892	12.81
UPPER LIMIT	681640	7.60	163096	10.69	367784	13.01
LOWER LIMIT	170410	7.20	40774	10.29	91946	12.61
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	446400	7.40	107113	10.49	209407	12.81
02 INTRA-LAB CH	319203	7.40	77050	10.49	184286	12.81
03 BH-SED-03E-2	441528	7.41	97010	10.49	162427	12.81
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SKD-03E-2

GC/MS Semivolatiles

Lot-Sample #....: C9C100191-001	Work Order #....: K795D1AC	Matrix.....: SOLID
Date Sampled....: 03/09/09	Date Received...: 03/10/09	MS Run #.....: 9071018
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071030	Analysis Time...: 20:39	
Dilution Factor: 4.96	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 63	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	66 J	89	ug/kg	13
2-Methylnaphthalene	150	89	ug/kg	17
Naphthalene	870	89	ug/kg	13
Acenaphthylene	200	89	ug/kg	18
Acenaphthene	31 J	89	ug/kg	14
Fluorene	110	89	ug/kg	13
Phenanthrene	290	89	ug/kg	11
Anthracene	230 J	440	ug/kg	16
Fluoranthene	980	89	ug/kg	7.5
Pyrene	1200	89	ug/kg	24
Benzo (a) anthracene	830	89	ug/kg	14
Chrysene	920	89	ug/kg	16
Benzo (b) fluoranthene	1100	89	ug/kg	18
Benzo (k) fluoranthene	580	89	ug/kg	18
Benzo (a) pyrene	1100	89	ug/kg	25
Indeno (1,2,3-cd) pyrene	550	89	ug/kg	4.9
Dibenzo (a,h) anthracene	170	89	ug/kg	20
Benzo (ghi) perylene	650	89	ug/kg	6.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(27 - 110)
Terphenyl-d14	66	(21 - 130)
2-Fluorobiphenyl	61	(28 - 108)
2-Fluorophenol	67	(28 - 107)
Phenol-d5	71	(30 - 112)
2,4,6-Tribromophenol	55	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C100191

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-03E-2	59	66	61	67	71	55	00
02	INTRA-LAB QC	0 D	0 D	0 D	0 D	0 D	0 D	06
03	METHOD BLK. K8D1M1AA	56	85	59	58	58	63	00
04	LCS K8D1M1AC	60	69	65	58	58	71	00
05	LAB MS/MSD D	0 D	0 D	0 D	0 D	0 D	0 D	06
06	LAB MS/MSD S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

QC LIMITS

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120000

WO #: K8D1M1AC

BATCH: 9071030

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	194	58	39 - 105	
2-Chlorophenol	333	198	59	40 - 105	
1,4-Dichlorobenzene	333	197	59	41 - 101	
N-Nitrosodi-n-propylamine	333	203	61	42 - 108	
1,2,4-Trichlorobenzene	333	198	59	41 - 105	
4-Chloro-3-methylphenol	333	210	63	43 - 110	
Acenaphthene	333	210	63	42 - 104	
4-Nitrophenol	333	229	69	27 - 131	
2,4-Dinitrotoluene	333	224	67	48 - 118	
Pentachlorophenol	333	211	63	18 - 125	
Pyrene	333	214	64	39 - 113	
4-Methylphenol	667	389	58	43 - 107	
Hexachloroethane	333	196	59	40 - 102	
Naphthalene	333	201	60	42 - 104	
4-Bromophenyl phenyl ethe	333	217	65	43 - 111	
Butyl benzyl phthalate	333	204	61	40 - 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C110188

WO #: K8C061AW

BATCH: 9071030

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	1350	ND		0*	39 - 105	NC DIL
2-Chlorophenol	1350	ND		0*	40 - 105	NC DIL
1,4-Dichlorobenzene	1350	ND		0*	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	1350	ND		0*	42 - 108	NC DIL
1,2,4-Trichlorobenzene	1350	ND		0*	41 - 105	NC DIL
4-Chloro-3-methylphenol	1350	ND		0*	43 - 110	NC DIL
Acenaphthene	1350	200		0*	42 - 104	NC DIL
4-Nitrophenol	1350	ND		0*	27 - 131	NC DIL
2,4-Dinitrotoluene	1350	ND		0*	48 - 118	NC DIL
Pentachlorophenol	1350	ND		0*	18 - 125	NC DIL
Pyrene	1350	10000		0*	39 - 113	NC DIL
4-Methylphenol	2700	1900		0*	43 - 107	NC DIL
Hexachloroethane	1350	ND		0*	40 - 102	NC DIL
Naphthalene	1350	24000		0*	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	1350	ND		0*	43 - 111	NC DIL
Butyl benzyl phthalate	1350	ND		0*	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C110188

WO #: K8C061AX

BATCH: 9071030

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	1350		0*		40	39 - 105	NC DIL
2-Chlorophenol	1350		0*		37	40 - 105	NC DIL
1,4-Dichlorobenzene	1350		0*		32	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	1350		0*		32	42 - 108	NC DIL
1,2,4-Trichlorobenzene	1350		0*		36	41 - 105	NC DIL
4-Chloro-3-methylphenol	1350		0*		31	43 - 110	NC DIL
Acenaphthene	1350		0*		34	42 - 104	NC DIL
4-Nitrophenol	1350		0*		33	27 - 131	NC DIL
2,4-Dinitrotoluene	1350		0*		33	48 - 118	NC DIL
Pentachlorophenol	1350		0*		34	18 - 125	NC DIL
Pyrene	1350		0*		28	39 - 113	NC DIL
4-Methylphenol	2700		0*		36	43 - 107	NC DIL
Hexachloroethane	1350		0*		34	40 - 102	NC DIL
Naphthalene	1350		0*		25	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	1350		0*		20	43 - 111	NC DIL
Butyl benzyl phthalate	1350		0*		34	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

K8D1M1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: D0312010.

Lot Number: C9C100191

Date Analyzed: 03/12/09

Time Analyzed: 18:27

Matrix: SOLID

Date Extracted:03/12/09

GC Column: DB5

ID: .32

Extraction Method:

Instrument ID: 732

Level:(low/med) LOW

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

CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 BH-SED-03E-2	K795D1AC	D0312017.	03/12/09	20:39
02 INTRA-LAB QC	K8C061AC	D0312012.	03/12/09	19:05
03 LAB MS/MSD	K8C061AW S	D0312013.	03/12/09	19:24
04 LAB MS/MSD	K8C061AX D	D0312014.	03/12/09	19:42
05 CHECK SAMPLE	K8D1M1AC C	D0312011.	03/12/09	18:46
06				
07				
08				
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26				
27				
28				
29				
30				

COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9C100191
MB Lot-Sample #: C9C120000-030

Work Order #...: K8D1M1AA

Matrix.....: SOLID

Analysis Date...: 03/12/09
Dilution Factor: 0.5

Prep Date.....: 03/12/09
Prep Batch #...: 9071030
Initial Wgt/Vol: 30 g
Analyst ID.....: 403801

Analysis Time...: 18:27
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 732

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a,h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	56	(27 - 110)
Terphenyl-d14	85	(21 - 130)
2-Fluorobiphenyl	59	(28 - 108)
2-Fluorophenol	58	(28 - 107)
Phenol-d5	58	(30 - 112)
2,4,6-Tribromophenol	63	(21 - 116)

NOTE(S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9C100191
Lab File ID (Standard): D0312CC1 Date Analyzed: 03/12/09
Instrument ID: 732 Time Analyzed: 1503

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	111391	4.19	504301	5.17	381963	6.51
UPPER LIMIT	222782	4.69	1008602	5.67	763926	7.01
LOWER LIMIT	55696	3.69	252151	4.67	190982	6.01
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	116501	4.19	510561	5.17	360932	6.51
02 INTRA-LAB CH	118926	4.19	554623	5.17	393718	6.51
03 BH-SED-03E-2	107260	4.20	493826	5.17	396409	6.52
04						
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17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9C100191
Lab File ID (Standard): D0312CC1 Date Analyzed: 03/12/09
Instrument ID: 732 Time Analyzed: 1503

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	111391	4.19	504301	5.17	381963	6.51
UPPER LIMIT	222782	4.69	1008602	5.67	763926	7.01
LOWER LIMIT	55696	3.69	252151	4.67	190982	6.01
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	116501	4.19	510561	5.17	360932	6.51
02 INTRA-LAB CH	118926	4.19	554623	5.17	393718	6.51
03 BH-SED-03E-2	107260	4.20	493826	5.17	396409	6.52
04						
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20						
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22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

TOTAL Metals

Lot-Sample #...: C9C100191-001

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

% Moisture.....: 63

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9071012						
Mercury	0.53	0.044	mg/kg	SW846 7471A	03/12/09	K795D1AR
		Dilution Factor: 0.5		Analysis Time...: 08:44	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0034	
Prep Batch #...: 9071306						
Silver	0.70 J	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AQ
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0032	
Arsenic	38.5 J,E	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AD
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.022	
Beryllium	1.4	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AE
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0050	
Cadmium	2.1 E	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AF
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.012	
Chromium	164 J	0.27	mg/kg	SW846 6020	03/12-03/16/09	K795D1AG
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.011	
Copper	98.5 J,E	0.27	mg/kg	SW846 6020	03/12-03/16/09	K795D1AH
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.011	
Nickel	36.0 J	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AJ
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0091	
Lead	333 J	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AK
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0046	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

TOTAL Metals

Lot-Sample #....: C9C100191-001

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Selenium	6.6 J,E	0.67	mg/kg	SW846 6020	03/12-03/16/09	K795D1AM
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.054	
Thallium	0.36	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AN
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0027	
Zinc	510 J,E	0.67	mg/kg	SW846 6020	03/12-03/16/09	K795D1AP
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.016	

Prep Batch #....: 9075181

Antimony	1.2 J	0.27	mg/kg	SW846 6020	03/16/09	K795D1AL
		Dilution Factor: 0.5		Analysis Time...: 13:22	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9075115	MDL.....: 0.0044	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

E Matrix interference.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

REPORTING				PREPARATION-	WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
MB Lot-Sample #: C9C120000-012 Prep Batch #...: 9071012						
Mercury	ND	0.016	mg/kg	SW846 7471A	03/12/09	K8D0J1AA
		Dilution Factor: 0.5				
		Analysis Time...: 08:22		Analyst ID.....: 031043		Instrument ID...: HGH
MB Lot-Sample #: C9C120000-306 Prep Batch #...: 9071306						
Arsenic	0.019 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AA
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Beryllium	ND	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AC
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Cadmium	ND	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AD
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Chromium	0.37	0.10	mg/kg	SW846 6020	03/12-03/16/09	K8E021AE
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Copper	0.011 B	0.10	mg/kg	SW846 6020	03/12-03/16/09	K8E021AF
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Lead	0.011 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AH
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Nickel	0.016 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AG
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Selenium	0.047 B	0.25	mg/kg	SW846 6020	03/12-03/16/09	K8E021AK
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Silver	0.0052 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AN
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9C100191

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AL
Dilution Factor: 0.5						
Analysis Time...: 09:15 Analyst ID.....: 401509 Instrument ID...: ICP						
Zinc	0.26	0.25	mg/kg	SW846 6020	03/12-03/16/09	K8E021AM
Dilution Factor: 0.5						
Analysis Time...: 09:15 Analyst ID.....: 401509 Instrument ID...: ICP						

MB Lot-Sample #: C9C160000-181 Prep Batch #....: 9075181

Antimony	0.0060 B	0.10	mg/kg	SW846 6020	03/16/09	K8KM41AA
Dilution Factor: 0.5						
Analysis Time...: 13:14 Analyst ID.....: 401509 Instrument ID...: ICP						

NOTE(S):

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C120000-012 Prep Batch #... : 9071012					
Mercury	100	(80 - 120)	SW846 7471A	03/12/09	K8D0J1AC
		Dilution Factor: 0.5	Analysis Time...: 08:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C120000-306 Prep Batch #... : 9071306					
Arsenic	86	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AP
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Beryllium	88	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AQ
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Cadmium	90	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AR
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Chromium	107	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AT
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Copper	103	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AU
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Nickel	104	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AV
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Lead	94	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AW
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Selenium	101	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A0
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Thallium	92	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A1
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C100191

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	86	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A2
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Silver	104	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A3
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
LCS Lot-Sample#:	C9C160000-181	Prep Batch #....:	9075181		
Antimony	78	(80 - 120)	SW846 6020	03/16/09	K8KM41AC
		Dilution Factor: 0.5	Analysis Time...: 13:18	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVR	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C120000-012 Prep Batch #...: 9071012							
Mercury	0.208	0.208	mg/kg	100	SW846 7471A	03/12/09	K8D0J1AC
				Dilution Factor: 0.5	Analysis Time...: 08:24	Analyst ID.....: 031043	
				Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C120000-306 Prep Batch #...: 9071306							
Arsenic	2.00	1.71	mg/kg	86	SW846 6020	03/12-03/16/09	K8E021AP
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Beryllium	2.50	2.19	mg/kg	88	SW846 6020	03/12-03/16/09	K8E021AQ
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Cadmium	2.50	2.25	mg/kg	90	SW846 6020	03/12-03/16/09	K8E021AR
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Chromium	10.0	10.7	mg/kg	107	SW846 6020	03/12-03/16/09	K8E021AT
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Copper	12.5	12.9	mg/kg	103	SW846 6020	03/12-03/16/09	K8E021AU
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Nickel	25.0	25.9	mg/kg	104	SW846 6020	03/12-03/16/09	K8E021AV
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Lead	1.00	0.944	mg/kg	94	SW846 6020	03/12-03/16/09	K8E021AW
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Selenium	0.500	0.504	mg/kg	101	SW846 6020	03/12-03/16/09	K8E021A0
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Thallium	2.50	2.31	mg/kg	92	SW846 6020	03/12-03/16/09	K8E021A1
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C100191

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	25.0	21.6	mg/kg	86	SW846 6020	03/12-03/16/09	K8E021A2
Dilution Factor: 0.5				Analysis Time..: 09:19		Analyst ID.....: 401509	
Instrument ID...: ICPMS							
Silver	2.50	2.61	mg/kg	104	SW846 6020	03/12-03/16/09	K8E021A3
Dilution Factor: 0.5				Analysis Time..: 09:19		Analyst ID.....: 401509	
Instrument ID...: ICPMS							
LCS Lot-Sample#: C9C160000-181 Prep Batch #....: 9075181							
Antimony	25.0	19.5	mg/kg	78	SW846 6020	03/16/09	K8KM41AC
Dilution Factor: 0.5				Analysis Time..: 13:18		Analyst ID.....: 401509	
Instrument ID...: ICPMS							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C050210-003 Prep Batch #...: 9071012

% Moisture.....: 46

Mercury	56 N	(75 - 125)		SW846 7471A	03/12/09	K737M1CT
	84	(75 - 125)	15 (0-20)	SW846 7471A	03/12/09	K737M1CU

Dilution Factor: 0.5

Analysis Time...: 08:29

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9071004

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C050210-003 Prep Batch #...: 9071012

% Moisture.....: 46

Mercury

0.17	0.153	0.258	N mg/kg	56		SW846	7471A	03/12/09	K737M1CT
0.17	0.153	0.301	mg/kg	84	15	SW846	7471A	03/12/09	K737M1CU

Dilution Factor: 0.5

Analysis Time...: 08:29

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9071004

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C100191-001 Prep Batch #...: 9071306						
% Moisture.....: 63						
Arsenic	NC	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1AV
	NC	(75 - 125)	(0-20)	SW846 6020	03/12-03/16/09	K795D1AW
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Beryllium	88	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1AX
	97	(75 - 125)	8.2 (0-20)	SW846 6020	03/12-03/16/09	K795D1A0
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Cadmium	73 N	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1A1
	79	(75 - 125)	5.6 (0-20)	SW846 6020	03/12-03/16/09	K795D1A2
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Chromium	NC	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1A3
	NC	(75 - 125)	(0-20)	SW846 6020	03/12-03/16/09	K795D1A4
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Copper	22 N	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1A5
	37 N	(75 - 125)	4.6 (0-20)	SW846 6020	03/12-03/16/09	K795D1A6
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Lead	NC	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1A9
	NC	(75 - 125)	(0-20)	SW846 6020	03/12-03/16/09	K795D1CA
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Nickel	81	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1A7
	81	(75 - 125)	0.16 (0-20)	SW846 6020	03/12-03/16/09	K795D1A8
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C100191

Matrix.....: SOLID

Date Sampled....: 03/09/09

Date Received...: 03/10/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	NC	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CE
	NC	(75 - 125)	(0-20)	SW846 6020	03/12-03/16/09	K795D1CF
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Silver	89	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CL
	94	(75 - 125)	4.9 (0-20)	SW846 6020	03/12-03/16/09	K795D1CM
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Thallium	85	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CG
	90	(75 - 125)	5.1 (0-20)	SW846 6020	03/12-03/16/09	K795D1CH
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Zinc	NC	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CJ
	NC	(75 - 125)	(0-20)	SW846 6020	03/12-03/16/09	K795D1CK
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						

MS Lot-Sample #: C9C100191-001 Prep Batch #....: 9075181

% Moisture.....: 63

Antimony	39 N	(75 - 125)		SW846 6020	03/16/09	K795D1CC
	40 N	(75 - 125)	3.1 (0-20)	SW846 6020	03/16/09	K795D1CD
Dilution Factor: 0.5						
Analysis Time...: 13:31 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9075115						

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C100191-001 Prep Batch #...: 9071306

% Moisture.....: 63

Arsenic

38.5	5.37	36.6	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1AV
38.5	5.37	37.3	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1AW
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Beryllium

1.4	6.71	7.29		mg/kg	88		SW846 6020	03/12-03/16/09	K795D1AX
1.4	6.71	7.91		mg/kg	97	8.2	SW846 6020	03/12-03/16/09	K795D1A0
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Cadmium

2.1	6.71	6.98	N	mg/kg	73		SW846 6020	03/12-03/16/09	K795D1A1
2.1	6.71	7.38		mg/kg	79	5.6	SW846 6020	03/12-03/16/09	K795D1A2
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Chromium

164	26.8	157	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1A3
164	26.8	166	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1A4
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Copper

98.5	33.5	106	N	mg/kg	22		SW846 6020	03/12-03/16/09	K795D1A5
98.5	33.5	111	N	mg/kg	37	4.6	SW846 6020	03/12-03/16/09	K795D1A6
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Lead

333	2.68	257	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1A9
333	2.68	270	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1CA
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	36.0	67.1	90.2	mg/kg	81		SW846 6020	03/12-03/16/09	K795D1A7
	36.0	67.1	90.1	mg/kg	81	0.16	SW846 6020	03/12-03/16/09	K795D1A8

Dilution Factor: 0.5

Analysis Time...: 09:32

Instrument ID...: ICPMS

Analyst ID.....: 401509

MS Run #.....: 9071175

Selenium

	6.6	1.34	6.74	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CE
	6.6	1.34	7.06	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CF

Dilution Factor: 0.5

Analysis Time...: 09:32

Instrument ID...: ICPMS

Analyst ID.....: 401509

MS Run #.....: 9071175

Silver

	0.70	6.71	6.66	mg/kg	89		SW846 6020	03/12-03/16/09	K795D1CL
	0.70	6.71	6.99	mg/kg	94	4.9	SW846 6020	03/12-03/16/09	K795D1CM

Dilution Factor: 0.5

Analysis Time...: 09:32

Instrument ID...: ICPMS

Analyst ID.....: 401509

MS Run #.....: 9071175

Thallium

	0.36	6.71	6.09	mg/kg	85		SW846 6020	03/12-03/16/09	K795D1CG
	0.36	6.71	6.41	mg/kg	90	5.1	SW846 6020	03/12-03/16/09	K795D1CH

Dilution Factor: 0.5

Analysis Time...: 09:32

Instrument ID...: ICPMS

Analyst ID.....: 401509

MS Run #.....: 9071175

Zinc

	510	67.1	435	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CJ
	510	67.1	470	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CK

Dilution Factor: 0.5

Analysis Time...: 09:32

Instrument ID...: ICPMS

Analyst ID.....: 401509

MS Run #.....: 9071175

MS Lot-Sample #: C9C100191-001 Prep Batch #....: 9075181

% Moisture.....: 63

Antimony

	1.2	67.1	27.2	N mg/kg	39		SW846 6020	03/16/09	K795D1CC
	1.2	67.1	28.1	N mg/kg	40	3.1	SW846 6020	03/16/09	K795D1CD

Dilution Factor: 0.5

Analysis Time...: 13:31

Instrument ID...: ICPMS

Analyst ID.....: 401509

MS Run #.....: 9075115

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C100191

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C100191

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03E-2	C9C100191 001	K795D1AT	3.4	mg/kg	0.23	1.3	1	3/11/2009 - 3/11/2009 14:51	9070100

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Lot Number: C9C100191

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03E-2	C9C100191 001	K795D1AA	37.3	%	0.0	1.0	1	3/10/2009 - 3/11/2009 05:47	9069402
BH-SED-03E-TOC	C9C100191 002	K795K1AA	47.9	%	0.0	1.0	1	3/10/2009 - 3/11/2009 05:47	9069402

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9C100191

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03E-TOC	C9C100191 002	K795K1AC	11900	mg/kg	235	2080	1.97	3/11/2009 - 3/11/2009 12:55	9070101

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Report ID: C9C100191

Matrix: SOLID

Date/Time Received: 3/10/2009 2:30:00PM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C110000100B	100 MB	K8CA31AA	ND	mg/kg	0.50	3/11/2009 - 3/11/2009 14:43	9070100	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Report ID: C9C100191

Matrix: SOLID

Date/Time Received: 3/10/2009 2:30:00PM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K8AFP1AD	99.7	%	1.0	3/10/2009 - 3/11/2009 05:47	9069402	0.002 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Report ID: C9C100191
 Date/Time Received: 3/6/2009 9:40:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C110000101B	101 MB	K8CCC1AA	ND	mg/kg	1250	3/11/2009 - 3/11/2009 11:44	9070101	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C110000
 Date/Time Received: 3/10/2009 2:30:00PM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K8CA31AC	104	41 - 159	3/11/2009 - 3/11/2009 14:43	9070100	
LAB MS/MSD	MS	K8AFV1AW	102	75 - 125	3/11/2009 - 3/11/2009 14:51	9070100	12 / 20
LAB MS/MSD	MSD	K8AFV1AX	89	75 - 125	3/11/2009 - 3/11/2009 15:28	9070100	12 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C110000
 Date/Time Received: 3/6/2009 9:40:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K8CCC1AC	101	75 - 125	3/11/2009 - 3/11/2009 11:54	9070101	3.5 / 20
DUPLICATE CHECK	LCSD	K8CCC1AD	97	75 - 125	3/11/2009 - 3/11/2009 12:04	9070101	3.5 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C100191

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03E-2	C9C100191-001	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values.

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Compound Quantitation - No discrepancies were identified.

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C100191

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03E-2	C9C100191 001	K795D1AT	3.4	mg/kg	0.23	1.3	1	3/11/2009 - 3/11/2009 14:51	9070100

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9C100191

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-03E-TOC	C9C100191 002	K795K1AC	11900	mg/kg	235	2060	1.97	3/11/2009 - 3/11/2009 12:55	9070101

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C100191

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03E-2	C9C100191-001	Soil
1MS	BH-SED-03E-2MS	C9C100191-001MS	Soil
1MSD	BH-SED-03E-2MSD	C9C100191-001MSD	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS Sample ID	Compound	MS/MSD%R/RPD	Qualifier	Affected Samples
1	Mercury	56%/Ok/Ok	L/UL	1
	Cadmium	73%/Ok/Ok	None	See ICP Serial Dilution
	Copper	22%/37%/Ok	None	See ICP Serial Dilution
	Antimony	39%/40%/Ok	None	See ICP Serial Dilution

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample exhibited acceptable %D values except the following.

ICP Sample ID	Compound	%D	Qualifier	Affected Samples
1	Antimony	16.6%	J	1
	Arsenic	17.0%	J	1
	Cadmium	17.4%	J	1
	Copper	11.4%	J	1
	Selenium	18.1%	J	1
	Zinc	26.5%	J	1

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

TOTAL Metals

Lot-Sample #....: C9C100191-001

Matrix.....: SOLID

Date Sampled....: 03/09/09

Date Received...: 03/10/09

% Moisture.....: 63

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9071012						
Mercury	0.53 <i>L</i>	0.044	mg/kg	SW846 7471A	03/12/09	K795D1AR
		Dilution Factor: 0.5		Analysis Time...: 08:44	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0034	
Prep Batch #....: 9071306						
Silver	0.70 <i>J</i>	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AQ
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0032	
Arsenic	38.5 <i>JAE J</i>	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AD
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.022	
Beryllium	1.4	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AE
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0050	
Cadmium	2.1 <i>JE J</i>	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AF
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.012	
Chromium	164 <i>J</i>	0.27	mg/kg	SW846 6020	03/12-03/16/09	K795D1AG
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.011	
Copper	98.5 <i>JAE J</i>	0.27	mg/kg	SW846 6020	03/12-03/16/09	K795D1AH
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.011	
Nickel	36.0 <i>J</i>	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AJ
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0091	
Lead	333 <i>J</i>	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AK
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0046	

(Continued on next page)

luw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

TOTAL Metals

Lot-Sample #....: C9C100191-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	6.6 J E J	0.67	mg/kg	SW846 6020	03/12-03/16/09	K795D1AM
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.054	
Thallium	0.36	0.13	mg/kg	SW846 6020	03/12-03/16/09	K795D1AN
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0027	
Zinc	510 J E J	0.67	mg/kg	SW846 6020	03/12-03/16/09	K795D1AP
		Dilution Factor: 0.5		Analysis Time...: 09:23	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.016	
Prep Batch #....: 9075181						
Antimony	1.2 J E J	0.27	mg/kg	SW846 6020	03/16/09	K795D1AL
		Dilution Factor: 0.5		Analysis Time...: 13:22	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9075115	MDL.....: 0.0044	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

E Matrix interference.

luw
4/22/09

POLYNUCLEAR AROMATIC HYDROCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C100191

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03E-2	C9C100191-001	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SKD-03E-2

GC/MS Semivolatiles

Lot-Sample #....: C9C100191-001 Work Order #....: K795D1AC Matrix.....: SOLID
Date Sampled....: 03/09/09 Date Received...: 03/10/09 MS Run #.....: 9071018
Prep Date.....: 03/12/09 Analysis Date...: 03/12/09
Prep Batch #....: 9071030 Analysis Time...: 20:39
Dilution Factor: 4.96 Initial Wgt/Vol: 30.2 g Final Wgt/Vol...: 0.5 mL
% Moisture.....: 63 Analyst ID.....: 403801 Instrument ID...: 732
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	66 J	89	ug/kg	13
2-Methylnaphthalene	150	89	ug/kg	17
Naphthalene	870	89	ug/kg	13
Acenaphthylene	200	89	ug/kg	18
Acenaphthene	31 J	89	ug/kg	14
Fluorene	110	89	ug/kg	13
Phenanthrene	290	89	ug/kg	11
Anthracene	230 J	440	ug/kg	16
Fluoranthene	980	89	ug/kg	7.5
Pyrene	1200	89	ug/kg	24
Benzo (a) anthracene	830	89	ug/kg	14
Chrysene	920	89	ug/kg	16
Benzo (b) fluoranthene	1100	89	ug/kg	18
Benzo (k) fluoranthene	580	89	ug/kg	18
Benzo (a) pyrene	1100	89	ug/kg	25
Indeno (1,2,3-cd) pyrene	550	89	ug/kg	4.9
Dibenzo (a,h) anthracene	170	89	ug/kg	20
Benzo (ghi) perylene	650	89	ug/kg	6.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(27 - 110)
Terphenyl-d14	66	(21 - 130)
2-Fluorobiphenyl	61	(28 - 108)
2-Fluorophenol	67	(28 - 107)
Phenol-d5	71	(30 - 112)
2,4,6-Tribromophenol	55	(21 - 116)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

LW
4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C100191

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-03E-2	C9C100191-001	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.043 RRF	L/R	1

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values except the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
01/06/09	Acrolein	0.048 RRF	None	See ICAL

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

GC/MS Volatiles

Lot-Sample #....: C9C100191-001	Work Order #....: K795D1AU	Matrix.....: SOLID
Date Sampled....: 03/09/09	Date Received...: 03/10/09	MS Run #.....: 9071074
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071060	Analysis Time...: 10:32	
Dilution Factor: 1.04	Initial Wgt/Vol: 4.81 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 63	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	280	ug/kg	20
Acrylonitrile	ND	280	ug/kg	29
Benzene	ND	14	ug/kg	1.9
Bromodichloromethane	ND	14	ug/kg	1.6
Bromoform	ND	14	ug/kg	1.2
Bromomethane	ND	14	ug/kg	2.1
2-Butanone (MEK)	ND	14	ug/kg	2.5
Carbon tetrachloride	ND	14	ug/kg	1.2
Chloroethane	ND	14	ug/kg	4.3
2-Chloroethyl vinyl ether	ND	28	ug/kg	2.2
Chloroform	ND	14	ug/kg	1.6
Chloromethane	ND	14	ug/kg	2.4
Dibromochloromethane	ND	14	ug/kg	2.0
1,2-Dichlorobenzene	ND	14	ug/kg	2.2
1,3-Dichlorobenzene	ND	14	ug/kg	1.8
1,4-Dichlorobenzene	ND	14	ug/kg	1.8
trans-1,2-Dichloroethene	ND	14	ug/kg	1.7
Dichlorodifluoromethane	ND	14	ug/kg	1.9
1,1-Dichloroethane	ND	14	ug/kg	1.6
1,2-Dichloroethane	ND	14	ug/kg	1.7
1,1-Dichloroethene	ND	14	ug/kg	2.4
1,2-Dichloropropane	ND	14	ug/kg	1.5
cis-1,3-Dichloropropene	ND	14	ug/kg	1.9
trans-1,3-Dichloropropene	ND	14	ug/kg	1.7
Ethylbenzene	ND	14	ug/kg	1.8
Methylene chloride	ND	14	ug/kg	1.9
1,1,2,2-Tetrachloroethane	ND	14	ug/kg	2.0
Tetrachloroethene	ND	14	ug/kg	1.9
Toluene	ND	14	ug/kg	2.0
1,1,1-Trichloroethane	ND	14	ug/kg	1.4
1,1,2-Trichloroethane	ND	14	ug/kg	2.3
Trichloroethene	ND	14	ug/kg	1.8
Trichlorofluoromethane	ND	14	ug/kg	2.6
Vinyl chloride	ND	14	ug/kg	1.3

(Continued on next page)

lw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-03E-2

GC/MS Volatiles

Lot-Sample #....: C9C100191-001 Work Order #....: K795D1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	79	(52 - 124)
Toluene-d8	103	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	90	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9C100192

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 30, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C100192

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 10, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.

TestAmerica Laboratories, Inc.

March 27, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9C100192

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on March 11th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/11/09 ETR No: 130566			
787939	BH-SED-03E-2	03/09/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

There were no exceptions to the method quality control criteria during the analysis of this sample by ASTM Methods D422 and D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, reading "Ron Pentkowski". The signature is fluid and cursive, with the first name "Ron" and last name "Pentkowski" clearly legible.

Ron Pentkowski
Project Manager

Enclosure

TestAmerica Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: SW-846: The relative percent difference for detected concentrations between two GC columns is greater than 40%. Unless otherwise specified the higher of the two values is reported on the Form I.
- CLP SOW: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- P ICP-AES
MS ICP-MS
CV Cold Vapor AA
AS Semi-Automated Spectrophotometric

FQA009:02.18.08:4
TestAmerica Burlington

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA Engineering Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 3/10/09

Coolers Opened and Unpacked on: 3/10/09 By: PLF

(Signature)

TestAmerica Pittsburgh Lot Number: C9C100192

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved

UP: Unpreserved

[illegible]

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

Comments:

Cooler Number

Temperature*

Thermometer ID

Sample

Lot Number**

[illegible][illegible]

* Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid

Hydrochloric Acid

Sulfuric Acid

Sodium Hydroxide

C9C100192

6

(1 - 16)

12321
500

FedEx *US Airbill*
Express

FedEx
Tracking
Number

8565 6932 6786

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.
Date 1/1/09 FedEx Tracking Number 856569326786
Sender's Name TODD NARD Phone 407 710 1100
Company E A ENGINEERING SCIENCE & TECH
Address 15 LOVELTON CIR
City SPARKS GLENCOE State ND ZIP 58152
2 Your Internal Billing Reference 173 1406, 0002, 0007A
3 To
Recipient's Name WILLIAM W. WILSON JR Phone 412 942 2128
Company THE T. WILSON COMPANY
Recipient's Address 301 L. HILL DRIVE
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Address WIDE WALK
To request a package be held at a specific FedEx location, print FedEx address here.
City PITTSBURGH State PA ZIP 15128



8565 6932 6786

0526961324

Recipient's Copy

4a Express Package Service
☐ FedEx Priority Overnight
Next business morning. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight
Next business afternoon. * Saturday Delivery NOT available.
☐ FedEx First Overnight
Earliest next business morning delivery to select locations. * Saturday Delivery NOT available.
☐ FedEx 2Day
Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Express Saver
Third business day. * Saturday Delivery NOT available.
FedEx Envelope rate not available. Minimum charge: One-pound rate. * To most locations.

4b Express Freight Service
☐ FedEx 1Day Freight*
Next business day. ** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 2Day Freight
Second business day. ** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 3Day Freight
Third business day. ** Saturday Delivery NOT available.
* Call for Confirmation. ** To most locations.

5 Packaging
☐ FedEx Envelope*
☐ FedEx Pak*
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
☐ FedEx Box
☐ FedEx Tube
☐ Other
* Declared value limit \$500.

6 Special Handling
Include FedEx address in Section 3.
☐ SATURDAY Delivery
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
☐ HOLD Weekday at FedEx Location
Not available for FedEx First Overnight.
☐ HOLD Saturday at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
One box must be checked.
☒ No ☐ Yes
As per attached Shipper's Declaration. ☐ Yes
Shipper's Declaration not required.
☐ Dry Ice
Dry Ice, 3, UN 1845 x kg
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging. ☐ Cargo Aircraft Only

7 Payment Bill to:
☒ Sender
Acct. No. in Section 1 will be billed.
☐ Recipient
☐ Third Party
☐ Credit Card
☐ Cash/Check
Enter FedEx Acct. No. or Credit Card No. below.
Obtain Recip. Acct. No. ☐

Total Packages 1 Total Weight 5.19 Total Charges 51.9
Credit Card Auth. 51.9

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.
☐ No Signature Required
Package may be left with out obtaining a signature for delivery.
☐ Direct Signature
Anyone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

Rev. Date 8/09-Part #158275-01894-2005 FedEx-PRINTED IN U.S.A.-SRS

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-03-10
Analytical Due Date: 2009-03-30
Report Due Date: 2009-03-31

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-03E-2 DATE SAMPLED: 20090309 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K795X1AC

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K795X1AA

METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY:

Patricia R. [Signature]

DATE:

3/10/09 1700

RECEIVED FOR LAB BY:

[Signature]

DATE:

3/11/09 1030

DATA SUMMARY PACKAGE

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9C100192



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-03E-2

Lab Name: TestAmerica Burlington

Contract: C9C100192

SDG No.: 9C100192

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 787939

Matrix: SOLID

Client: STLPAP

Date Received: 03/11/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/20/09		%	1	0.0	128.9	

Printed on: 03/27/09 08:28 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130566
SDG: 9C100192

Start Date:	03/20/09
Start Time:	2130
End Date:	03/21/09
Analyst:	MAP

[illegible]

Particle Size of Solls by ASTM D422

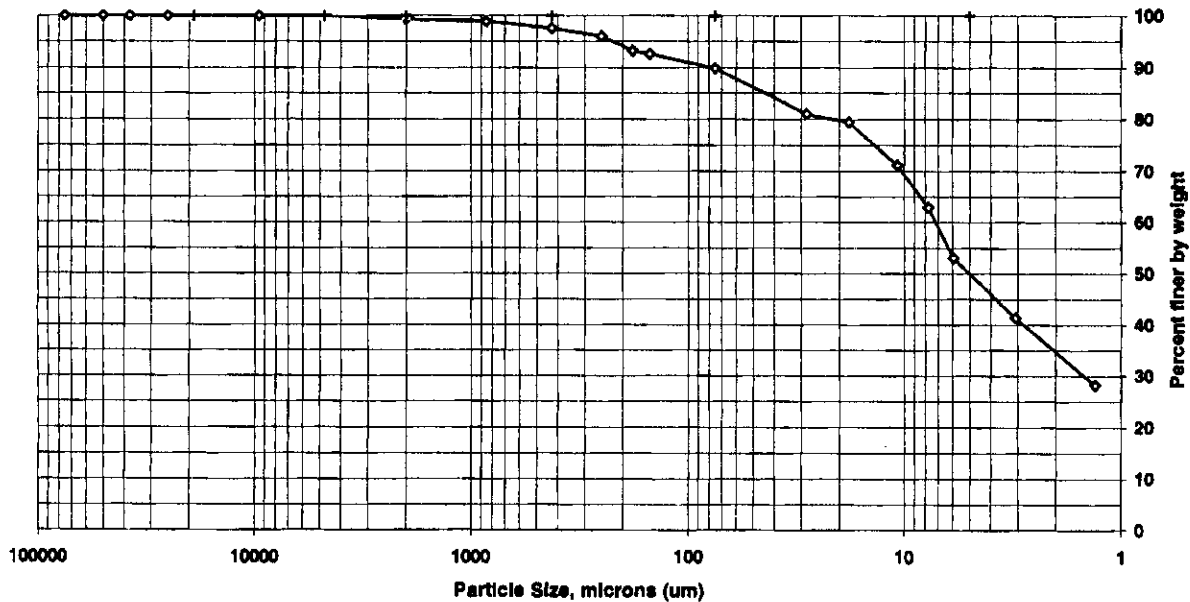
Client Code: STLPAP
 Sample ID: BH-SED-03E-2
 Lab ID: 787939

SDG: 9C100192
 ETR(a): 130566

Date Received: 3/11/2009
 Start Date: 3/16/2009
 End Date: 3/27/2009

Percent Solids: 43.7%
 Specific Gravity: 2.650
 Maximum Particle Size: Crs sand

Non-soil material: na
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.4	0.6
#20	850	98.9	0.5
#40	425	97.6	1.3
#60	250	95.9	1.6
#80	180	93.2	2.7
#100	150	92.6	0.6
#200	75	89.8	2.8
Hydrometer	28.2	81.0	8.8
	18.0	79.4	1.6
	10.8	71.2	8.2
	7.7	63.0	8.2
	5.9	53.1	9.9
	3.1	41.3	11.8
V	1.3	28.2	13.1

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	10.2
Coarse Sand	0.6
Medium Sand	1.8
Fine Sand	7.7
Silt	36.7
Clay	53.1

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9C110188

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 23, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
US Dept of Agriculture	NA	NAVY	X
Arkansas	(#P330-07-00101)	Foreign Soil Import Permit	X
	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C110188

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 11, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in calibration verification standard 1C30312; but were within expected performance range for these compounds: 1,2,3-trichloropropane 25.3%, 1,2-dibromo-3-chloropropane 36.7%, acetone 27.1%, acrolein 49.4%, bromochloromethane 30.4%, and methyl acetate 36.8%.

GC/MS Semivolatiles:

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

Due to matrix interference, the samples were analyzed at a dilution. The samples had the surrogates diluted out.

The matrix spike and matrix spike duplicate had the recoveries diluted out.

Metals:

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

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C110188

Metals cont.:

The method blank had chromium and zinc above the reporting limit. All associated samples had these elements >10X the concentration detected, therefore all results are reported.

General Chemistry:

The samples were analyzed at a dilution for TOC.

The matrix spike duplicate recovered above the control limit for TOC. The RPD was outside the control limit.

METHODS SUMMARY

C9C110188

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9C110188

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K8CXQ	001	BH-SED-17-0	03/10/09	10:20
K8C04	002	BH-SED-17-TOC	03/10/09	10:30
K8C06	003	BH-SED-18-0	03/10/09	12:50
K8C07	004	BH-SED-18-TOC	03/10/09	13:05

NOTE(S) :

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

Client: EA Engineering Science, and Technology, Inc. 15 Loveton Circle Sparks, MD 21152						Project Manager: Frank Barranco Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250																					
Project Name: Sparrows Point Offshore Areas																											
Project#: 14534.06																											
Page 1 of 1				Sediment Samples																							
Date	Time	Water	Sediment	Sample Identification										No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids					Laboratory:
3/10/09	1020	X	X	BH-SED-17-O	5 ^{TU}	X	X	X	X	X		X	X										TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber				
	1030		X	BH-SED-17-TOC	1						X												Remarks SEE PROJECT SPECIFIC ANALYTE LIST expedited 5-day turn around requested				
	1250	X	X	BH-SED-18-O	5	X	X	X	X	X		X	X														
	1305	X	X	BH-SED-18-TOC	1						X																
Sampled by: (Signature) Todd Ward						Date/Time 3/10/09 1305		Relinquished by: (Signature) Todd Ward						Date/Time 3/10/09 1700		CHAIN OF CUSTODY RECORD RECEIVED BY LABORATORY DATE/TIME 3/11/09 1000											
Relinquished by: (Signature)						Date/Time		Received by Laboratory (Signature)						Date/Time													

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA ENG. Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 3/11/9

Coolers Opened and Unpacked on: 3/11/9 By: JO

(Signature)

TestAmerica Pittsburgh Lot Number: C9C110188

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved

UP: Unpreserved

[illegible]

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

Comments:

Cooler Number

Temperature*

Thermometer ID:

Sample

Lot Number**

[illegible][illegible]

*Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

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

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

Nitric Acid

Hydrochloric Acid

Sulfuric Acid

Sodium Hydroxide

231

500

FedEx® US Airbill
Express
FedEx
Tracking
Number

8565 6932 6775

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 3/10/09

FedEx Tracking Number

856569326775

0212-0722-5

Sender's
Name

TODD WARD

Phone 410 746-1250Company E A ENGINEERING SCIENCE & TECHAddress 15 LOVETON CIR

Dept./Floor/Suite/Room

City SPARKS GLENCOEState MDZIP 21152

2 Your Internal Billing Reference

1453406.0002.0007A

3 To

Recipient's
Name

SAMPLE MANAGEMENT

Phone 711 963-2428Company TEST AMERICA - PITTSBURGHRecipient's
Address301 ALPHA DRIVE

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address RIDGE PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City PITTSBURGHState PAZIP 15238

0326961324



8565 6932 6775

Recipient's Copy

4a Express Package Service

☒ **FedEx Priority Overnight**
Next business morning.* Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ **FedEx Standard Overnight**
Next business afternoon.*
Saturday Delivery NOT available.

Packages up to 150 lbs.
☐ **FedEx First Overnight**
Earliest next business morning
delivery to select locations.*
Saturday Delivery NOT available.

☐ **FedEx 2Day**
Second business day.* Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ **FedEx Express Saver**
Third business day.*
Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service

☐ **FedEx 1Day Freight***
Next business day.** Friday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

☐ **FedEx 2Day Freight**
Second business day.** Thursday
shipments will be delivered on Monday
unless SATURDAY Delivery is selected.

Packages over 150 lbs.
☐ **FedEx 3Day Freight**
Third business day.**
Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging

☐ **FedEx Envelope***
☐ **FedEx Pak***
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.

☐ **FedEx Box**
☐ **FedEx Tube**
☒ **Other**
* Declared value limit \$500.

6 Special Handling

☐ **SATURDAY Delivery**
Not available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3D by Freight.

☐ **HOLD Weekday
at FedEx Location**
Not available for
FedEx First Overnight.

☐ **HOLD Saturday
at FedEx Location**
Not available for
FedEx Priority
or FedEx 2Day
ns.

Include FedEx address in Section 3.

Does this shipment contain dangerous goods?

One box must be checked.

☒ **No**
☐ **Yes**
As per attached
Shipper's Declaration.

☐ **Yes**
Shipper's Declaration
not required.

☐ **Dry Ice**
Dry Ice, 3, UN 1845

☐ **Cargo Aircraft Only**

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment **Bill to:**

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip.
Acct. No.:
☒ **Sender**
Acct. No. in Section
1 will be billed.

☐ **Recipient**
☐ **Third Party**
☐ **Credit Card**
☐ **Cash/Check**


Total Packages

Total Weight

1



Total Charges

Credit Card Auth.

Your liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

☐ **No Signature
Required**
Package may be left with-
out obtaining a signature
for delivery.

☐ **Direct Signature**
Anyone at recipient's
address may sign for delivery.
Fee applies.

☐ **Indirect Signature**
If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

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DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

GC/MS Volatiles

Lot-Sample #... : C9C110188-001	Work Order #... : K8CXQ1AV	Matrix..... : SOLID
Date Sampled... : 03/10/09	Date Received.. : 03/11/09	MS Run #..... : 9071074
Prep Date..... : 03/12/09	Analysis Date... : 03/12/09	
Prep Batch #... : 9071060	Analysis Time... : 10:57	
Dilution Factor : 0.91	Initial Wgt/Vol : 5.49 g	Final Wgt/Vol... : 5 mL
% Moisture..... : 57	Analyst ID..... : 010099	Instrument ID... : HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.93
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.94
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.6
Chloroform	ND	11	ug/kg	1.2
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.3
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.1
cis-1,3-Dichloropropene	ND	11	ug/kg	1.4
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.4
Toluene	ND	11	ug/kg	1.5
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	1.9
Vinyl chloride	ND	11	ug/kg	0.99

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

GC/MS Volatiles

Lot-Sample #...: C9C110188-001 Work Order #...: K8CXQ1AV Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	96	(72 - 127)
4-Bromofluorobenzene	107	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: BH-SED-18-0

GC/MS Volatiles

Lot-Sample #... : C9C110188-003	Work Order #... : K8C061AV	Matrix..... : SOLID
Date Sampled... : 03/10/09	Date Received... : 03/11/09	MS Run #..... : 9071074
Prep Date..... : 03/12/09	Analysis Date... : 03/12/09	
Prep Batch #... : 9071060	Analysis Time... : 11:22	
Dilution Factor: 0.95	Initial Wgt/Vol: 5.27 g	Final Wgt/Vol...: 5 mL
% Moisture..... : 75	Analyst ID..... : 010099	Instrument ID...: HP3
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	390	ug/kg	27
Acrylonitrile	ND	390	ug/kg	40
Benzene	ND	19	ug/kg	2.6
Bromodichloromethane	ND	19	ug/kg	2.2
Bromoform	ND	19	ug/kg	1.7
Bromomethane	ND	19	ug/kg	2.8
2-Butanone (MEK)	ND	19	ug/kg	3.4
Carbon tetrachloride	ND	19	ug/kg	1.7
Chloroethane	ND	19	ug/kg	6.0
2-Chloroethyl vinyl ether	ND	39	ug/kg	3.0
Chloroform	ND	19	ug/kg	2.3
Chloromethane	ND	19	ug/kg	3.3
Dibromochloromethane	ND	19	ug/kg	2.7
1,2-Dichlorobenzene	ND	19	ug/kg	3.1
1,3-Dichlorobenzene	ND	19	ug/kg	2.5
1,4-Dichlorobenzene	ND	19	ug/kg	2.5
trans-1,2-Dichloroethene	ND	19	ug/kg	2.3
Dichlorodifluoromethane	ND	19	ug/kg	2.6
1,1-Dichloroethane	ND	19	ug/kg	2.2
1,2-Dichloroethane	ND	19	ug/kg	2.4
1,1-Dichloroethene	ND	19	ug/kg	3.3
1,2-Dichloropropane	ND	19	ug/kg	2.1
cis-1,3-Dichloropropene	ND	19	ug/kg	2.6
trans-1,3-Dichloropropene	ND	19	ug/kg	2.3
Ethylbenzene	ND	19	ug/kg	2.5
Methylene chloride	ND	19	ug/kg	2.6
1,1,2,2-Tetrachloroethane	ND	19	ug/kg	2.8
Tetrachloroethene	ND	19	ug/kg	2.6
Toluene	ND	19	ug/kg	2.8
1,1,1-Trichloroethane	ND	19	ug/kg	1.9
1,1,2-Trichloroethane	ND	19	ug/kg	3.2
Trichloroethene	ND	19	ug/kg	2.5
Trichlorofluoromethane	ND	19	ug/kg	3.5
Vinyl chloride	ND	19	ug/kg	1.8

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-18-0

GC/MS Volatiles

Lot-Sample #...: C9C110188-003 Work Order #...: K8C061AV Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	84	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	110	(63 - 120)
Dibromofluoromethane	97	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C110188

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	90	96	109	93	00
02	BH-SED-17-0	86	96	107	96	00
03	BH-SED-18-0	84	100	110	97	00
04	METHOD BLK. K8D2V1AA	96	93	108	94	00
05	LCS K8D2V1AC	94	102	118	89	00
06	LAB MS/MSD D	90	97	110	85	00
07	LAB MS/MSD S	101	105	119	94	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
SRG02 = Toluene-d8
SRG03 = 4-Bromofluorobenzene
SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
(72-127)
(63-120)
(68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120000

WO #: K8D2V1AC

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	40.0	31.3	78	59 - 129	
Trichloroethene	40.0	30.7	77	76 - 119	
Benzene	40.0	33.4	84	77 - 120	
Toluene	40.0	38.4	96	78 - 124	
Chlorobenzene	40.0	40.4	101	79 - 120	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AF

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	40.0	ND	30.7	77	59 - 129	
Trichloroethene	40.0	ND	30.6	76	76 - 119	
Benzene	40.0	ND	33.9	85	77 - 120	
Toluene	40.0	ND	39.1	98	78 - 124	
Chlorobenzene	40.0	ND	40.5	101	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C050306

WO #: K74TN1AG

BATCH: 9071060

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
1,1-Dichloroethene	40.0	30.4	76	0.81	25	59 - 129	
Trichloroethene	40.0	29.8	75*	2.4	21	76 - 119	a
Benzene	40.0	32.9	82	3.2	20	77 - 120	
Toluene	40.0	38.5	96	1.5	21	78 - 124	
Chlorobenzene	40.0	39.6	99	2.2	20	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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

RPD: 0 out of 5 outside limitsSpike Recovery: 1 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K8D2V1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3031201.D

Lot Number: C9C110188

Date Analyzed: 03/12/09

Time Analyzed: 06:52

Matrix: SOLID

Date Extracted: 03/12/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	K74TN1AE	3031202.D	03/12/09	07:17
02	LAB MS/MSD	K74TN1AF S	3031204.D	03/12/09	08:06
03	LAB MS/MSD	K74TN1AG D	3031209.D	03/12/09	10:08
04	BH-SED-17-0	K8CXQ1AV	3031211.D	03/12/09	10:57
05	BH-SED-18-0	K8C061AV	3031212.D	03/12/09	11:22
06	CHECK SAMPLE	K8D2V1AC C	3031203.D	03/12/09	07:41
07					
08					
09					
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26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C110188
MB Lot-Sample #: C9C120000-060

Work Order #...: K8D2V1AA

Matrix.....: SOLID

Analysis Date...: 03/12/09
Dilution Factor: 1

Prep Date.....: 03/12/09

Prep Batch #...: 9071060

Analysis Time...: 06:52

Initial Wgt/Vol: 5 g

Final Wgt/Vol...: 5 mL

Analyst ID.....: 010099

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acrolein	ND	100	ug/kg	SW846	8260B
Acrylonitrile	ND	100	ug/kg	SW846	8260B
Benzene	ND	5.0	ug/kg	SW846	8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846	8260B
Bromoform	ND	5.0	ug/kg	SW846	8260B
Bromomethane	ND	5.0	ug/kg	SW846	8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846	8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846	8260B
Chloroethane	ND	5.0	ug/kg	SW846	8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846	8260B
Chloroform	ND	5.0	ug/kg	SW846	8260B
Chloromethane	ND	5.0	ug/kg	SW846	8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846	8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
Ethylbenzene	ND	5.0	ug/kg	SW846	8260B
Methylene chloride	ND	5.0	ug/kg	SW846	8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846	8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846	8260B
Toluene	ND	5.0	ug/kg	SW846	8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
Trichloroethene	ND	5.0	ug/kg	SW846	8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846	8260B
Vinyl chloride	ND	5.0	ug/kg	SW846	8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	93	(72 - 127)
4-Bromofluorobenzene	108	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C110188

Work Order #...: K8D2V1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	94	(68 - 121)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C110188
 Lab File ID (Standard): 1C30312 Date Analyzed: 03/12/09
 Instrument ID: HP3 Time Analyzed: 0542
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	340820	7.40	81548	10.49	183892	12.81
UPPER LIMIT	681640	7.60	163096	10.69	367784	13.01
LOWER LIMIT	170410	7.20	40774	10.29	91946	12.61
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	446400	7.40	107113	10.49	209407	12.81
02 INTRA-LAB CH	319203	7.40	77050	10.49	184286	12.81
03 BH-SED-17-0	425899	7.41	101617	10.49	181290	12.81
04 BH-SED-18-0	388275	7.41	90519	10.49	166920	12.81
05						
06						
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22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

GC/MS Semivolatiles

Lot-Sample #....: C9C110188-001	Work Order #....: K8CXQ1AC	Matrix.....: SOLID
Date Sampled....: 03/10/09	Date Received...: 03/11/09	MS Run #.....: 9071018
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071030	Analysis Time...: 20:01	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 57	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Methylnaphthalene	410	160	ug/kg	30
1-Methylnaphthalene	180	160	ug/kg	23
Naphthalene	2400	160	ug/kg	23
Acenaphthylene	1100	160	ug/kg	31
Acenaphthene	150 J	160	ug/kg	25
Fluorene	510	160	ug/kg	23
Phenanthrene	2800	160	ug/kg	18
Anthracene	1400	770	ug/kg	27
Fluoranthene	7500	160	ug/kg	13
Pyrene	6900	160	ug/kg	41
Benzo (a) anthracene	4200	160	ug/kg	25
Chrysene	3600	160	ug/kg	27
Benzo (b) fluoranthene	6000	160	ug/kg	31
Benzo (k) fluoranthene	1600	160	ug/kg	32
Benzo (a) pyrene	5000	160	ug/kg	43
Indeno (1,2,3-cd) pyrene	2500	160	ug/kg	8.5
Dibenzo (a,h) anthracene	810	160	ug/kg	34
Benzo (ghi) perylene	2700	160	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-18-0

GC/MS Semivolatiles

Lot-Sample #....: C9C110188-003	Work Order #....: K8C061AC	Matrix.....: SOLID
Date Sampled....: 03/10/09	Date Received...: 03/11/09	MS Run #.....: 9071018
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071030	Analysis Time...: 19:05	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 75	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Methylnaphthalene	1400	270	ug/kg	53
1-Methylnaphthalene	560	270	ug/kg	41
Naphthalene	24000	270	ug/kg	39
Acenaphthylene	810	270	ug/kg	54
Acenaphthene	200 J	270	ug/kg	43
Fluorene	910	270	ug/kg	41
Phenanthrene	1800	270	ug/kg	32
Anthracene	2000	1300	ug/kg	47
Fluoranthene	14000	270	ug/kg	23
Pyrene	10000	270	ug/kg	72
Benzo (a) anthracene	6500	270	ug/kg	43
Chrysene	6100	270	ug/kg	47
Benzo (b) fluoranthene	6300	270	ug/kg	55
Benzo (k) fluoranthene	3500	270	ug/kg	56
Benzo (a) pyrene	7000	270	ug/kg	76
Indeno (1,2,3-cd) pyrene	2900	270	ug/kg	15
Dibenzo (a,h) anthracene	820	270	ug/kg	60
Benzo (ghi) perylene	3100	270	ug/kg	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C110188

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-17-0	0 D	0 D	0 D	0 D	0 D	0 D	06
02	BH-SED-18-0	0 D	0 D	0 D	0 D	0 D	0 D	06
03	METHOD BLK. K8D1M1AA	56	85	59	58	58	63	00
04	LCS K8D1M1AC	60	69	65	58	58	71	00
05	BH-SED-18-0 D	0 D	0 D	0 D	0 D	0 D	0 D	06
06	BH-SED-18-0 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATESQC LIMITS

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120000

WO #: K8D1M1AC

BATCH: 9071030

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	194	58	39 - 105	
2-Chlorophenol	333	198	59	40 - 105	
1,4-Dichlorobenzene	333	197	59	41 - 101	
N-Nitrosodi-n-propylamine	333	203	61	42 - 108	
1,2,4-Trichlorobenzene	333	198	59	41 - 105	
4-Chloro-3-methylphenol	333	210	63	43 - 110	
Acenaphthene	333	210	63	42 - 104	
4-Nitrophenol	333	229	69	27 - 131	
2,4-Dinitrotoluene	333	224	67	48 - 118	
Pentachlorophenol	333	211	63	18 - 125	
Pyrene	333	214	64	39 - 113	
4-Methylphenol	667	389	58	43 - 107	
Hexachloroethane	333	196	59	40 - 102	
Naphthalene	333	201	60	42 - 104	
4-Bromophenyl phenyl ethe	333	217	65	43 - 111	
Butyl benzyl phthalate	333	204	61	40 - 117	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-18-0

Level: (low/med) LOW

Lot #: C9C110188

WO #: K8C061AW

BATCH: 9071030

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	1350	ND		0*	39 - 105	NC DIL
2-Chlorophenol	1350	ND		0*	40 - 105	NC DIL
1,4-Dichlorobenzene	1350	ND		0*	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	1350	ND		0*	42 - 108	NC DIL
1,2,4-Trichlorobenzene	1350	ND		0*	41 - 105	NC DIL
4-Chloro-3-methylphenol	1350	ND		0*	43 - 110	NC DIL
Acenaphthene	1350	200		0*	42 - 104	NC DIL
4-Nitrophenol	1350	ND		0*	27 - 131	NC DIL
2,4-Dinitrotoluene	1350	ND		0*	48 - 118	NC DIL
Pentachlorophenol	1350	ND		0*	18 - 125	NC DIL
Pyrene	1350	10000		0*	39 - 113	NC DIL
4-Methylphenol	2700	1900		0*	43 - 107	NC DIL
Hexachloroethane	1350	ND		0*	40 - 102	NC DIL
Naphthalene	1350	24000		0*	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	1350	ND		0*	43 - 111	NC DIL
Butyl benzyl phthalate	1350	ND		0*	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-18-0

Level: (low/med) LOW

Lot #: C9C110188

WO #: K8C061AX

BATCH: 9071030

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	1350		0*		40	39 - 105	NC DIL
2-Chlorophenol	1350		0*		37	40 - 105	NC DIL
1,4-Dichlorobenzene	1350		0*		32	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	1350		0*		32	42 - 108	NC DIL
1,2,4-Trichlorobenzene	1350		0*		36	41 - 105	NC DIL
4-Chloro-3-methylphenol	1350		0*		31	43 - 110	NC DIL
Acenaphthene	1350		0*		34	42 - 104	NC DIL
4-Nitrophenol	1350		0*		33	27 - 131	NC DIL
2,4-Dinitrotoluene	1350		0*		33	48 - 118	NC DIL
Pentachlorophenol	1350		0*		34	18 - 125	NC DIL
Pyrene	1350		0*		28	39 - 113	NC DIL
4-Methylphenol	2700		0*		36	43 - 107	NC DIL
Hexachloroethane	1350		0*		34	40 - 102	NC DIL
Naphthalene	1350		0*		25	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	1350		0*		20	43 - 111	NC DIL
Butyl benzyl phthalate	1350		0*		34	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limits

Spike Recovery: 16 out of 16 outside limits

COMMENTS:

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9C110188
MB Lot-Sample #: C9C120000-030

Work Order #...: K8D1M1AA

Matrix.....: SOLID

Analysis Date...: 03/12/09
Dilution Factor: 0.5

Prep Date.....: 03/12/09
Prep Batch #...: 9071030
Initial Wgt/Vol: 30 g
Analyst ID.....: 403801

Analysis Time...: 18:27
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 732

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg	SW846 8270C
Naphthalene	ND	3.4	ug/kg	SW846 8270C
Acenaphthylene	ND	3.4	ug/kg	SW846 8270C
Acenaphthene	ND	3.4	ug/kg	SW846 8270C
Fluorene	ND	3.4	ug/kg	SW846 8270C
Phenanthrene	ND	3.4	ug/kg	SW846 8270C
Anthracene	ND	16	ug/kg	SW846 8270C
Fluoranthene	ND	3.4	ug/kg	SW846 8270C
Pyrene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg	SW846 8270C
Chrysene	ND	3.4	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg	SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	3.4	ug/kg	SW846 8270C
Dibenzo (a,h) anthracene	ND	3.4	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(27 - 110)
Terphenyl-d14	85	(21 - 130)
2-Fluorobiphenyl	59	(28 - 108)
2-Fluorophenol	58	(28 - 107)
Phenol-d5	58	(30 - 112)
2,4,6-Tribromophenol	63	(21 - 116)

NOTE (S) :

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

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K8D1M1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: D0312010.

Lot Number: C9C110188

Date Analyzed: 03/12/09

Time Analyzed: 18:27

Matrix: SOLID

Date Extracted:03/12/09

GC Column: DB5 ID: .32

Extraction Method:

Instrument ID: 732

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	BH-SED-17-0	K8CXQ1AC	D0312015.	03/12/09	20:01
02	BH-SED-18-0	K8C061AC	D0312012.	03/12/09	19:05
03	BH-SED-18-0	K8C061AW S	D0312013.	03/12/09	19:24
04	BH-SED-18-0	K8C061AX D	D0312014.	03/12/09	19:42
05	CHECK SAMPLE	K8D1M1AC C	D0312011.	03/12/09	18:46
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9C110188
 Lab File ID (Standard): D0312CC1 Date Analyzed: 03/12/09
 Instrument ID: 732 Time Analyzed: 1503

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	111391	4.19	504301	5.17	381963	6.51
UPPER LIMIT	222782	4.69	1008602	5.67	763926	7.01
LOWER LIMIT	55696	3.69	252151	4.67	190982	6.01
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	116501	4.19	510561	5.17	360932	6.51
02 INTRA-LAB CH	118926	4.19	554623	5.17	393718	6.51
03 BH-SED-18-0	108652	4.20	470069	5.17	382137	6.52
04 BH-SED-18-0	111168	4.19	495163	5.17	379714	6.51
05 BH-SED-18-0	117774	4.19	526014	5.17	407351	6.52
06 BH-SED-17-0	114159	4.20	500848	5.17	384766	6.52
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C9C110188
Lab File ID (Standard): D0312CC1 Date Analyzed: 03/12/09
Instrument ID: 732 Time Analyzed: 1503

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	689983	7.64	636539	9.67	516031	10.85
UPPER LIMIT	1379966	8.14	1273078	10.17	1032062	11.35
LOWER LIMIT	344992	7.14	318270	9.17	258016	10.35
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	664657	7.65	551625	9.67	470289	10.86
02 INTRA-LAB CH	717212	7.65	727036	9.67	475927	10.86
03 BH-SED-18-0	728838	7.66	747538	9.68	625935	10.87
04 BH-SED-18-0	721016	7.65	708083	9.67	636890	10.87
05 BH-SED-18-0	787598	7.65	777591	9.67	714645	10.87
06 BH-SED-17-0	767213	7.66	758575	9.68	675290	10.87
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

TOTAL Metals

Lot-Sample #...: C9C110188-001

Matrix.....: SOLID

Date Sampled...: 03/10/09

Date Received...: 03/11/09

% Moisture.....: 57

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 9071012						
Mercury	1.1	0.038	mg/kg	SW846 7471A	03/12/09	K8CXQ1AR
		Dilution Factor: 0.5		Analysis Time...: 08:46	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0029	
Prep Batch #...: 9071306						
Silver	1.2 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AQ
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0028	
Arsenic	64.6 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AD
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.019	
Beryllium	1.4	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AE
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0043	
Cadmium	3.4	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AF
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.011	
Chromium	233 J	0.23	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AG
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0093	
Copper	154 J	0.23	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AH
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0099	
Nickel	37.8 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AJ
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0079	
Lead	693 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AK
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0039	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

TOTAL Metals

Lot-Sample #...: C9C110188-001

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Selenium	9.9 J	0.58	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AM
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.047	
Thallium	0.52	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AN
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0023	
Zinc	943 J	0.58	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AP
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.014	

Prep Batch #...: 9075181

Antimony	1.6 J	0.23	mg/kg	SW846 6020	03/16/09	K8CXQ1AL
		Dilution Factor: 0.5		Analysis Time...: 14:00	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9075115	MDL.....: 0.0038	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: BH-SKD-18-0

TOTAL Metals

Lot-Sample #...: C9C110188-003

Matrix.....: SOLID

Date Sampled...: 03/10/09

Date Received...: 03/11/09

% Moisture.....: 75

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9071012						
Mercury	1.9	0.067	mg/kg	SW846 7471A	03/12/09	K8C061AR
		Dilution Factor: 0.5		Analysis Time...: 08:48	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0051	
Prep Batch #...: 9071306						
Silver	3.7 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AQ
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0049	
Arsenic	86.7 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AD
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.033	
Beryllium	1.3	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AE
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0075	
Cadmium	6.7	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AF
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.018	
Chromium	794 J	0.41	mg/kg	SW846 6020	03/12-03/16/09	K8C061AG
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.016	
Copper	300 J	0.41	mg/kg	SW846 6020	03/12-03/16/09	K8C061AH
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.017	
Nickel	53.5 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AJ
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.014	
Lead	684 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AK
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0069	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-18-0

TOTAL Metals

Lot-Sample #...: C9C110188-003

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Selenium	19.3 J	1.0	mg/kg	SW846 6020	03/12-03/16/09	K8C061AM
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.082	
Thallium	0.79	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AN
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0041	
Zinc	2500 J	1.0	mg/kg	SW846 6020	03/12-03/16/09	K8C061AP
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.024	

Prep Batch #...: 9075181

Antimony	3.7 J	0.41	mg/kg	SW846 6020	03/16/09	K8C061AL
		Dilution Factor: 0.5		Analysis Time...: 13:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9075115	MDL.....: 0.0067	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9C110188

Matrix.....: SOLID

REPORTING				PREPARATION-	WORK	
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
MB Lot-Sample #: C9C120000-012 Prep Batch #....: 9071012						
Mercury	ND	0.016	mg/kg	SW846 7471A	03/12/09	K8D0J1AA
		Dilution Factor: 0.5				
		Analysis Time...: 08:22		Analyst ID.....: 031043		Instrument ID...: HGH
MB Lot-Sample #: C9C120000-306 Prep Batch #....: 9071306						
Arsenic	0.019 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AA
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Beryllium	ND	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AC
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Cadmium	ND	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AD
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Chromium	0.37	0.10	mg/kg	SW846 6020	03/12-03/16/09	K8E021AE
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Copper	0.011 B	0.10	mg/kg	SW846 6020	03/12-03/16/09	K8E021AF
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Lead	0.011 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AH
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Nickel	0.016 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AG
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Selenium	0.047 B	0.25	mg/kg	SW846 6020	03/12-03/16/09	K8E021AK
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP
Silver	0.0052 B	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AN
		Dilution Factor: 0.5				
		Analysis Time...: 09:15		Analyst ID.....: 401509		Instrument ID...: ICP

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Thallium	ND	0.050	mg/kg	SW846 6020	03/12-03/16/09	K8E021AL
Dilution Factor: 0.5						
Analysis Time..: 09:15 Analyst ID.....: 401509 Instrument ID...: ICP						
Zinc	0.26	0.25	mg/kg	SW846 6020	03/12-03/16/09	K8E021AM
Dilution Factor: 0.5						
Analysis Time..: 09:15 Analyst ID.....: 401509 Instrument ID...: ICP						

MB Lot-Sample #: C9C160000-181 Prep Batch #...: 9075181

Antimony	0.0060 B	0.10	mg/kg	SW846 6020	03/16/09	K8KM41AA
Dilution Factor: 0.5						
Analysis Time..: 13:14 Analyst ID.....: 401509 Instrument ID...: ICP						

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C120000-012 Prep Batch #... : 9071012					
Mercury	100	(80 - 120)	SW846 7471A	03/12/09	K8D0J1AC
		Dilution Factor: 0.5	Analysis Time...: 08:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C120000-306 Prep Batch #... : 9071306					
Arsenic	86	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AP
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Beryllium	88	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AQ
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Cadmium	90	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AR
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Chromium	107	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AT
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Copper	103	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AU
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Nickel	104	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AV
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Lead	94	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021AW
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Selenium	101	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A0
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Thallium	92	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A1
		Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	86	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A2
Dilution Factor: 0.5 Analysis Time...: 09:19 Analyst ID.....: 401509					
Instrument ID...: ICPMS					
Silver	104	(80 - 120)	SW846 6020	03/12-03/16/09	K8E021A3
Dilution Factor: 0.5 Analysis Time...: 09:19 Analyst ID.....: 401509					
Instrument ID...: ICPMS					
LCS Lot-Sample#: C9C160000-181 Prep Batch #...: 9075181					
Antimony	78	(80 - 120)	SW846 6020	03/16/09	K8KM41AC
Dilution Factor: 0.5 Analysis Time...: 13:18 Analyst ID.....: 401509					
Instrument ID...: ICPMS					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C120000-012 Prep Batch #...: 9071012							
Mercury	0.208	0.208	mg/kg	100	SW846 7471A	03/12/09	K8D0J1AC
				Dilution Factor: 0.5	Analysis Time...: 08:24	Analyst ID.....: 031043	
				Instrument ID...: HGHYDRA			
LCS Lot-Sample#: C9C120000-306 Prep Batch #...: 9071306							
Arsenic	2.00	1.71	mg/kg	86	SW846 6020	03/12-03/16/09	K8E021AP
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Beryllium	2.50	2.19	mg/kg	88	SW846 6020	03/12-03/16/09	K8E021AQ
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Cadmium	2.50	2.25	mg/kg	90	SW846 6020	03/12-03/16/09	K8E021AR
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Chromium	10.0	10.7	mg/kg	107	SW846 6020	03/12-03/16/09	K8E021AT
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Copper	12.5	12.9	mg/kg	103	SW846 6020	03/12-03/16/09	K8E021AU
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Nickel	25.0	25.9	mg/kg	104	SW846 6020	03/12-03/16/09	K8E021AV
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Lead	1.00	0.944	mg/kg	94	SW846 6020	03/12-03/16/09	K8E021AW
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Selenium	0.500	0.504	mg/kg	101	SW846 6020	03/12-03/16/09	K8E021A0
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Thallium	2.50	2.31	mg/kg	92	SW846 6020	03/12-03/16/09	K8E021A1
				Dilution Factor: 0.5	Analysis Time...: 09:19	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	25.0	21.6	mg/kg	86	SW846 6020	03/12-03/16/09	K8E021A2
Dilution Factor: 0.5 Analysis Time...: 09:19 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Silver	2.50	2.61	mg/kg	104	SW846 6020	03/12-03/16/09	K8E021A3
Dilution Factor: 0.5 Analysis Time...: 09:19 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
LCS Lot-Sample#: C9C160000-181 Prep Batch #...: 9075181							
Antimony	25.0	19.5	mg/kg	78	SW846 6020	03/16/09	K8KM41AC
Dilution Factor: 0.5 Analysis Time...: 13:18 Analyst ID.....: 401509							
Instrument ID...: ICPMS							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C050210-003 Prep Batch #...: 9071012

% Moisture.....: 46

Mercury	56 N	(75 - 125)		SW846 7471A	03/12/09	K737M1CT
	84	(75 - 125) 15	(0-20)	SW846 7471A	03/12/09	K737M1CU

Dilution Factor: 0.5

Analysis Time...: 08:29

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9071004

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

Date Sampled...: 03/04/09

Date Received...: 03/05/09

PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	PERCNT	RECVRY	RPD	METHOD	PREPARATION-	WORK
									ANALYSIS DATE	ORDER #

MS Lot-Sample #: C9C050210-003 Prep Batch #...: 9071012

% Moisture.....: 46

Mercury

0.17	0.153	0.258	N mg/kg	56		SW846	7471A	03/12/09	K737M1CT
0.17	0.153	0.301	mg/kg	84	15	SW846	7471A	03/12/09	K737M1CU

Dilution Factor: 0.5

Analysis Time...: 08:29

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9071004

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C100191-001 Prep Batch #...: 9071306							
% Moisture.....: 63							
Arsenic	NC	(75 - 125)			SW846 6020	03/12-03/16/09	K795D1AV
	NC	(75 - 125)	(0-20)		SW846 6020	03/12-03/16/09	K795D1AW
Dilution Factor: 0.5							
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9071175							
Beryllium	88	(75 - 125)			SW846 6020	03/12-03/16/09	K795D1AX
	97	(75 - 125)	8.2 (0-20)		SW846 6020	03/12-03/16/09	K795D1A0
Dilution Factor: 0.5							
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9071175							
Cadmium	73 N	(75 - 125)			SW846 6020	03/12-03/16/09	K795D1A1
	79	(75 - 125)	5.6 (0-20)		SW846 6020	03/12-03/16/09	K795D1A2
Dilution Factor: 0.5							
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9071175							
Chromium	NC	(75 - 125)			SW846 6020	03/12-03/16/09	K795D1A3
	NC	(75 - 125)	(0-20)		SW846 6020	03/12-03/16/09	K795D1A4
Dilution Factor: 0.5							
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9071175							
Copper	22 N	(75 - 125)			SW846 6020	03/12-03/16/09	K795D1A5
	37 N	(75 - 125)	4.6 (0-20)		SW846 6020	03/12-03/16/09	K795D1A6
Dilution Factor: 0.5							
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9071175							
Lead	NC	(75 - 125)			SW846 6020	03/12-03/16/09	K795D1A9
	NC	(75 - 125)	(0-20)		SW846 6020	03/12-03/16/09	K795D1CA
Dilution Factor: 0.5							
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9071175							
Nickel	81	(75 - 125)			SW846 6020	03/12-03/16/09	K795D1A7
	81	(75 - 125)	0.16 (0-20)		SW846 6020	03/12-03/16/09	K795D1A8
Dilution Factor: 0.5							
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9071175							

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	NC	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CE
	NC	(75 - 125)	(0-20)	SW846 6020	03/12-03/16/09	K795D1CF
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Silver	89	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CL
	94	(75 - 125)	4.9 (0-20)	SW846 6020	03/12-03/16/09	K795D1CM
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Thallium	85	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CG
	90	(75 - 125)	5.1 (0-20)	SW846 6020	03/12-03/16/09	K795D1CH
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						
Zinc	NC	(75 - 125)		SW846 6020	03/12-03/16/09	K795D1CJ
	NC	(75 - 125)	(0-20)	SW846 6020	03/12-03/16/09	K795D1CK
Dilution Factor: 0.5						
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9071175						

MS Lot-Sample #: C9C100191-001 Prep Batch #....: 9075181

% Moisture.....: 63

Antimony	39 N	(75 - 125)		SW846 6020	03/16/09	K795D1CC
	40 N	(75 - 125)	3.1 (0-20)	SW846 6020	03/16/09	K795D1CD
Dilution Factor: 0.5						
Analysis Time...: 13:31 Instrument ID...: ICPMS Analyst ID.....: 401509						
MS Run #.....: 9075115						

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

PARAMETER	AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C100191-001 Prep Batch #...: 9071306

% Moisture.....: 63

Arsenic

38.5	5.37	36.6	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1AV
38.5	5.37	37.3	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1AW
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Beryllium

1.4	6.71	7.29		mg/kg	88		SW846 6020	03/12-03/16/09	K795D1AX
1.4	6.71	7.91		mg/kg	97	8.2	SW846 6020	03/12-03/16/09	K795D1A0
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Cadmium

2.1	6.71	6.98	N	mg/kg	73		SW846 6020	03/12-03/16/09	K795D1A1
2.1	6.71	7.38		mg/kg	79	5.6	SW846 6020	03/12-03/16/09	K795D1A2
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Chromium

164	26.8	157	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1A3
164	26.8	166	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1A4
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Copper

98.5	33.5	106	N	mg/kg	22		SW846 6020	03/12-03/16/09	K795D1A5
98.5	33.5	111	N	mg/kg	37	4.6	SW846 6020	03/12-03/16/09	K795D1A6
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

Lead

333	2.68	257	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1A9
333	2.68	270	NC	mg/kg			SW846 6020	03/12-03/16/09	K795D1CA
Dilution Factor: 0.5									
Analysis Time...: 09:32 Instrument ID...: ICPMS Analyst ID.....: 401509									
MS Run #.....: 9071175									

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	36.0	67.1	90.2	mg/kg	81		SW846 6020	03/12-03/16/09	K795D1A7
	36.0	67.1	90.1	mg/kg	81	0.16	SW846 6020	03/12-03/16/09	K795D1A8
Dilution Factor: 0.5									
Analysis Time...: 09:32									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9071175									
Selenium	6.6	1.34	6.74	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CE
	6.6	1.34	7.06	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CF
Dilution Factor: 0.5									
Analysis Time...: 09:32									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9071175									
Silver	0.70	6.71	6.66	mg/kg	89		SW846 6020	03/12-03/16/09	K795D1CL
	0.70	6.71	6.99	mg/kg	94	4.9	SW846 6020	03/12-03/16/09	K795D1CM
Dilution Factor: 0.5									
Analysis Time...: 09:32									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9071175									
Thallium	0.36	6.71	6.09	mg/kg	85		SW846 6020	03/12-03/16/09	K795D1CG
	0.36	6.71	6.41	mg/kg	90	5.1	SW846 6020	03/12-03/16/09	K795D1CH
Dilution Factor: 0.5									
Analysis Time...: 09:32									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9071175									
Zinc	510	67.1	435	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CJ
	510	67.1	470	NC mg/kg			SW846 6020	03/12-03/16/09	K795D1CK
Dilution Factor: 0.5									
Analysis Time...: 09:32									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9071175									

MS Lot-Sample #: C9C100191-001 Prep Batch #....: 9075181

% Moisture.....: 63

Antimony

1.2	67.1	27.2	N mg/kg	39		SW846 6020	03/16/09	K795D1CC
1.2	67.1	28.1	N mg/kg	40	3.1	SW846 6020	03/16/09	K795D1CD
Dilution Factor: 0.5								
Analysis Time...: 13:31								
Instrument ID...: ICPMS								
Analyst ID.....: 401509								
MS Run #.....: 9075115								

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C110188

Matrix.....: SOLID

Date Sampled...: 03/09/09

Date Received...: 03/10/09

NOTE(S) :

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

NC The recovery and/or RPD were not calculated.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C110188

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-17-0	C9C110188 001	K8CXQ1AT	2.0	mg/kg	0.20	1.2	1	3/12/2009 - 3/12/2009 12:27	9071146
BH-SED-18-0	C9C110188 003	K8C061AT	53.3	mg/kg	0.35	2.0	1	3/12/2009 - 3/12/2009 12:30	9071146

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Lot Number: C9C110188

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-17-0	C9C110188 001	K8CXQ1AA	43.1	%	0.0	1.0	1	3/13/2009 - 3/14/2009 08:02	9072260
BH-SED-17-TOC	C9C110188 002	K8C041AC	60.2	%	0.0	1.0	1	3/19/2009 - 3/20/2009 07:00	9078357
BH-SED-18-0	C9C110188 003	K8C061AA	24.7	%	0.0	1.0	1	3/13/2009 - 3/14/2009 08:02	9072260
BH-SED-18-TOC	C9C110188 004	K8C071AC	49.5	%	0.0	1.0	1	3/19/2009 - 3/20/2009 07:00	9078357

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9C110188

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-17-TOC	C9C110188 002	K8C041AA	18700	mg/kg	204	1790	2.15	3/14/2009 - 3/14/2009 14:05	9073023
BH-SED-18-TOC	C9C110188 004	K8C071AA	13600	mg/kg	218	1910	1.89	3/14/2009 - 3/14/2009 14:15	9073023

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Report ID: C9C110188

Matrix: SOLID

Date/Time Received: 3/11/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C120000146B	146 MB	K8ECE1AA	ND	mg/kg	0.50	3/12/2009 - 3/12/2009 12:27	9071146	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Report ID: C9C110188

Matrix: SOLID

Date/Time Received: 3/11/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-17-0 DUP	001 DUP	K8CXQ1A0	42.1	%	1.0	3/13/2009 - 3/14/2009 08:02	9072260	2.2 / 20
BH-SED-17-TOC DUP	002 DUP	K8C041AD	60.7	%	1.0	3/19/2009 - 3/20/2009 07:00	9078357	0.82 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method: EPA Lloyd Kahn

Client Name: Maryland Environmental Service

Report ID: C9C110188

Matrix: SOLID

Date/Time Received: 3/11/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C140000023B	023 MB	K8JPL1AA	ND	mg/kg	1250	3/14/2009 - 3/14/2009 13:34	9073023	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C120000

Matrix: SOLID

Date/Time Received: 3/11/2009 10:00:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K8ECE1AC	141	41 - 159	3/12/2009 - 3/12/2009 12:27	9071146	
BH-SED-17-0	MS	K8CXQ1AW	86	75 - 125	3/12/2009 - 3/12/2009 12:30	9071146	43 / 20
BH-SED-17-0	MSD	K8CXQ1AX	142 N *	75 - 125	3/12/2009 - 3/12/2009 12:30	9071146	43 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C120252
 Date/Time Received: 3/12/2009 10:00:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
LAB MS/MSD	MSD	K8FH61AG	100	75 - 125	3/14/2009 - 3/14/2009 16:17	9073023	18 / 20
LAB MS/MSD	MS	K8FH61AF	99	75 - 125	3/14/2009 - 3/14/2009 16:07	9073023	18 / 20
CHECK SAMPLE	LCS	K8JPL1AC	101	75 - 125	3/14/2009 - 3/14/2009 13:44	9073023	3.1 / 20
DUPLICATE CHECK	LCSD	K8JPL1AD	105	75 - 125	3/14/2009 - 3/14/2009 13:54	9073023	3.1 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C110188

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-17-0	C9C110188-001	Soil
1MS*	BH-SED-17-0MS	C9C110188-001MS	Soil
1MSD*	BH-SED-17-0MSD	C9C110188-001MSD	Soil
2	BH-SED-18-0	C9C110188-003	Soil

* MS/MSD - Cyanide Only

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
1	Cyanide	Ok/142%/Ok	K	All Samples

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

MES Sparrows Point 18001868

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Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: SW846 9012A
Lot Number: C9C110188

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-17-0	C9C110188 001	K8CXQ1AT	2.0	mg/kg	0.20	1.2	1	3/12/2009 - 3/12/2009 12:27	9071146
BH-SED-18-0	C9C110188 003	K8C061AT	53.3	mg/kg	0.35	2.0	1	3/12/2009 - 3/12/2009 12:30	9071146

MES Sparrows Point 18001868

142


TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: EPA Lloyd Kahn
Lot Number: C9C110188

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-17-TOC	C9C110188 002	K8C041AA	18700	mg/kg	204	1790	2.15	3/14/2009 - 3/14/2009 14:05	9073023
BH-SED-18-TOC	C9C110188 004	K8C071AA	13800	mg/kg	218	1910	1.89	3/14/2009 - 3/14/2009 14:15	9073023


4/29/09

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C110188

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-17-0	C9C110188-001	Soil
2	BH-SED-18-0	C9C110188-003	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R values except the following:

MS Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
Reference	Mercury	56%/Ok/Ok	L/UL	All Samples
	Cadmium	73%/Ok/Ok	L/UL	
	Copper	22%/37%/Ok	L/UL	
	Antimony	39%/40%/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - ICP serial dilution samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

TOTAL Metals

Lot-Sample #....: C9C110188-001

Matrix.....: SOLID

Date Sampled....: 03/10/09

Date Received...: 03/11/09

% Moisture.....: 57

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9071012						
Mercury	1.1 L	0.038	mg/kg	SW846 7471A	03/12/09	K8CXQ1AR
		Dilution Factor: 0.5		Analysis Time...: 08:46	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004	MDL.....: 0.0029	
Prep Batch #....: 9071306						
Silver	1.2 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AQ
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0028	
Arsenic	64.6 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AD
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.019	
Beryllium	1.4	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AE
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0043	
Cadmium	3.4 L	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AF
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.011	
Chromium	233 J	0.23	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AG
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0093	
Copper	154 J L	0.23	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AH
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0099	
Nickel	37.8 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AJ
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0079	
Lead	693 J	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AK
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0039	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

TOTAL Metals

Lot-Sample #....: C9C110188-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	9.9 J/	0.58	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AM
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.047	
Thallium	0.52	0.12	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AN
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0023	
Zinc	943 J/	0.58	mg/kg	SW846 6020	03/12-03/16/09	K8CXQ1AP
		Dilution Factor: 0.5		Analysis Time...: 09:45	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.014	

Prep Batch #....: 9075181

Antimony	1.6 J/	0.23	mg/kg	SW846 6020	03/16/09	K8CXQ1AL
		Dilution Factor: 0.5		Analysis Time...: 14:00	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9075115	MDL.....: 0.0038	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

4/29/09

Maryland Environmental Service

Client Sample ID: BH-SKD-18-0

TOTAL Metals

Lot-Sample #....: C9C110188-003

Matrix.....: SOLID

Date Sampled....: 03/10/09

Date Received...: 03/11/09

% Moisture.....: 75

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9071012						
Mercury	1.9 L	0.067	mg/kg	SW846 7471A	03/12/09	K8C061AR
		Dilution Factor: 0.5		Analysis Time...: 08:48		Analyst ID.....: 031043
		Instrument ID...: HGHYDRA		MS Run #.....: 9071004		MDL.....: 0.0051
Prep Batch #....: 9071306						
Silver	3.7 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AQ
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0049
Arsenic	86.7 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AD
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0033
Beryllium	1.3	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AE
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0075
Cadmium	6.7 L	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AF
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0018
Chromium	794 J	0.41	mg/kg	SW846 6020	03/12-03/16/09	K8C061AG
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0016
Copper	300 J L	0.41	mg/kg	SW846 6020	03/12-03/16/09	K8C061AH
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0017
Nickel	53.5 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AJ
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0014
Lead	684 J	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AK
		Dilution Factor: 0.5		Analysis Time...: 09:40		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9071175		MDL.....: 0.0069

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-18-0

TOTAL Metals

Lot-Sample #....: C9C110188-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	19.3 <i>J</i>	1.0	mg/kg	SW846 6020	03/12-03/16/09	K8C061AM
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.082	
Thallium	0.79	0.20	mg/kg	SW846 6020	03/12-03/16/09	K8C061AN
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.0041	
Zinc	2500 <i>J</i>	1.0	mg/kg	SW846 6020	03/12-03/16/09	K8C061AP
		Dilution Factor: 0.5		Analysis Time...: 09:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9071175	MDL.....: 0.024	
Prep Batch #....: 9075181						
Antimony	3.7 <i>J/L</i>	0.41	mg/kg	SW846 6020	03/16/09	K8C061AL
		Dilution Factor: 0.5		Analysis Time...: 13:40	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9075115	MDL.....: 0.0067	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

POLYNUCLEAR AROMATIC HYDRCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C110188

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-17-0	C9C110188-001	Soil
2	BH-SED-18-0	C9C110188-003	Soil
2MS	BH-SED-18-0MS	C9C110188-003MS	Soil
2MSD	BH-SED-18-0MSD	C9C110188-003MSD	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SKD-17-0

GC/MS Semivolatiles

Lot-Sample #....: C9C110188-001 Work Order #....: K8CXQ1AC Matrix.....: SOLID
 Date Sampled....: 03/10/09 Date Received...: 03/11/09 MS Run #.....: 9071018
 Prep Date.....: 03/12/09 Analysis Date...: 03/12/09
 Prep Batch #....: 9071030 Analysis Time...: 20:01
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 57 Analyst ID.....: 403801 Instrument ID...: 732
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Methylnaphthalene	410	160	ug/kg	30
1-Methylnaphthalene	180	160	ug/kg	23
Naphthalene	2400	160	ug/kg	23
Acenaphthylene	1100	160	ug/kg	31
Acenaphthene	150 J	160	ug/kg	25
Fluorene	510	160	ug/kg	23
Phenanthrene	2800	160	ug/kg	18
Anthracene	1400	770	ug/kg	27
Fluoranthene	7500	160	ug/kg	13
Pyrene	6900	160	ug/kg	41
Benzo (a) anthracene	4200	160	ug/kg	25
Chrysene	3600	160	ug/kg	27
Benzo (b) fluoranthene	6000	160	ug/kg	31
Benzo (k) fluoranthene	1600	160	ug/kg	32
Benzo (a) pyrene	5000	160	ug/kg	43
Indeno (1,2,3-cd) pyrene	2500	160	ug/kg	8.5
Dibenzo (a,h) anthracene	810	160	ug/kg	34
Benzo (ghi) perylene	2700	160	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

lw
 4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-18-0

GC/MS Semivolatiles

Lot-Sample #....: C9C110188-003	Work Order #....: K8C061AC	Matrix.....: SOLID
Date Sampled....: 03/10/09	Date Received...: 03/11/09	MS Run #.....: 9071018
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071030	Analysis Time...: 19:05	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 75	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Methylnaphthalene	1400	270	ug/kg	53
1-Methylnaphthalene	560	270	ug/kg	41
Naphthalene	24000	270	ug/kg	39
Acenaphthylene	810	270	ug/kg	54
Acenaphthene	200 J	270	ug/kg	43
Fluorene	910	270	ug/kg	41
Phenanthrene	1800	270	ug/kg	32
Anthracene	2000	1300	ug/kg	47
Fluoranthene	14000	270	ug/kg	23
Pyrene	10000	270	ug/kg	72
Benzo (a) anthracene	6500	270	ug/kg	43
Chrysene	6100	270	ug/kg	47
Benzo (b) fluoranthene	6300	270	ug/kg	55
Benzo (k) fluoranthene	3500	270	ug/kg	56
Benzo (a) pyrene	7000	270	ug/kg	76
Indeno (1,2,3-cd) pyrene	2900	270	ug/kg	15
Dibenzo (a,h) anthracene	820	270	ug/kg	60
Benzo (ghi) perylene	3100	270	ug/kg	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)


NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.


 4/29/09
 27

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C110188

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-17-0	C9C110188-001	Soil
2	BH-SED-18-0	C9C110188-003	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
01/16/09	Acrolein	0.043	L/R	All

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-17-0

GC/MS Volatiles

Lot-Sample #....: C9C110188-001	Work Order #....: K8CXQ1AV	Matrix.....: SOLID
Date Sampled....: 03/10/09	Date Received...: 03/11/09	MS Run #.....: 9071074
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071060	Analysis Time...: 10:57	
Dilution Factor: 0.91	Initial Wgt/Vol: 5.49 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 57	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.93
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.94
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.6
Chloroform	ND	11	ug/kg	1.2
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.3
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.1
cis-1,3-Dichloropropene	ND	11	ug/kg	1.4
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	ND	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.4
Toluene	ND	11	ug/kg	1.5
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	1.9
Vinyl chloride	ND	11	ug/kg	0.99

(Continued on next page)

lw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SKD-17-0

GC/MS Volatiles

Lot-Sample #...: C9C110188-001 Work Order #...: K8CXQ1AV

Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	86	(52 - 124)
Toluene-d8	96	(72 - 127)
4-Bromofluorobenzene	107	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

2

Maryland Environmental Service

Client Sample ID: BH-SKD-18-0

GC/MS Volatiles

Lot-Sample #....: C9C110188-003	Work Order #....: K8C061AV	Matrix.....: SOLID
Date Sampled....: 03/10/09	Date Received...: 03/11/09	MS Run #.....: 9071074
Prep Date.....: 03/12/09	Analysis Date...: 03/12/09	
Prep Batch #....: 9071060	Analysis Time...: 11:22	
Dilution Factor: 0.95	Initial Wgt/Vol: 5.27 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 75	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	390	ug/kg	27
Acrylonitrile	ND	390	ug/kg	40
Benzene	ND	19	ug/kg	2.6
Bromodichloromethane	ND	19	ug/kg	2.2
Bromoform	ND	19	ug/kg	1.7
Bromomethane	ND	19	ug/kg	2.8
2-Butanone (MEK)	ND	19	ug/kg	3.4
Carbon tetrachloride	ND	19	ug/kg	1.7
Chloroethane	ND	19	ug/kg	6.0
2-Chloroethyl vinyl ether	ND	39	ug/kg	3.0
Chloroform	ND	19	ug/kg	2.3
Chloromethane	ND	19	ug/kg	3.3
Dibromochloromethane	ND	19	ug/kg	2.7
1,2-Dichlorobenzene	ND	19	ug/kg	3.1
1,3-Dichlorobenzene	ND	19	ug/kg	2.5
1,4-Dichlorobenzene	ND	19	ug/kg	2.5
trans-1,2-Dichloroethene	ND	19	ug/kg	2.3
Dichlorodifluoromethane	ND	19	ug/kg	2.6
1,1-Dichloroethane	ND	19	ug/kg	2.2
1,2-Dichloroethane	ND	19	ug/kg	2.4
1,1-Dichloroethene	ND	19	ug/kg	3.3
1,2-Dichloropropane	ND	19	ug/kg	2.1
cis-1,3-Dichloropropene	ND	19	ug/kg	2.6
trans-1,3-Dichloropropene	ND	19	ug/kg	2.3
Ethylbenzene	ND	19	ug/kg	2.5
Methylene chloride	ND	19	ug/kg	2.6
1,1,2,2-Tetrachloroethane	ND	19	ug/kg	2.8
Tetrachloroethene	ND	19	ug/kg	2.6
Toluene	ND	19	ug/kg	2.8
1,1,1-Trichloroethane	ND	19	ug/kg	1.9
1,1,2-Trichloroethane	ND	19	ug/kg	3.2
Trichloroethene	ND	19	ug/kg	2.5
Trichlorofluoromethane	ND	19	ug/kg	3.5
Vinyl chloride	ND	19	ug/kg	1.8

(Continued on next page)

lw
4/29/09

2

Maryland Environmental Service

Client Sample ID: BH-SED-18-0

GC/MS Volatiles

Lot-Sample #....: C9C110188-003 Work Order #....: K8C061AV Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	84	(52 - 124)
Toluene-d8	100	(72 - 127)
4-Bromofluorobenzene	110	(63 - 120)
Dibromofluoromethane	97	(68 - 121)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9C110197

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 30, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C110197

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 11, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory performed the moisture and the grain size analyses. All data is included in the data package.

TestAmerica Laboratories, Inc.

March 20, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9C110197

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on March 12th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/12/09 ETR No: 130586			
788117	BH-SED-17-0	03/10/09	SOLID
788118	BH-SED-18-0	03/10/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

There were no exceptions to the method quality control criteria during the analyses of these samples by ASTM Methods D422 and D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, reading "Ron Pentkowski".

Ron Pentkowski
Project Manager

Enclosure

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA ENG. Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 3/11/9

Coolers Opened and Unpacked on: 3/11/9 By: JO

TestAmerica Pittsburgh Lot Number: _____

JO 3/11/9
C9C110100 (Signature)
C9C110197

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

Explain any discrepancies: _____

Level 2 Review _____
Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica.Pittsburgh

UP: Unpreserved

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

Comments:

[illegible]

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

Nitric Acid

Hydrochloric Acid

Sodium Hydroxide

231

500

FedEx US Airbill
ExpressFedEx
Tracking
Number

8565 6932 6775

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.Date 11/01/07

FedEx Tracking Number

856569326775

Sender's
NameTOPS DATA

Phone

410-777-1230

Company

E A ENGINEERING SCIENCE & TECH

Address

19 LOVELTON CIR

Dept./Floor/Suite/Room

City

SPARKS GLENCOE

State

MD

ZIP

21152**2 Your Internal Billing Reference**11/01/06.0002.30000**3 To**Recipient's
NameTOPS DATA

Phone

410-777-1230

Company

E A ENGINEERING SCIENCE & TECHRecipient's
Address19 LOVELTON CIR

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

19 LOVELTON CIR

To request a package be held at a specific FedEx location, print FedEx address here.

City

SPARKS GLENCOE

State

MD

ZIP

21152

8565 6932 6775

0326961024

4a Express Package Service☒ **FedEx Priority Overnight**

Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx Standard Overnight**

Next business afternoon.* Saturday Delivery NOT available.

Packages up to 150 lbs.

☐ **FedEx First Overnight**

Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

☐ **FedEx 2Day**

Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx Express Saver**

Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service☒ **FedEx 1Day Freight***

Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ **FedEx 2Day Freight**

Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

Packages over 150 lbs.

☐ **FedEx 3Day Freight**

Third business day.** Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging☐ **FedEx Envelope***☐ **FedEx Pak***
Includes FedEx Small Pak,
FedEx Large Pak, and FedEx Sturdy Pak.☐ **FedEx Box**☐ **FedEx Tube**☐ **Other**

* Declared value limit \$500.

6 Special Handling☐ **SATURDAY Delivery**Not available for
FedEx Standard Overnight,
FedEx First Overnight, FedEx Express
Saver, or FedEx 3Day Freight.☐ **HOLD Weekday
at FedEx Location**Not available for
FedEx First Overnight.☐ **HQ/ 3 Saturday
at FedEx Location**Available
Ove-
to 1 or FedEx Priority
4Ex 2Day
ns.

Include FedEx address in Section 3.

Does this shipment contain dangerous goods?

One box must be checked.

☐ **No**☐ **Yes**As per attached
Shipper's Declaration.☐ **Yes**Shipper's Declaration
not required.☐ **Dry Ice**

Dry Ice, 9, UN 1845 x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

☐ **Cargo Aircraft Only****7 Payment Bill to:**☒ **Sender**
Acct. No. in Section
1 will be billed.

Enter FedEx Acct. No. or Credit Card No. below.

☐ **Recipient**☐ **Third Party**☐ **Credit Card**☐ **Cash/Check**Ultimate Recip.
Acct. No.

Total Packages

Total Weight

Total Charges

Credit Card Auth.

Your liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.☐ **No Signature
Required**Package may be left with-
out obtaining a signature
for delivery.☐ **Direct Signature**Anyone at recipient's
address may sign for delivery.
Fee applies.☐ **Indirect Signature**If no one is available at
recipient's address, anyone
at a neighboring address may
sign for delivery. Fee applies.

519

Rev. Date 8/05 Part #138279-01/1994-2005 FedEx PRINTED IN U.S.A.-SR5

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C9C110197

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-03-11
Analytical Due Date: 2009-03-30
Report Due Date: 2009-03-31

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-17-0 DATE SAMPLED: 20090310 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8C251AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8C251AA METAL: XX

SMP#: 2 CLIENT ID: BH-SED-18-0 DATE SAMPLED: 20090310 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8C3D1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8C3D1AA METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY:  DATE: 3/11/9

RECEIVED FOR LAB BY:  DATE: 3/12/09 1020

DATA SUMMARY PACKAGE

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9C110197



Sample Data Summary – Geotechnical

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130586
SDG: 9C110197

Start Date:	03/12/09
Start Time:	1700
End Date:	03/13/09
Analyst:	MAP

[illegible]

Particle Size of Soils by ASTM D422

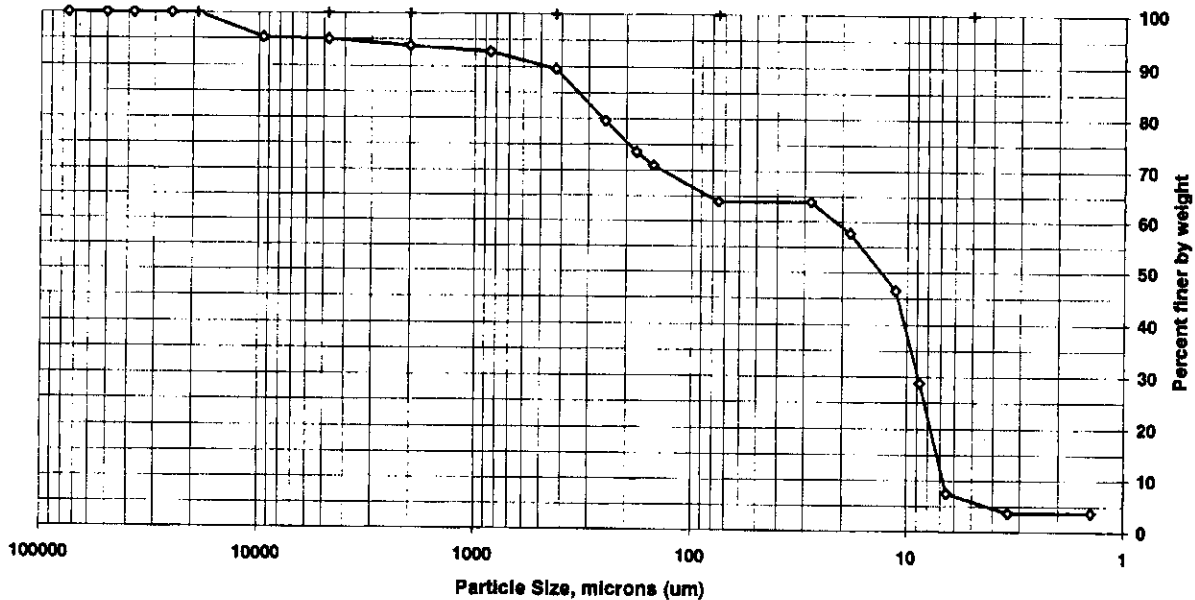
Client Code: STLPAP
 Sample ID: BH-SED-17-0
 Lab ID: 788117

SDG: 9C110197
 ETR(s): 130586

Date Received: 3/12/2009
 Start Date: 3/12/2009
 End Date: 3/17/2009

Percent Solids: 41.6%
 Specific Gravity: 2.650
 Maximum Particle Size: 19 mm

Non-soil material: shells
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	95.3	4.7
#4	4750	95.0	0.3
#10	2000	93.8	1.2
#20	850	92.8	1.0
#40	425	89.6	3.3
#60	250	79.6	10.0
#80	180	73.5	6.1
#100	150	71.0	2.5
#200	75	63.9	7.1
Hydrometer	28.0	63.9	0.0
	18.4	57.7	6.2
	11.3	48.4	11.2
	8.7	28.7	17.7
	6.5	7.5	21.2
	3.4	3.7	3.7
V	1.4	3.7	0.0

Soil Classification	Percent of Total Sample
Gravel	5.0
Sand	31.1
Coarse Sand	1.2
Medium Sand	4.2
Fine Sand	25.6
Silt	56.4
Clay	7.5

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

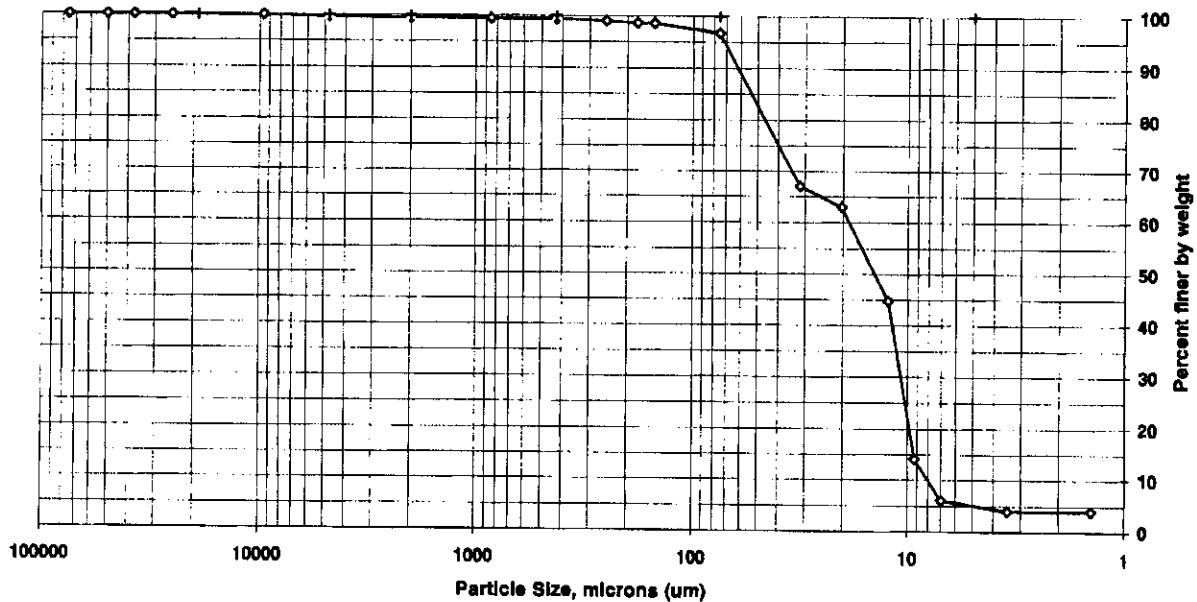
Client Code: STLPAP
 Sample ID: BH-SED-18-0
 Lab ID: 788118

SDG: 9C110197
 ETR(s): 130586

Date Received: 3/12/2009
 Start Date: 3/12/2009
 End Date: 3/17/2009

Percent Solids: 23.6%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: shells
 Shape (> #10): angular
 Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.7	0.3
#10	2000	99.5	0.2
#20	850	99.5	0.0
#40	425	99.4	0.1
#60	250	99.1	0.4
#80	180	98.7	0.4
#100	150	98.6	0.1
#200	75	96.8	1.8
Hydrometer	31.6	67.0	29.8
	20.3	63.0	4.0
	12.3	44.8	18.2
	9.3	14.1	30.6
	7.0	6.1	8.1
	3.4	4.0	2.0
V	1.4	4.0	0.0

Soil Classification	Percent of Total Sample
Gravel	0.3
Sand	2.9
Coarse Sand	0.2
Medium Sand	0.1
Fine Sand	2.7
Silt	90.7
Clay	6.1

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS


MES Sparrows Point 18001868

Lot #: C9C120252

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 30, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pittsburgh.doc

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C120252

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 12, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

The method blank for batch 9076058 had methylene chloride detected between the MDL and the reporting limit. The result was flagged with a "J" qualifier. Any sample in this batch that had this compound detected had the result flagged with a "B" qualifier.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compounds had the %D > 25% in calibration verification standard CC70318; but were within expected performance range for these compounds: 1,2-dibromo-3-chloropropane 25.8%, acetone 39.8%, bromomethane 27.6%, and cyclohexane 29.5%.

The following compounds had the %D > 25% in calibration verification standard AX70318; but were within expected performance range for these compounds: 2-chloroethyl-vinyl ether 36.4%, acrolein 31.2%, and acrylonitrile 29.7%.

GC/MS Semivolatiles:

Due to the concentration of target compounds detected, several samples were analyzed at a dilution. These samples had the surrogates diluted out.

The matrix spike and matrix spike duplicate had the surrogates and the spikes diluted out.

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C120252

GC/MS Semivolatiles (cont) :

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

The following compound had the %D > 25% in calibration verification standard N03170CC; but was within expected performance range for this compound: benzo(b)fluoranthene 25.9%.

Metals:

The serial dilution of sample BH-SED-15-2 was outside of the percent difference control limits for cadmium. The result was flagged with an "E" qualifier.

Samples BH-SED-03D-2 and DUP-1 were analyzed at a dilution for lead and zinc.

The method blank had chromium and lead detected above the reporting limits. The associated samples had these analytes detected at concentrations that were greater than 10X the concentrations detected in the method blank. All data was reported.

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

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

The matrix spike recovered outside of the control limits for arsenic, copper, and selenium.

For the matrix spike and matrix spike duplicate, chromium, lead, and zinc recoveries were not calculated due to the concentration of analyte in the sample being >4 times the concentration of spike added.

General Chemistry:

Some samples were analyzed at a dilution for TOC.

METHODS SUMMARY

C9C120252

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND
WASTEWATER", 20TH EDITION."

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

SAMPLE SUMMARY

C9C120252

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K8FFH	001	BH-SED-15-2	03/11/09	11:00
K8FH6	002	BH-SED-15-TOC	03/11/09	11:05
K8FH9	003	BH-SED-03D-2	03/11/09	13:00
K8FJF	004	BH-SED-03D-TOC	03/11/09	13:05
K8FJL	005	DUP-1	03/11/09	
K8FJX	006	EQBGRAB	03/11/09	16:00
K8FJ2	007	EQBWAT	03/11/09	16:15

NOTE(S) :

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

Client: EA Engineering Science, and Technology, Inc. 15 Loveton Circle Sparks, MD 21152				Project Manager: Frank Barranco Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250				Parameters/Method Numbers for Analysis										Chain of Custody Record			
Project Name: Sparrows Point Offshore Areas																		Laboratory: TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber			
Project#: 14534.06																					
Page 1 of 2				Sediment Samples																	
Date	Time	Water	Sediment	Sample Identification	No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids						Remarks		
TLW 400			X																SEE PROJECT SPECIFIC ANALYTE LIST		
3/11/09	1100		X	BH-SED-15-2	5	X	X	X	X	X		X	X								
	1100		X	BH-SED-15-2 MS	5	X	X	X	X	X		X	X						5 day expedited turn		
	1100		X	BH-SED-15-2 MSD	5	X	X	X	X	X		X	X						around requested		
	1105		X	BH-SED-15-TOC	1						X										
	1105		X	BH-SED-15-TOC MS	1						X										
	1105		X	BH-SED-15-TOC MSD	1						X										
	1300		X	BH-SED-03D-2	5	X	X	X	X	X		X	X								
	1305		X	BH-SED-03D-TOC	1						X										
				DUP-1	6	X	X	X	X	X	X	X	X								
Sampled by: (Signature) <i>Todd Ward</i>				Date/Time 3/11/09 1305		Relinquished by: (Signature) <i>Todd Ward</i>				Date/Time 3/11/09 1700				SEDIMENT							
Relinquished by: (Signature)				Date/Time		Received by Laboratory: (Signature) <i>Patricia R. Bunch</i>				Date/Time 3/12/09 1000											

[illegible]

Cooler Receipt Form

TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013
 Cooler Rec'd & Opened for Temp. Check on: 3/12/09
 Coolers Opened and Unpacked on: 3/12/09 By: PRF
 (Signature)
 TestAmerica Pittsburgh Lot Number: C9C120252

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

Explain any discrepancies: _____

Level 2 Review _____
 Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

UP: Unpreserved

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

Comments:

[illegible]

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

Sodium Hydroxide

C9C120252

11

(1 - 85)

259

500

FedEx

US Airbill

Express

FedEx Tracking Number

8565 6932 7050

1 From This portion can be removed for Recipient's records.

Date

3/11/09

FedEx Tracking Number

856569327050

Sender's Name

TODD WARD

Phone

410 746-1250

Company

E A ENGINEERING SCIENCE & TECH

Address

15 LOVETON CIR

Dept./Floor/Suite/Room

City

SPARKS GLENCOE

State

MD

ZIP

21152

2 Your Internal Billing Reference

1453406.0002.0007A

3 To

Recipient's Name

SAMPLE MANAGEMENT

Phone

412 963-2428

Company

TEST AMERICA - PITTSBURGH

Recipient's Address

301 ALPHA DRIVE

Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

RIDC PARK

To request a package be held at a specific FedEx location, print FedEx address here.

City

PITTSBURGH

State

PA

ZIP

15238

0326961324

8565 6932 7050

Recipient's Copy

4a Express Package Service

☒ FedEx Priority Overnight

Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight

Next business afternoon.* Saturday Delivery NOT available.

☐ FedEx First Overnight

Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

☐ FedEx 2Day

Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver

Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One pound rate.

* To most locations.

4b Express Freight Service

☐ FedEx 1Day Freight*

Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 2Day Freight

Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 3Day Freight

Third business day.** Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging

☐ FedEx Envelope*

☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.

☐ FedEx Box

☐ FedEx Tube

☒ Other

* Declared value limit \$500.

6 Special Handling

☐ SATURDAY Delivery

Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

☐ HOLD Weekday at FedEx Location

Not available for FedEx First Overnight.

☐ HOLD Saturday at FedEx Location

Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Include FedEx address in Section 3.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No

☐ Yes As per attached Shipper's Declaration.

☐ Yes Shipper's Declaration not required.

☐ Dry Ice Dry Ice, 9, UN 1845 x _____ kg

☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recm. Acct. No.

☒ Sender Acct. No. in Section 1 will be billed.

☐ Recipient

☐ Third Party

☐ Credit Card

☐ Cash/Check

Total Packages

1

Total Weight

Total Charges

Credit Card Auth.

8 NEW Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

☐ No Signature Required

Package may be left without obtaining a signature for delivery.

☐ Direct Signature

Anyone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature

If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

519

Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

Rev. Date 8/05-Part #180279-C1994-2005 FedEx-PRINTED IN U.S.A.-SRS

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-15-2

GC/MS Volatiles

Lot-Sample #....: C9C120252-001	Work Order #....: K8FFH1AU	Matrix.....: SOLID
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9076035
Prep Date.....: 03/17/09	Analysis Date...: 03/17/09	
Prep Batch #....: 9076058	Analysis Time...: 06:29	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.85 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 40	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	170	ug/kg	12
Acrylonitrile	ND	170	ug/kg	18
Benzene	ND	8.6	ug/kg	1.2
Bromodichloromethane	ND	8.6	ug/kg	0.97
Bromoform	ND	8.6	ug/kg	0.76
Bromomethane	ND	8.6	ug/kg	1.3
2-Butanone (MEK)	ND	8.6	ug/kg	1.5
Carbon tetrachloride	ND	8.6	ug/kg	0.77
Chloroethane	ND	8.6	ug/kg	2.7
2-Chloroethyl vinyl ether	ND	17	ug/kg	1.3
Chloroform	ND	8.6	ug/kg	1.0
Chloromethane	ND	8.6	ug/kg	1.5
Dibromochloromethane	ND	8.6	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.6	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.6	ug/kg	1.1
1,4-Dichlorobenzene	ND	8.6	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.6	ug/kg	1.0
Dichlorodifluoromethane	ND	8.6	ug/kg	1.1
1,1-Dichloroethane	ND	8.6	ug/kg	0.99
1,2-Dichloroethane	ND	8.6	ug/kg	1.1
1,1-Dichloroethene	ND	8.6	ug/kg	1.5
1,2-Dichloropropane	ND	8.6	ug/kg	0.94
cis-1,3-Dichloropropene	ND	8.6	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.6	ug/kg	1.0
Ethylbenzene	ND	8.6	ug/kg	1.1
Methylene chloride	6.7 J,B	8.6	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.6	ug/kg	1.2
Tetrachloroethene	ND	8.6	ug/kg	1.2
Toluene	ND	8.6	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.6	ug/kg	0.84
1,1,2-Trichloroethane	ND	8.6	ug/kg	1.4
Trichloroethene	ND	8.6	ug/kg	1.1
Trichlorofluoromethane	ND	8.6	ug/kg	1.6
Vinyl chloride	ND	8.6	ug/kg	0.81

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-15-2

GC/MS Volatiles

Lot-Sample #...: C9C120252-001 Work Order #...: K8FFH1AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	88	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	94	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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

Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

GC/MS Volatiles

Lot-Sample #....: C9C120252-003	Work Order #....: K8FH91AU	Matrix.....: SOLID
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9076035
Prep Date.....: 03/17/09	Analysis Date...: 03/17/09	
Prep Batch #....: 9076058	Analysis Time...: 08:32	
Dilution Factor: 1	Initial Wgt/Vol: 4.99 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 63	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	270	ug/kg	19
Acrylonitrile	ND	270	ug/kg	28
Benzene	ND	13	ug/kg	1.8
Bromodichloromethane	ND	13	ug/kg	1.5
Bromoform	ND	13	ug/kg	1.2
Bromomethane	ND	13	ug/kg	2.0
2-Butanone (MEK)	ND	13	ug/kg	2.4
Carbon tetrachloride	ND	13	ug/kg	1.2
Chloroethane	ND	13	ug/kg	4.2
2-Chloroethyl vinyl ether	ND	27	ug/kg	2.1
Chloroform	ND	13	ug/kg	1.6
Chloromethane	ND	13	ug/kg	2.3
Dibromochloromethane	ND	13	ug/kg	1.9
1,2-Dichlorobenzene	ND	13	ug/kg	2.1
1,3-Dichlorobenzene	ND	13	ug/kg	1.8
1,4-Dichlorobenzene	ND	13	ug/kg	1.7
trans-1,2-Dichloroethene	ND	13	ug/kg	1.6
Dichlorodifluoromethane	ND	13	ug/kg	1.8
1,1-Dichloroethane	ND	13	ug/kg	1.6
1,2-Dichloroethane	ND	13	ug/kg	1.7
1,1-Dichloroethene	ND	13	ug/kg	2.3
1,2-Dichloropropane	ND	13	ug/kg	1.5
cis-1,3-Dichloropropene	ND	13	ug/kg	1.8
trans-1,3-Dichloropropene	ND	13	ug/kg	1.6
Ethylbenzene	ND	13	ug/kg	1.7
Methylene chloride	15 B	13	ug/kg	1.8
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.9
Tetrachloroethene	ND	13	ug/kg	1.8
Toluene	ND	13	ug/kg	2.0
1,1,1-Trichloroethane	ND	13	ug/kg	1.3
1,1,2-Trichloroethane	ND	13	ug/kg	2.2
Trichloroethene	ND	13	ug/kg	1.8
Trichlorofluoromethane	ND	13	ug/kg	2.5
Vinyl chloride	ND	13	ug/kg	1.3

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

GC/MS Volatiles

Lot-Sample #...: C9C120252-003 Work Order #...: K8FH91AU Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #...: C9C120252-005	Work Order #...: K8FJL1AV	Matrix.....: SOLID
Date Sampled...: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9076035
Prep Date.....: 03/17/09	Analysis Date...: 03/17/09	
Prep Batch #...: 9076058	Analysis Time...: 08:58	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.87 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 60	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	250	ug/kg	18
Acrylonitrile	ND	250	ug/kg	26
Benzene	ND	13	ug/kg	1.7
Bromodichloromethane	ND	13	ug/kg	1.4
Bromoform	ND	13	ug/kg	1.1
Bromomethane	ND	13	ug/kg	1.9
2-Butanone (MEK)	ND	13	ug/kg	2.2
Carbon tetrachloride	ND	13	ug/kg	1.1
Chloroethane	ND	13	ug/kg	3.9
2-Chloroethyl vinyl ether	ND	25	ug/kg	2.0
Chloroform	ND	13	ug/kg	1.5
Chloromethane	ND	13	ug/kg	2.2
Dibromochloromethane	ND	13	ug/kg	1.8
1,2-Dichlorobenzene	ND	13	ug/kg	2.0
1,3-Dichlorobenzene	ND	13	ug/kg	1.7
1,4-Dichlorobenzene	ND	13	ug/kg	1.6
trans-1,2-Dichloroethene	ND	13	ug/kg	1.5
Dichlorodifluoromethane	ND	13	ug/kg	1.7
1,1-Dichloroethane	ND	13	ug/kg	1.5
1,2-Dichloroethane	ND	13	ug/kg	1.6
1,1-Dichloroethene	ND	13	ug/kg	2.2
1,2-Dichloropropane	ND	13	ug/kg	1.4
cis-1,3-Dichloropropene	ND	13	ug/kg	1.7
trans-1,3-Dichloropropene	ND	13	ug/kg	1.5
Ethylbenzene	ND	13	ug/kg	1.6
Methylene chloride	13 B	13	ug/kg	1.7
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.8
Tetrachloroethene	ND	13	ug/kg	1.7
Toluene	ND	13	ug/kg	1.9
1,1,1-Trichloroethane	ND	13	ug/kg	1.2
1,1,2-Trichloroethane	ND	13	ug/kg	2.1
Trichloroethene	ND	13	ug/kg	1.7
Trichlorofluoromethane	ND	13	ug/kg	2.3
Vinyl chloride	ND	13	ug/kg	1.2

(Continued on next page)

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #...: C9C120252-005 Work Order #...: K8FJL1AV Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	107	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: EQBGRAB

GC/MS Volatiles

Lot-Sample #... : C9C120252-006	Work Order #... : K8FJX1AA	Matrix..... : WATER
Date Sampled... : 03/11/09	Date Received... : 03/12/09	MS Run #..... : 9077190
Prep Date..... : 03/18/09	Analysis Date... : 03/18/09	
Prep Batch #... : 9077356	Analysis Time... : 14:24	
Dilution Factor: 1	Initial Wgt/Vol: 5 mL	Final Wgt/Vol... : 5 mL
Analyst ID..... : 034635	Instrument ID... : HP7	
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

(Continued on next page)

Maryland Environmental Service

Client Sample ID: EQBGRAB

GC/MS Volatiles

Lot-Sample #...: C9C120252-006 Work Order #...: K8FJX1AA Matrix.....: WATER

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	94	(62 - 123)
Toluene-d8	105	(80 - 120)
4-Bromofluorobenzene	96	(75 - 120)
Dibromofluoromethane	92	(80 - 120)

Maryland Environmental Service

Client Sample ID: EQBWAT

GC/MS Volatiles

Lot-Sample #... : C9C120252-007	Work Order #... : K8FJ21AA	Matrix..... : WATER
Date Sampled... : 03/11/09	Date Received... : 03/12/09	MS Run #..... : 9077190
Prep Date..... : 03/18/09	Analysis Date... : 03/18/09	
Prep Batch #... : 9077356	Analysis Time... : 14:50	
Dilution Factor: 1	Initial Wgt/Vol: 5 mL	Final Wgt/Vol... : 5 mL
Analyst ID..... : 034635	Instrument ID... : HP7	
	Method..... : SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

(Continued on next page)

Maryland Environmental Service

Client Sample ID: EQBWAT

GC/MS Volatiles

Lot-Sample #...: C9C120252-007 Work Order #...: K8FJ21AA Matrix.....: WATER

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	93	(62 - 123)
Toluene-d8	109	(80 - 120)
4-Bromofluorobenzene	97	(75 - 120)
Dibromofluoromethane	89	(80 - 120)

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120252

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	BH-SED-15-2	88	99	94	96	00
02	BH-SED-03D-2	91	105	91	104	00
03	DUP-1	96	102	102	107	00
04	METHOD BLK. K8LV81AA	99	102	87	96	00
05	LCS K8LV81AC	103	100	107	99	00
06	BH-SED-15-2 D	102	101	103	99	00
07	BH-SED-15-2 S	103	99	101	99	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120252

Extraction: XXI15QK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	EQBGRAB	94	105	96	92	00
02	EQBWAT	93	109	97	89	00
03	INTRA-LAB QC	88	109	92	85	00
04	METHOD BLK. K8P591AA	94	110	96	89	00
05	LCS K8P591AC	93	108	92	89	00
06	LAB MS/MSD D	92	111	95	91	00
07	LAB MS/MSD S	92	111	95	90	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(62-123)
 (80-120)
 (75-120)
 (80-120)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C170000

WO #: K8LV81AC

BATCH: 9076058

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	38.1	95	59 - 129	
Trichloroethene	40.0	37.8	95	76 - 119	
Benzene	40.0	39.2	98	77 - 120	
Toluene	40.0	40.2	100	78 - 124	
Chlorobenzene	40.0	39.8	100	79 - 120	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C180000

WO #: K8P591AC

BATCH: 9077356

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	40.0	46.1	115	69- 127	
Trichloroethene	40.0	38.0	95	80- 120	
Benzene	40.0	44.9	112	80- 120	
Toluene	40.0	44.2	111	80- 124	
Chlorobenzene	40.0	38.6	97	83- 120	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-15-2

Level: (low/med) LOW

Lot #: C9C120252

WO #: K8FFH1CX

BATCH: 9076058

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	71.6	ND	78.0	109	59 - 129	
Trichloroethene	71.6	ND	74.5	104	76 - 119	
Benzene	71.6	ND	78.1	109	77 - 120	
Toluene	71.6	ND	78.7	110	78 - 124	
Chlorobenzene	71.6	ND	76.6	107	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-15-2

Level: (low/med) LOW

Lot #: C9C120252

WO #: K8FFH1C0

BATCH: 9076058

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
1,1-Dichloroethene	76.9	76.1	99	2.4	25	59 - 129	
Trichloroethene	76.9	78.6	102	5.4	21	76 - 119	
Benzene	76.9	80.0	104	2.4	20	77 - 120	
Toluene	76.9	84.1	109	6.6	21	78 - 124	
Chlorobenzene	76.9	81.5	106	6.2	20	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 5 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: C9C130287

WO #: K8H251AC

BATCH: 9077356

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT. (ug/L)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	40.0	ND	45.5	114	69 - 127	
Trichloroethene	40.0	ND	39.2	98	80 - 120	
Benzene	40.0	ND	45.4	113	80 - 120	
Toluene	40.0	ND	44.7	112	80 - 124	
Chlorobenzene	40.0	ND	39.0	97	83 - 120	

NOTES(S) :

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: C9C130287

WO #: K8H251AD

BATCH: 9077356

COMPOUND	SPIKE	MSD	MSD	QC LIMITS				QUAL
	ADDED (ug/L)	CONCENT. (ug/L)	% REC	% RPD	RPD	REC		
1,1-Dichloroethene	40.0	50.6	126	11	20	69 - 127		
Trichloroethene	40.0	40.8	102	4.0	20	80 - 120		
Benzene	40.0	47.3	118	4.1	20	80 - 120		
Toluene	40.0	46.7	117	4.4	20	80 - 124		
Chlorobenzene	40.0	39.4	99	1.2	20	83 - 120		

NOTES(S):

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

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

K8LV81AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3031701.D

Lot Number: C9C120252

Date Analyzed: 03/17/09

Time Analyzed: 06:05

Matrix: SOLID

Date Extracted: 03/17/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-15-2	K8FFH1AU	3031702.D	03/17/09	06:29
02	BH-SED-15-2	K8FFH1CX S	3031705.D	03/17/09	07:43
03	BH-SED-15-2	K8FFH1C0 D	3031706.D	03/17/09	08:08
04	BH-SED-03D-2	K8FH91AU	3031707.D	03/17/09	08:32
05	DUP-1	K8FJL1AV	3031708.D	03/17/09	08:58
06	CHECK SAMPLE	K8LV81AC C	3031704.D	03/17/09	07:19
07					
08					
09					
10					
11					
12					
13					
14					
15					
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25					
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27					
28					
29					
30					

COMMENTS:

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C120252
MB Lot-Sample #: C9C170000-058

Work Order #...: K8LV81AA

Matrix.....: SOLID

Analysis Date...: 03/17/09
Dilution Factor: 1

Prep Date.....: 03/17/09
Prep Batch #...: 9076058
Initial Wgt/Vol: 5 g
Analyst ID.....: 010099

Analysis Time...: 06:05
Final Wgt/Vol...: 5 mL
Instrument ID...: HP3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	4.5 J	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	99	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	87	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C120252

Work Order #...: K8LV81AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	96	(68 - 121)		

NOTE(S) :

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

J Estimated result. Result is less than RL.

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K8P591AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 7031801.D

Lot Number: C9C120252

Date Analyzed: 03/18/09

Time Analyzed: 09:30

Matrix: WATER

Date Extracted: 03/18/09

GC Column: RTX-624 ID: .18

Extraction Method: 5030B

Instrument ID: HP7

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	EQBGRAB	K8FJX1AA	7031812.D	03/18/09	14:24
02	EQBWAT	K8FJ21AA	7031813.D	03/18/09	14:50
03	INTRA-LAB QC	K8H251AA	7031803.D	03/18/09	10:19
04	LAB MS/MSD	K8H251AC S	7031804.D	03/18/09	10:43
05	LAB MS/MSD	K8H251AD D	7031805.D	03/18/09	11:17
06	CHECK SAMPLE	K8P591AC C	7031806.D	03/18/09	11:45
07					
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28					
29					
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COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C120252
MB Lot-Sample #: C9C180000-356

Work Order #...: K8P591AA

Matrix.....: WATER

Analysis Date...: 03/18/09
Dilution Factor: 1

Prep Date.....: 03/18/09

Prep Batch #...: 9077356

Analysis Time...: 09:30

Initial Wgt/Vol: 5 mL

Final Wgt/Vol...: 5 mL

Analyst ID.....: 034635

Instrument ID...: HP7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acrolein	ND	100	ug/L	SW846 8260B
Acrylonitrile	ND	100	ug/L	SW846 8260B
Benzene	ND	5.0	ug/L	SW846 8260B
Bromodichloromethane	ND	5.0	ug/L	SW846 8260B
Bromoform	ND	5.0	ug/L	SW846 8260B
Bromomethane	ND	5.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Chloroethane	ND	5.0	ug/L	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
Chloromethane	ND	5.0	ug/L	SW846 8260B
Dibromochloromethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
Ethylbenzene	ND	5.0	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	SW846 8260B
Tetrachloroethene	ND	5.0	ug/L	SW846 8260B
Toluene	ND	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/L	SW846 8260B
Trichloroethene	ND	5.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/L	SW846 8260B
Vinyl chloride	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	94	(62 - 123)
Toluene-d8	110	(80 - 120)
4-Bromofluorobenzene	96	(75 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C120252

Work Order #...: K8P591AA

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	89	(80 - 120)		

NOTE(S) :

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C120252
 Lab File ID (Standard): CC30317 Date Analyzed: 03/17/09
 Instrument ID: HP3 Time Analyzed: 0527
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	309993	7.40	74666	10.48	191173	12.81
UPPER LIMIT	619986	7.60	149332	10.68	382346	13.01
LOWER LIMIT	154997	7.20	37333	10.28	95587	12.61
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	529469	7.41	122297	10.49	196386	12.81
02 BH-SED-15-2	443768	7.41	105780	10.49	213116	12.81
03 INTRA-LAB CH	262059	7.40	65041	10.49	172170	12.81
04 BH-SED-15-2	244901	7.41	62661	10.49	155309	12.81
05 BH-SED-15-2	280049	7.40	68786	10.49	171451	12.81
06 BH-SED-03D-2	329933	7.41	77069	10.49	142817	12.81
07 DUP-1	318477	7.41	78041	10.49	156027	12.81
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C120252
 Lab File ID (Standard): CC70318 Date Analyzed: 03/18/09
 Instrument ID: HP7 Time Analyzed: 0705
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 (CBZ)	RT #	IS2 (DCB)	RT #	IS3	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	148587	10.58	242924	12.91	690945	7.50
UPPER LIMIT	297174	10.78	485848	13.11	1381890	7.70
LOWER LIMIT	74294	10.38	121462	12.71	345473	7.30
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	176584	10.58	296733	12.91	852321	7.50
02 INTRA-LAB CH	166271	10.59	275783	12.91	765626	7.50
03 EQBGRAB	162327	10.58	265603	12.91	744595	7.51
04 EQBWAT	156638	10.59	249770	12.91	728415	7.50
05						
06						
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12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (CBZ) = Chlorobenzene-d5
 IS2 (DCB) = 1,4-Dichlorobenzene-d4
 IS3 = Fluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SKD-15-2

GC/MS Semivolatiles

Lot-Sample #...: C9C120252-001	Work Order #...: K8FFH1AC	Matrix.....: SOLID
Date Sampled...: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9072002
Prep Date.....: 03/13/09	Analysis Date...: 03/13/09	
Prep Batch #...: 9072010	Analysis Time...: 18:13	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 40	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	97 J	110	ug/kg	17
2-Methylnaphthalene	240	110	ug/kg	22
Naphthalene	3200	110	ug/kg	16
Acenaphthylene	340	110	ug/kg	22
Acenaphthene	99 J	110	ug/kg	18
Fluorene	220	110	ug/kg	17
Phenanthrene	660	110	ug/kg	13
Anthracene	460 J	550	ug/kg	20
Fluoranthene	3000	110	ug/kg	9.4
Pyrene	2000	110	ug/kg	30
Benzo (a) anthracene	1100	110	ug/kg	18
Chrysene	1300	110	ug/kg	19
Benzo (b) fluoranthene	1500	110	ug/kg	23
Benzo (k) fluoranthene	890	110	ug/kg	23
Benzo (a) pyrene	1500	110	ug/kg	31
Indeno (1,2,3-cd) pyrene	720	110	ug/kg	6.1
Dibenzo (a,h) anthracene	240	110	ug/kg	25
Benzo (ghi) perylene	810	110	ug/kg	8.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-003	Work Order #....: K8FH91AC	Matrix.....: SOLID
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9072002
Prep Date.....: 03/13/09	Analysis Date...: 03/13/09	
Prep Batch #....: 9072010	Analysis Time...: 19:29	
Dilution Factor: 9.93	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 63	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	330	180	ug/kg	27
2-Methylnaphthalene	810	180	ug/kg	35
Naphthalene	5300	180	ug/kg	26
Acenaphthylene	930	180	ug/kg	36
Acenaphthene	150 J	180	ug/kg	29
Fluorene	630	180	ug/kg	27
Phenanthrene	1400	180	ug/kg	21
Anthracene	870 J	880	ug/kg	31
Fluoranthene	5800	180	ug/kg	15
Pyrene	4300	180	ug/kg	47
Benzo (a) anthracene	2800	180	ug/kg	28
Chrysene	2200	180	ug/kg	31
Benzo (b) fluoranthene	3600	180	ug/kg	36
Benzo (k) fluoranthene	1700	180	ug/kg	37
Benzo (a) pyrene	3400	180	ug/kg	50
Indeno (1,2,3-cd) pyrene	1600	180	ug/kg	9.8
Dibenzo (a,h) anthracene	500	180	ug/kg	39
Benzo (ghi) perylene	1800	180	ug/kg	13

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #... : C9C120252-005	Work Order #... : K8FJL1AC	Matrix..... : SOLID
Date Sampled... : 03/11/09	Date Received... : 03/12/09	MS Run #..... : 9072002
Prep Date..... : 03/13/09	Analysis Date... : 03/13/09	
Prep Batch #... : 9072010	Analysis Time... : 20:08	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol... : 0.5 mL
% Moisture..... : 60	Analyst ID..... : 403801	Instrument ID... : 732
	Method..... : SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	420	170	ug/kg	25
2-Methylnaphthalene	1000	170	ug/kg	32
Naphthalene	7200	170	ug/kg	24
Acenaphthylene	940	170	ug/kg	33
Acenaphthene	180	170	ug/kg	26
Fluorene	830	170	ug/kg	25
Phenanthrene	1800	170	ug/kg	20
Anthracene	1000	820	ug/kg	29
Fluoranthene	6100	170	ug/kg	14
Pyrene	4600	170	ug/kg	44
Benzo (a) anthracene	2300	170	ug/kg	26
Chrysene	2500	170	ug/kg	29
Benzo (b) fluoranthene	3900	170	ug/kg	33
Benzo (k) fluoranthene	1700	170	ug/kg	34
Benzo (a) pyrene	3300	170	ug/kg	46
Indeno (1,2,3-cd) pyrene	1500	170	ug/kg	9.1
Dibenzo (a,h) anthracene	500	170	ug/kg	36
Benzo (ghi) perylene	1800	170	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

Maryland Environmental Service

Client Sample ID: EQBGRAB

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-006	Work Order #....: K8FJX1AC	Matrix.....: WATER
Date Sampled....: 03/11/09 16:00	Date Received...: 03/12/09 10:00	MS Run #.....:
Prep Date.....: 03/13/09	Analysis Date...: 03/17/09	
Prep Batch #....: 9072073	Analysis Time...: 15:42	
Dilution Factor: 0.95	Initial Wgt/Vol: 1050 mL	Final Wgt/Vol...: 1 mL
Analyst ID.....: 003200	Instrument ID...: 733	
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.017
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	ND	0.19	ug/L	0.027
Acenaphthylene	ND	0.19	ug/L	0.0081
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0094
Phenanthrene	ND	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0082
Fluoranthene	ND	0.19	ug/L	0.0095
Pyrene	ND	0.19	ug/L	0.011
Benzo(a)anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo(b)fluoranthene	ND	0.19	ug/L	0.015
Benzo(k)fluoranthene	ND	0.19	ug/L	0.016
Benzo(a)pyrene	ND	0.19	ug/L	0.011
Indeno(1,2,3-cd)pyrene	ND	0.19	ug/L	0.015
Dibenzo(a,h)anthracene	ND	0.19	ug/L	0.012
Benzo(ghi)perylene	ND	0.19	ug/L	0.0082

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	74	(23 - 112)
Terphenyl-d14	85	(10 - 132)
2-Fluorobiphenyl	76	(19 - 107)
2-Fluorophenol	70	(10 - 111)
Phenol-d5	68	(15 - 112)
2,4,6-Tribromophenol	76	(16 - 122)

Maryland Environmental Service

Client Sample ID: EQBWAT

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-007 Work Order #....: K8FJ21AC Matrix.....: WATER
 Date Sampled...: 03/11/09 16:15 Date Received...: 03/12/09 10:00 MS Run #.....:
 Prep Date.....: 03/13/09 Analysis Date...: 03/18/09
 Prep Batch #....: 9072073 Analysis Time...: 07:00
 Dilution Factor: 0.95 Initial Wgt/Vol: 1050 mL Final Wgt/Vol...: 1 mL
 Analyst ID.....: 003200 Instrument ID...: 733
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.017
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	ND	0.19	ug/L	0.027
Acenaphthylene	ND	0.19	ug/L	0.0081
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0094
Phenanthrene	ND	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0082
Fluoranthene	ND	0.19	ug/L	0.0095
Pyrene	ND	0.19	ug/L	0.011
Benzo (a) anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo (b) fluoranthene	ND	0.19	ug/L	0.015
Benzo (k) fluoranthene	ND	0.19	ug/L	0.016
Benzo (a) pyrene	ND	0.19	ug/L	0.011
Indeno (1,2,3-cd) pyrene	ND	0.19	ug/L	0.015
Dibenzo (a,h) anthracene	ND	0.19	ug/L	0.012
Benzo (ghi) perylene	ND	0.19	ug/L	0.0082

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	77	(23 - 112)
Terphenyl-d14	97	(10 - 132)
2-Fluorobiphenyl	79	(19 - 107)
2-Fluorophenol	75	(10 - 111)
Phenol-d5	80	(15 - 112)
2,4,6-Tribromophenol	86	(16 - 122)

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120252

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-15-2	0 D	0 D	0 D	0 D	0 D	0 D	06
02	BH-SED-03D-2	0 D	0 D	0 D	0 D	0 D	0 D	06
03	DUP-1	0 D	0 D	0 D	0 D	0 D	0 D	06
04	METHOD BLK. K8F661AA	67	94	66	69	68	74	00
05	LCS K8F661AC	70	80	73	69	69	83	00
06	BH-SED-15-2 D	0 D	0 D	0 D	0 D	0 D	0 D	06
07	BH-SED-15-2 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C120252

Extraction: XXI514201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	EQBGRAB	74	85	76	70	68	76	00
02	EQBWAT	77	97	79	75	80	86	00
03	METHOD BLK. K8GEE1AA	69	80	73	69	67	71	00
04	LCS K8GEE1AC	78	80	82	77	72	86	00
05	LCSD K8GEE1AD	78	82	83	76	71	84	00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(23-112)
 (10-132)
 (19-107)
 (10-111)
 (15-112)
 (16-122)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C130000

WO #: K8F661AC

BATCH: 9072010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
4-Bromophenyl phenyl ethe	333	257	77	43 - 111	
Butyl benzyl phthalate	333	244	73	40 - 117	
Phenol	333	235	70	39 - 105	
2-Chlorophenol	333	227	68	40 - 105	
1,4-Dichlorobenzene	333	224	67	41 - 101	
N-Nitrosodi-n-propylamine	333	235	70	42 - 108	
1,2,4-Trichlorobenzene	333	227	68	41 - 105	
4-Chloro-3-methylphenol	333	253	76	43 - 110	
Acenaphthene	333	245	73	42 - 104	
4-Nitrophenol	333	285	86	27 - 131	
2,4-Dinitrotoluene	333	276	83	48 - 118	
Pentachlorophenol	333	258	77	18 - 125	
Pyrene	333	245	74	39 - 113	
4-Methylphenol	667	453	68	43 - 107	
Hexachloroethane	333	219	66	40 - 102	
Naphthalene	333	228	68	42 - 104	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C130000

WO #: K8GEE1AC

BATCH: 9072073

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Phenol	20.0	13.8	69	32 - 95	
2-Chlorophenol	20.0	14.4	72	31 - 99	
1,4-Dichlorobenzene	20.0	15.2	76	34 - 93	
N-Nitrosodi-n-propylamine	20.0	15.0	75	34 - 101	
1,2,4-Trichlorobenzene	20.0	16.1	80	34 - 96	
4-Chloro-3-methylphenol	20.0	13.7	69	35 - 104	
Acenaphthene	20.0	15.8	79	35 - 99	
4-Nitrophenol	20.0	17.0	85	29 - 115	
2,4-Dinitrotoluene	20.0	16.7	83	37 - 115	
Pentachlorophenol	20.0	16.5	82	15 - 111	
Pyrene	20.0	14.6	73	35 - 106	
4-Methylphenol	40.0	26.3	66	32 - 100	
Hexachloroethane	20.0	15.2	76	32 - 94	
Naphthalene	20.0	15.6	78	35 - 97	
4-Bromophenyl phenyl ethe	20.0	16.0	80	37 - 104	
Butyl benzyl phthalate	20.0	15.6	78	36 - 108	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C130000

WO #: K8GEE1AD

BATCH: 9072073

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Phenol	20.0	13.6	68	32 - 95	
2-Chlorophenol	20.0	14.0	70	31 - 99	
1,4-Dichlorobenzene	20.0	15.0	75	34 - 93	
N-Nitrosodi-n-propylamine	20.0	14.7	74	34 - 101	
1,2,4-Trichlorobenzene	20.0	16.4	82	34 - 96	
4-Chloro-3-methylphenol	20.0	14.0	70	35 - 104	
Acenaphthene	20.0	15.7	79	35 - 99	
4-Nitrophenol	20.0	17.2	86	29 - 115	
2,4-Dinitrotoluene	20.0	16.9	84	37 - 115	
Pentachlorophenol	20.0	16.9	85	15 - 111	
Pyrene	20.0	14.8	74	35 - 106	
4-Methylphenol	40.0	25.8	65	32 - 100	
Hexachloroethane	20.0	15.0	75	32 - 94	
Naphthalene	20.0	15.7	78	35 - 97	
4-Bromophenyl phenyl ethe	20.0	16.0	80	37 - 104	
Butyl benzyl phthalate	20.0	15.7	78	36 - 108	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-15-2

Level: (low/med) LOW

Lot #: C9C120252

WO #: K8FFH1AX

BATCH: 9072010

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	558	ND		0*	39 - 105	NC DIL
2-Chlorophenol	558	ND		0*	40 - 105	NC DIL
1,4-Dichlorobenzene	558	ND		0*	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	558	ND		0*	42 - 108	NC DIL
1,2,4-Trichlorobenzene	558	ND		0*	41 - 105	NC DIL
4-Chloro-3-methylphenol	558	ND		0*	43 - 110	NC DIL
Acenaphthene	558	99		0*	42 - 104	NC DIL
4-Nitrophenol	558	ND		0*	27 - 131	NC DIL
2,4-Dinitrotoluene	558	ND		0*	48 - 118	NC DIL
Pentachlorophenol	558	ND		0*	18 - 125	NC DIL
Pyrene	558	2000		0*	39 - 113	NC DIL
4-Methylphenol	1120	ND		0*	43 - 107	NC DIL
Hexachloroethane	558	ND		0*	40 - 102	NC DIL
Naphthalene	558	3200		0*	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	558	ND		0*	43 - 111	NC DIL
Butyl benzyl phthalate	558	ND		0*	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

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

RPD: 0 out of 0 outside limits
 Spike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-15-2

Level: (low/med) LOW

Lot #: C9C120252

WO #: K8FFH1A0

BATCH: 9072010

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Phenol	558		0*		40	39 - 105	NC DIL
2-Chlorophenol	558		0*		37	40 - 105	NC DIL
1,4-Dichlorobenzene	558		0*		32	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	558		0*		32	42 - 108	NC DIL
1,2,4-Trichlorobenzene	558		0*		36	41 - 105	NC DIL
4-Chloro-3-methylphenol	558		0*		31	43 - 110	NC DIL
Acenaphthene	558		0*		34	42 - 104	NC DIL
4-Nitrophenol	558		0*		33	27 - 131	NC DIL
2,4-Dinitrotoluene	558		0*		33	48 - 118	NC DIL
Pentachlorophenol	558		0*		34	18 - 125	NC DIL
Pyrene	558		0*		28	39 - 113	NC DIL
4-Methylphenol	1120		0*		36	43 - 107	NC DIL
Hexachloroethane	558		0*		34	40 - 102	NC DIL
Naphthalene	558		0*		25	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	558		0*		20	43 - 111	NC DIL
Butyl benzyl phthalate	558		0*		34	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

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

RPD: 0 out of 16 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9C120252
 Lab File ID (Standard): D0313CC1 Date Analyzed: 03/13/09
 Instrument ID: 732 Time Analyzed: 1041

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	103773	4.19	472554	5.17	354711	6.50
UPPER LIMIT	207546	4.69	945108	5.67	709422	7.00
LOWER LIMIT	51887	3.69	236277	4.67	177356	6.00
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	110780	4.19	488903	5.17	365627	6.50
02 INTRA-LAB CH	117097	4.19	525310	5.17	386553	6.50
03 BH-SED-15-2	114917	4.19	486872	5.17	365654	6.50
04 BH-SED-15-2	110463	4.19	482697	5.17	370334	6.50
05 BH-SED-15-2	103579	4.19	468304	5.17	356936	6.50
06 BH-SED-03D-2	107482	4.19	480131	5.16	386537	6.50
07 DUP-1	108096	4.19	482080	5.17	392483	6.50
08						
09						
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18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C9C120252
 Lab File ID (Standard): D0313CC1 Date Analyzed: 03/13/09
 Instrument ID: 732 Time Analyzed: 1041

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	678792	7.63	651819	9.65	573352	10.83
UPPER LIMIT	1357584	8.13	1303638	10.15	1146704	11.33
LOWER LIMIT	339396	7.13	325910	9.15	286676	10.33
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	667558	7.63	627273	9.65	563775	10.83
02 INTRA-LAB CH	725398	7.63	815188	9.66	583292	10.83
03 BH-SED-15-2	730107	7.63	749199	9.66	656635	10.84
04 BH-SED-15-2	733364	7.63	710651	9.66	662379	10.84
05 BH-SED-15-2	717042	7.63	732394	9.66	653252	10.84
06 BH-SED-03D-2	762712	7.63	836274	9.66	800942	10.84
07 DUP-1	800267	7.63	886743	9.66	900857	10.84
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19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9C120252

Lab File ID (Standard): N03170CC

Date Analyzed: 03/17/09

Instrument ID: 733

Time Analyzed: 0724

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	=====	=====	=====	=====	=====	=====	=====
	12 HOUR STD	110818	4.39	480628	5.36	298675	6.69
	UPPER LIMIT	221636	4.89	961256	5.86	597350	7.19
	LOWER LIMIT	55409	3.89	240314	4.86	149338	6.19
	=====	=====	=====	=====	=====	=====	=====
	CLIENT SAMPLE NO.						
	=====	=====	=====	=====	=====	=====	=====
01	INTRA-LAB BL	120403	4.38	510366	5.35	301254	6.68
02	INTRA-LAB CH	119867	4.38	490327	5.35	299704	6.68
03	INTRA-LAB CH	119457	4.39	475604	5.35	289647	6.69
04	EQBGRAB	122874	4.38	487256	5.35	300981	6.68
05							
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C120252
 Lab File ID (Standard): N03170CC Date Analyzed: 03/17/09
 Instrument ID: 733 Time Analyzed: 0724

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	484558	7.83	347379	9.85	253033	11.12
UPPER LIMIT	969116	8.33	694758	10.35	506066	11.62
LOWER LIMIT	242279	7.33	173690	9.35	126517	10.62
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	508321	7.82	422410	9.84	359686	11.11
02 INTRA-LAB CH	499289	7.82	453307	9.84	359058	11.11
03 INTRA-LAB CH	478099	7.82	428200	9.84	342938	11.12
04 EQBGRAB	500546	7.82	415865	9.84	338065	11.11
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22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9C120252

Lab File ID (Standard): N03180CC

Date Analyzed: 03/18/09

Instrument ID: 733

Time Analyzed: 0558

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	88516	4.37	400419	5.35	260232	6.68
UPPER LIMIT	177032	4.87	800838	5.85	520464	7.18
LOWER LIMIT	44258	3.87	200210	4.85	130116	6.18
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 EQBWAT	99947	4.38	443251	5.35	297523	6.69
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IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C120252
 Lab File ID (Standard): N03180CC Date Analyzed: 03/18/09
 Instrument ID: 733 Time Analyzed: 0558

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	472415	7.82	401603	9.84	278880	11.10
UPPER LIMIT	944830	8.32	803206	10.34	557760	11.60
LOWER LIMIT	236208	7.32	200802	9.34	139440	10.60
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 EQBWAT	545704	7.82	442602	9.84	308094	11.11
02						
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22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-15-2

TOTAL Metals

Lot-Sample #...: C9C120252-001

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received...: 03/12/09

% Moisture.....: 40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9073029						
Silver	0.76	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AQ
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0020	
Arsenic	13.2	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AD
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.014	
Beryllium	0.82	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AE
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0031	
Cadmium	2.0 E	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AF
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0076	
Chromium	73.9 J	0.17	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AG
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0067	
Copper	64.2 J	0.17	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AH
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0071	
Nickel	24.2 J	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AJ
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0057	
Lead	311 J	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AK
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0028	
Antimony	0.62	0.17	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AL
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0028	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-15-2

TOTAL Metals

Lot-Sample #....: C9C120252-001

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Selenium	2.4	0.42	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AM
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.034	
Thallium	0.38	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AN
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0017	
Zinc	609 J	0.42	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AP
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0098	
 Prep Batch #....: 9075015						
Mercury	0.28	0.028	mg/kg	SW846 7471A	03/16/09	K8FFH1AR
		Dilution Factor: 0.5		Analysis Time...: 08:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9075007	MDL.....: 0.0021	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

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

Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

TOTAL Metals

Lot-Sample #...: C9C120252-003

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received..: 03/12/09

% Moisture.....: 63

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #... : 9073029						
Silver	3.9	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AQ
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0032	
Arsenic	105	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AD
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.022	
Beryllium	1.8	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AE
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0050	
Cadmium	7.2	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AF
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.012	
Chromium	335 J	0.27	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AG
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.011	
Copper	267 J	0.27	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AH
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.011	
Nickel	40.6 J	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AJ
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0092	
Lead	2220 J	1.3	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AK
		Dilution Factor: 5		Analysis Time..: 12:15	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.046	
Antimony	2.6	0.27	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AL
		Dilution Factor: 0.5		Analysis Time..: 10:29	Analyst ID.....: 401509	
		Instrument ID..: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0044	

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Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

TOTAL Metals

Lot-Sample #...: C9C120252-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	15.4	0.67	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AM
		Dilution Factor: 0.5		Analysis Time...: 10:29	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.055	
Thallium	1.1	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AN
		Dilution Factor: 0.5		Analysis Time...: 10:29	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0027	
Zinc	2890 J	6.7	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AP
		Dilution Factor: 5		Analysis Time...: 12:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.16	

Prep Batch #...: 9075015

Mercury	1.1	0.044	mg/kg	SW846 7471A	03/16/09	K8FH91AR
		Dilution Factor: 0.5		Analysis Time...: 08:29	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9075007	MDL.....: 0.0034	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #...: C9C120252-005

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received...: 03/12/09

% Moisture.....: 60

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9073029						
Silver	4.4	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AQ
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0030	
Arsenic	100	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AD
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.020	
Beryllium	1.8	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AE
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0046	
Cadmium	7.8	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AF
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.011	
Chromium	292 J	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AG
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0099	
Copper	249 J	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AH
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.011	
Nickel	37.9 J	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AJ
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0084	
Lead	2800 J	1.2	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AK
		Dilution Factor: 5		Analysis Time...: 12:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.042	
Antimony	2.7	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AL
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0041	

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Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #...: C9C120252-005

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Selenium	13.5	0.62	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AM
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.050	
Thallium	1.3	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AN
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0025	
Zinc	3500 J	6.2	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AP
		Dilution Factor: 5		Analysis Time...: 12:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.14	

Prep Batch #...: 9075015

Mercury	1.2	0.041	mg/kg	SW846 7471A	03/16/09	K8FJL1AR
		Dilution Factor: 0.5		Analysis Time...: 08:31	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9075007	MDL.....: 0.0031	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9C120252

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C140000-029 Prep Batch #....: 9073029						
Antimony	ND	0.10	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AJ
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Arsenic	ND	0.050	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AA
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Beryllium	ND	0.050	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AC
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Cadmium	ND	0.050	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AD
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Chromium	0.31	0.10	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AE
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Copper	0.022 B	0.10	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AF
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Lead	0.065	0.050	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AH
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Nickel	0.014 B	0.050	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AG
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Selenium	ND	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AK
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Silver	ND	0.050	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AN
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AL
		Dilution Factor: 0.5				
		Analysis Time...: 09:49		Analyst ID.....: 401509	Instrument ID...: ICP	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Zinc	0.20 B	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8JR01AM
Dilution Factor: 0.5						
Analysis Time...: 09:49		Analyst ID.....: 401509		Instrument ID...: ICP		

MB Lot-Sample #: C9C160000-015 Prep Batch #...: 9075015

Mercury	ND	0.016	mg/kg	SW846 7471A	03/16/09	K8KCP1AA
Dilution Factor: 0.5						
Analysis Time...: 08:21		Analyst ID.....: 031043		Instrument ID...: HGH		

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C140000-029 Prep Batch #... : 9073029					
Arsenic	88	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AP
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Beryllium	91	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AQ
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Cadmium	91	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AR
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Chromium	104	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AT
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Copper	104	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AU
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Nickel	105	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AV
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Lead	109	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AW
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Antimony	87	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01AX
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Selenium	96	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01A0
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Thallium	94	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01A1
		Dilution Factor: 0.5		Analysis Time...: 09:53	Analyst ID.....: 401509
		Instrument ID...: ICPMS			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	86	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01A2
		Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
Silver	106	(80 - 120)	SW846 6020	03/14-03/16/09	K8JR01A3
		Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
		Instrument ID...: ICPMS			
LCS Lot-Sample#:	C9C160000-015	Prep Batch #...	9075015		
Mercury	102	(80 - 120)	SW846 7471A	03/16/09	K8KCP1AC
		Dilution Factor: 0.5	Analysis Time...: 08:23	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA			

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C140000-029 Prep Batch #...: 9073029							
Arsenic	2.00	1.75	mg/kg	88	SW846 6020	03/14-03/16/09	K8JR01AP
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Beryllium	2.50	2.26	mg/kg	91	SW846 6020	03/14-03/16/09	K8JR01AQ
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Cadmium	2.50	2.27	mg/kg	91	SW846 6020	03/14-03/16/09	K8JR01AR
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Chromium	10.0	10.4	mg/kg	104	SW846 6020	03/14-03/16/09	K8JR01AT
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Copper	12.5	13.0	mg/kg	104	SW846 6020	03/14-03/16/09	K8JR01AU
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Nickel	25.0	26.2	mg/kg	105	SW846 6020	03/14-03/16/09	K8JR01AV
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Lead	1.00	1.09	mg/kg	109	SW846 6020	03/14-03/16/09	K8JR01AW
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Antimony	25.0	21.8	mg/kg	87	SW846 6020	03/14-03/16/09	K8JR01AX
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Selenium	0.500	0.478	mg/kg	96	SW846 6020	03/14-03/16/09	K8JR01AO
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Thallium	2.50	2.36	mg/kg	94	SW846 6020	03/14-03/16/09	K8JR01AI
				Dilution Factor: 0.5	Analysis Time...: 09:53	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	25.0	21.5	mg/kg	86	SW846 6020	03/14-03/16/09	K8JR01A2
Dilution Factor: 0.5 Analysis Time...: 09:53 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Silver	2.50	2.66	mg/kg	106	SW846 6020	03/14-03/16/09	K8JR01A3
Dilution Factor: 0.5 Analysis Time...: 09:53 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
LCS Lot-Sample#: C9C160000-015 Prep Batch #...: 9075015							
Mercury	0.208	0.213	mg/kg	102	SW846 7471A	03/16/09	K8KCP1AC
Dilution Factor: 0.5 Analysis Time...: 08:23 Analyst ID.....: 031043							
Instrument ID...: HGHYDRA							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received...: 03/12/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C120252-001 Prep Batch #...: 9073029							
						% Moisture.....: 40	
Antimony	52 N	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1CG
	51 N	(75 - 125)	2.3	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CH
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Arsenic	62 N	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1A1
	87	(75 - 125)	5.3	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1A2
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Beryllium	108	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1A3
	104	(75 - 125)	3.4	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1A4
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Cadmium	80	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1A5
	85	(75 - 125)	3.9	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1A6
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Chromium	NC	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1A7
	NC	(75 - 125)		(0-20)	SW846 6020	03/14-03/16/09	K8FFH1A8
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Copper	71 N	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1A9
	102	(75 - 125)	8.0	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CA
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Lead	NC	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1CE
	NC	(75 - 125)		(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CF
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received...: 03/12/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	97	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1CC
	93	(75 - 125)	2.2	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CD
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Selenium	71 N	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1CJ
	83	(75 - 125)	3.4	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CK
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Silver	93	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1CQ
	93	(75 - 125)	0.70	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CR
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Thallium	92	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1CL
	92	(75 - 125)	0.37	(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CM
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							
Zinc	NC	(75 - 125)			SW846 6020	03/14-03/16/09	K8FFH1CN
	NC	(75 - 125)		(0-20)	SW846 6020	03/14-03/16/09	K8FFH1CP
Dilution Factor: 0.5							
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9073023							

MS Lot-Sample #: C9C120252-001 Prep Batch #...: 9075015

% Moisture.....: 40

Mercury	110	(75 - 125)			SW846 7471A	03/16/09	K8FFH1CT
	116	(75 - 125)	1.9	(0-20)	SW846 7471A	03/16/09	K8FFH1CU
Dilution Factor: 0.5							
Analysis Time...: 08:26 Instrument ID...: HGHYDRA Analyst ID.....: 031043							
MS Run #.....: 9075007							

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received...: 03/12/09

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C120252-001 Prep Batch #...: 9073029

% Moisture.....: 40

Antimony

0.62	41.8	22.3 N	mg/kg	52		SW846 6020	03/14-03/16/09	K8FFH1CG
0.62	41.8	21.8 N	mg/kg	51	2.3	SW846 6020	03/14-03/16/09	K8FFH1CH
Dilution Factor: 0.5								
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9073023								

Arsenic

13.2	3.35	15.2 N	mg/kg	62		SW846 6020	03/14-03/16/09	K8FFH1A1
13.2	3.35	16.1	mg/kg	87	5.3	SW846 6020	03/14-03/16/09	K8FFH1A2
Dilution Factor: 0.5								
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9073023								

Beryllium

0.82	4.18	5.34	mg/kg	108		SW846 6020	03/14-03/16/09	K8FFH1A3
0.82	4.18	5.16	mg/kg	104	3.4	SW846 6020	03/14-03/16/09	K8FFH1A4
Dilution Factor: 0.5								
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9073023								

Cadmium

2.0	4.18	5.39	mg/kg	80		SW846 6020	03/14-03/16/09	K8FFH1A5
2.0	4.18	5.61	mg/kg	85	3.9	SW846 6020	03/14-03/16/09	K8FFH1A6
Dilution Factor: 0.5								
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9073023								

Chromium

73.9	16.7	90.7 NC	mg/kg			SW846 6020	03/14-03/16/09	K8FFH1A7
73.9	16.7	98.5 NC	mg/kg			SW846 6020	03/14-03/16/09	K8FFH1A8
Dilution Factor: 0.5								
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9073023								

Copper

64.2	20.9	79.0 N	mg/kg	71		SW846 6020	03/14-03/16/09	K8FFH1A9
64.2	20.9	85.6	mg/kg	102	8.0	SW846 6020	03/14-03/16/09	K8FFH1CA
Dilution Factor: 0.5								
Analysis Time...: 10:20 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9073023								

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C120252

Matrix.....: SOLID

Date Sampled....: 03/11/09

Date Received...: 03/12/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Lead									
	311	1.67	262 NC	mg/kg			SW846 6020	03/14-03/16/09	K8FFH1CE
	311	1.67	299 NC	mg/kg			SW846 6020	03/14-03/16/09	K8FFH1CF
Dilution Factor: 0.5									
Analysis Time...: 10:20									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9073023									
Nickel									
	24.2	41.8	64.6	mg/kg	97		SW846 6020	03/14-03/16/09	K8FFH1CC
	24.2	41.8	63.1	mg/kg	93	2.2	SW846 6020	03/14-03/16/09	K8FFH1CD
Dilution Factor: 0.5									
Analysis Time...: 10:20									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9073023									
Selenium									
	2.4	0.836	2.96 N	mg/kg	71		SW846 6020	03/14-03/16/09	K8FFH1CJ
	2.4	0.836	3.06	mg/kg	83	3.4	SW846 6020	03/14-03/16/09	K8FFH1CK
Dilution Factor: 0.5									
Analysis Time...: 10:20									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9073023									
Silver									
	0.76	4.18	4.64	mg/kg	93		SW846 6020	03/14-03/16/09	K8FFH1CQ
	0.76	4.18	4.67	mg/kg	93	0.70	SW846 6020	03/14-03/16/09	K8FFH1CR
Dilution Factor: 0.5									
Analysis Time...: 10:20									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9073023									
Thallium									
	0.38	4.18	4.22	mg/kg	92		SW846 6020	03/14-03/16/09	K8FFH1CL
	0.38	4.18	4.21	mg/kg	92	0.37	SW846 6020	03/14-03/16/09	K8FFH1CM
Dilution Factor: 0.5									
Analysis Time...: 10:20									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9073023									
Zinc									
	609	41.8	577 NC	mg/kg			SW846 6020	03/14-03/16/09	K8FFH1CN
	609	41.8	646 NC	mg/kg			SW846 6020	03/14-03/16/09	K8FFH1CP
Dilution Factor: 0.5									
Analysis Time...: 10:20									
Instrument ID...: ICPMS									
Analyst ID.....: 401509									
MS Run #.....: 9073023									

MS Lot-Sample #: C9C120252-001 Prep Batch #....: 9075015

% Moisture.....: 40

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C120252

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received...: 03/12/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Mercury	0.28	0.139	0.429	mg/kg	110		SW846 7471A	03/16/09	K8FFH1CT
	0.28	0.139	0.438	mg/kg	116	1.9	SW846 7471A	03/16/09	K8FFH1CU
Dilution Factor: 0.5									
Analysis Time...: 08:26 Instrument ID...: HGHYDRA Analyst ID.....: 031043									
MS Run #.....: 9075007									

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C120252

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-15-2	C9C120252 001	K8FFH1AT	1.1	mg/kg	0.14	0.84	1	3/13/2009 - 3/13/2009 12:34	9072079
BH-SED-03D-2	C9C120252 003	K8FH91AT	12.3	mg/kg	0.23	1.3	1	3/13/2009 - 3/13/2009 12:37	9072079
DUP-1	C9C120252 005	K8FJL1AT	12.4	mg/kg	0.21	1.2	1	3/13/2009 - 3/13/2009 12:37	9072079

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Lot Number: C9C120252

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-15-2	C9C120252 001	K8FFH1AA	59.8	%	0.0	1.0	1	3/13/2009 - 3/14/2009 08:03	9072261
BH-SED-15-TOC	C9C120252 002	K8FH61AA	78.7	%	0.0	1.0	1	3/13/2009 - 3/14/2009 08:03	9072261
BH-SED-03D-2	C9C120252 003	K8FH91AA	37.1	%	0.0	1.0	1	3/13/2009 - 3/14/2009 08:03	9072261
BH-SED-03D-TOC	C9C120252 004	K8FJF1AA	47.0	%	0.0	1.0	1	3/13/2009 - 3/14/2009 08:03	9072261
DUP-1	C9C120252 005	K8FJL1AA	40.4	%	0.0	1.0	1	3/13/2009 - 3/14/2009 08:03	9072261

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9C120252

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-15-TOC	C9C120252 002	K8FH61AE	258 B	mg/kg	54.4	477	0.75	3/14/2009 - 3/14/2009 15:56	9073023
BH-SED-03D-TOC	C9C120252 004	K8FJF1AC	13600	mg/kg	214	1870	1.76	3/14/2009 - 3/14/2009 16:27	9073023
DUP-1	C9C120252 005	K8FJL1AU	14900	mg/kg	297	2600	2.1	3/14/2009 - 3/14/2009 16:37	9073023

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Report ID: C9C120252

Matrix: SOLID

Date/Time Received: 3/12/2009 1:30:00PM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C130000079B	079 MB	K8GEJ1AA	ND	mg/kg	0.50	3/13/2009 - 3/13/2009 12:33	9072079	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Report ID: C9C120252

Matrix: SOLID

Date/Time Received: 3/12/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-15-2 DUP	001 DUP	K8FFH1C1	59.9	%	1.0	3/13/2009 - 3/14/2009 08:03	9072261	0.22 / 20
BH-SED-15-TOC DUP	002 DUP	K8FH61AH	80.4	%	1.0	3/13/2009 - 3/14/2009 08:03	9072261	2.1 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: EPA Lloyd Kahn
Report ID: C9C120252
Date/Time Received: 3/11/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C140000023B	023 MB	K8JPL1AA	ND	mg/kg	1250	3/14/2009 - 3/14/2009 13:34	9073023	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: SW846 9012A
Lot Number: C9C130000
Date/Time Received: 3/12/2009 1:30:00PM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K8GEJ1AC	110	41 - 159	3/13/2009 - 3/13/2009 12:33	9072079	
BH-SED-15-2	MS	K8FFH1CV	100	75 - 125	3/13/2009 - 3/13/2009 12:34	9072079	8.4 / 20
BH-SED-15-2	MSD	K8FFH1CW	91	75 - 125	3/13/2009 - 3/13/2009 12:34	9072079	8.4 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C120252
 Date/Time Received: 3/12/2009 10:00:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
BH-SED-15-TOC	MSD	K8FH61AG	100	75 - 125	3/14/2009 - 3/14/2009 16:17	9073023	18 / 20
BH-SED-15-TOC	MS	K8FH61AF	99	75 - 125	3/14/2009 - 3/14/2009 16:07	9073023	18 / 20
CHECK SAMPLE	LCS	K8JPL1AC	101	75 - 125	3/14/2009 - 3/14/2009 13:44	9073023	3.1 / 20
DUPLICATE CHECK	LCSD	K8JPL1AD	105	75 - 125	3/14/2009 - 3/14/2009 13:54	9073023	3.1 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C120252

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-15-2	C9C120252-001	Soil
1MS	BH-SED-15-2MS	C9C120252-001MS	Soil
1MSD	BH-SED-15-2MSD	C9C120252-001MSD	Soil
2	BH-SED-03D-2	C9C120252-003	Soil
3	DUP-1	C9C120252-005	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values.

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03D-2 mg/kg	DUP-1 mg/kg	RPD	Qualifier
TOC	13600	14900	9%	None
Total Cyanide	12.3	12.4	1%	None

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C120252

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-15-2	C9C120252 001	K8FFH1AT	1.1	mg/kg	0.14	0.84	1	3/13/2009 - 3/13/2009 12:34	9072079
BH-SED-03D-2	C9C120252 003	K8FH91AT	12.3	mg/kg	0.23	1.3	1	3/13/2009 - 3/13/2009 12:37	9072079
DUP-1	C9C120252 005	K8FJL1AT	12.4	mg/kg	0.21	1.2	1	3/13/2009 - 3/13/2009 12:37	9072079

MES Sparrows Point 18001868

1,2,3

TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: EPA Lloyd Kahn
Lot Number: C9C120252

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-15-TOC	C9C120252 002	K8FH61AE	258 <i>β</i>	mg/kg	54.4	477	0.75	3/14/2009 - 3/14/2009 15:56	9073023
BH-SED-03D-TOC	C9C120252 004	K8FJF1AC	13600	mg/kg	214	1870	1.76	3/14/2009 - 3/14/2009 16:27	9073023
DUP-1	C9C120252 005	K8FJL1AU	14900	mg/kg	297	2600	2.1	3/14/2009 - 3/14/2009 16:37	9073023

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C120252

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-15-2	C9C120252-001	Soil
1MS	BH-SED-15-2MS	C9C120252-001MS	Soil
1MSD	BH-SED-15-2MSD	C9C120252-001MSD	Soil
2	BH-SED-03D-2	C9C120252-003	Soil
3	DUP-1	C9C120252-005	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS/MSD ID	Compound	MS%R/MSD%R/RPD	Qualifier	Affected Samples
1	Antimony	52%/51%/Ok	L/UL	All samples
	Arsenic	62%/Ok/Ok	L/UL	
	Copper	71%/Ok/Ok	L/UL	
	Selenium	71%/Ok/Ok	L/UL	

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample exhibited acceptable %D values except the following.

ICP Sample ID	Compound	%D	Qualifier	Affected Samples
1	Cadmium	12.2%	J	All samples

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03D-2 mg/kg	DUP-1 mg/kg	RPD	Qualifier
Silver	3.9	4.4	12%	None
Arsenic	105	100	5%	None
Beryllium	1.8	1.8	0%	None
Cadmium	7.2	7.8	8%	None
Chromium	335	292	14%	None
Copper	267	249	7%	None
Nickel	40.6	37.9	7%	None
Lead	2220	2800	23%	None
Antimony	2.6	2.7	4%	None
Selenium	15.4	13.5	13%	None
Thallium	1.1	1.3	17%	None
Zinc	2890	3500	19%	None
Mercury	1.1	1.2	9%	None

Compound Quantitation - No discrepancies were not identified.

Maryland Environmental Service

Client Sample ID: BH-SED-15-2

TOTAL Metals

Lot-Sample #...: C9C120252-001

Matrix.....: SOLID

Date Sampled...: 03/11/09

Date Received...: 03/12/09

% Moisture.....: 40

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9073029						
Silver	0.76	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AQ
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0020	
Arsenic	13.2 L	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AD
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.014	
Beryllium	0.82	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AE
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0031	
Cadmium	2.0 J	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AF
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0076	
Chromium	73.9 J	0.17	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AG
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0067	
Copper	64.2 L	0.17	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AH
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0071	
Nickel	24.2 J	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AJ
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0057	
Lead	311 J	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AK
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0028	
Antimony	0.62 L	0.17	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AL
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0028	

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-15-2

TOTAL Metals

Lot-Sample #....: C9C120252-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	2.4 L	0.42	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AM
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.034	
Thallium	0.38	0.084	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AN
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0017	
Zinc	609 J	0.42	mg/kg	SW846 6020	03/14-03/16/09	K8FFH1AP
		Dilution Factor: 0.5		Analysis Time...: 10:12	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0098	
Prep Batch #....: 9075015						
Mercury	0.28	0.028	mg/kg	SW846 7471A	03/16/09	K8FFH1AR
		Dilution Factor: 0.5		Analysis Time...: 08:24	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9075007	MDL.....: 0.0021	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

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

luw
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

TOTAL Metals

Lot-Sample #....: C9C120252-003

Matrix.....: SOLID

Date Sampled....: 03/11/09

Date Received...: 03/12/09

% Moisture.....: 63

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9073029						
Silver	3.9	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AQ
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0032
Arsenic	105 L	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AD
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.022
Beryllium	1.8	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AE
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0050
Cadmium	7.2 J	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AF
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.012
Chromium	335 J	0.27	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AG
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.011
Copper	267 J L	0.27	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AH
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.011
Nickel	40.6 J	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AJ
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0092
Lead	2220 J	1.3	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AK
		Dilution Factor: 5		Analysis Time...: 12:15		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.046
Antimony	2.6 L	0.27	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AL
		Dilution Factor: 0.5		Analysis Time...: 10:29		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0044

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2

Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

TOTAL Metals

Lot-Sample #....: C9C120252-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	15.4 L	0.67	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AM
		Dilution Factor: 0.5		Analysis Time...: 10:29	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.055	
Thallium	1.1	0.13	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AN
		Dilution Factor: 0.5		Analysis Time...: 10:29	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0027	
Zinc	2890 f	6.7	mg/kg	SW846 6020	03/14-03/16/09	K8FH91AP
		Dilution Factor: 5		Analysis Time...: 12:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.16	
Prep Batch #....: 9075015						
Mercury	1.1	0.044	mg/kg	SW846 7471A	03/16/09	K8FH91AR
		Dilution Factor: 0.5		Analysis Time...: 08:29	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9075007	MDL.....: 0.0034	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

lew
4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #....: C9C120252-005

Matrix.....: SOLID

Date Sampled....: 03/11/09

Date Received...: 03/12/09

% Moisture.....: 60

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9073029						
Silver	4.4	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AQ
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0030
Arsenic	100 L	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AD
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.020
Beryllium	1.8	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AE
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0046
Cadmium	7.8 J	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AF
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.011
Chromium	292 J	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AG
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0099
Copper	249 J L	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AH
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.011
Nickel	37.9 J	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AJ
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0084
Lead	2800 J	1.2	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AK
		Dilution Factor: 5		Analysis Time...: 12:15		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.042
Antimony	2.7 L	0.25	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AL
		Dilution Factor: 0.5		Analysis Time...: 10:33		Analyst ID.....: 401509
		Instrument ID...: ICPMS		MS Run #.....: 9073023		MDL.....: 0.0041

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lew
4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

TOTAL Metals

Lot-Sample #....: C9C120252-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	13.5 L	0.62	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AM
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.050	
Thallium	1.3	0.12	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AN
		Dilution Factor: 0.5		Analysis Time...: 10:33	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.0025	
Zinc	3500 J	6.2	mg/kg	SW846 6020	03/14-03/16/09	K8FJL1AP
		Dilution Factor: 5		Analysis Time...: 12:15	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9073023	MDL.....: 0.14	
Prep Batch #....: 9075015						
Mercury	1.2	0.041	mg/kg	SW846 7471A	03/16/09	K8FJL1AR
		Dilution Factor: 0.5		Analysis Time...: 08:31	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9075007	MDL.....: 0.0031	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

lew
4/29/09

POLYNUCLEAR AROMATIC HYDRCARBONS

USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C120252

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-15-2	C9C120252-001	Soil
1MS	BH-SED-15-2MS	C9C120252-001MS	Soil
1MSD	BH-SED-15-2MSD	C9C120252-001MSD	Soil
2	BH-SED-03D-2	C9C120252-003	Soil
3	DUP-1	C9C120252-005	Soil
4	EQBGRAB	C9C120252-006	Water
5	EQBWAT	C9C120252-007	Water

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 7 days for water samples, 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC results are summarized below.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
EQBGRAB	None - ND	-	-	-	-
EQBWAT	None - ND	-	-	-	-

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03D-2 ug/kg	DUP-1 ug/kg	RPD	Qualifier
1-Methylnaphthalene	330	420	24%	None
2-Methylnaphthalene	810	1000	21%	None
Naphthalene	5300	7200	30%	None
Acenaphthylene	930	940	1%	None
Acenaphthene	150	180	18%	None
Fluorene	630	830	27%	None
Phenanthrene	1400	1800	25%	None
Anthracene	870	1000	14%	None
Fluoranthene	5800	6100	5%	None
Pyrene	4300	4600	7%	None
Benzo (a) anthracene	2800	2300	20%	None
Chrysene	2200	2500	13%	None
Benzo (b) fluoranthene	3600	3900	8%	None
Benzo (k) fluoranthene	1700	1700	0%	None
Benzo (a) pyrene	3400	3300	3%	None
Indeno (1,2,3-cd) pyrene	1600	1500	6%	None
Dibenzo (a,h) anthracene	500	500	0%	None
Benzo (g,h,i) perylene	1800	1800	0%	None

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SKD-15-2

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-001	Work Order #....: K8FFH1AC	Matrix.....: SOLID
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9072002
Prep Date.....: 03/13/09	Analysis Date...: 03/13/09	
Prep Batch #....: 9072010	Analysis Time...: 18:13	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 40	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	97 J	110	ug/kg	17
2-Methylnaphthalene	240	110	ug/kg	22
Naphthalene	3200	110	ug/kg	16
Acenaphthylene	340	110	ug/kg	22
Acenaphthene	99 J	110	ug/kg	18
Fluorene	220	110	ug/kg	17
Phenanthrene	660	110	ug/kg	13
Anthracene	460 J	550	ug/kg	20
Fluoranthene	3000	110	ug/kg	9.4
Pyrene	2000	110	ug/kg	30
Benzo (a) anthracene	1100	110	ug/kg	18
Chrysene	1300	110	ug/kg	19
Benzo (b) fluoranthene	1500	110	ug/kg	23
Benzo (k) fluoranthene	890	110	ug/kg	23
Benzo (a) pyrene	1500	110	ug/kg	31
Indeno (1,2,3-cd) pyrene	720	110	ug/kg	6.1
Dibenzo (a,h) anthracene	240	110	ug/kg	25
Benzo (ghi) perylene	810	110	ug/kg	8.2

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

lew
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-03D-2

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-003	Work Order #....: K8FH91AC	Matrix.....: SOLID
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9072002
Prep Date.....: 03/13/09	Analysis Date...: 03/13/09	
Prep Batch #....: 9072010	Analysis Time...: 19:29	
Dilution Factor: 9.93	Initial Wgt/Vol: 30.2 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 63	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	330	180	ug/kg	27
2-Methylnaphthalene	810	180	ug/kg	35
Naphthalene	5300	180	ug/kg	26
Acenaphthylene	930	180	ug/kg	36
Acenaphthene	150 J	180	ug/kg	29
Fluorene	630	180	ug/kg	27
Phenanthrene	1400	180	ug/kg	21
Anthracene	870 J	880	ug/kg	31
Fluoranthene	5800	180	ug/kg	15
Pyrene	4300	180	ug/kg	47
Benzo (a) anthracene	2800	180	ug/kg	28
Chrysene	2200	180	ug/kg	31
Benzo (b) fluoranthene	3600	180	ug/kg	36
Benzo (k) fluoranthene	1700	180	ug/kg	37
Benzo (a) pyrene	3400	180	ug/kg	50
Indeno (1,2,3-cd) pyrene	1600	180	ug/kg	9.8
Dibenzo (a,h) anthracene	500	180	ug/kg	39
Benzo (ghi) perylene	1800	180	ug/kg	13

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

HW
4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-005	Work Order #....: K8FJL1AC	Matrix.....: SOLID
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9072002
Prep Date.....: 03/13/09	Analysis Date...: 03/13/09	
Prep Batch #....: 9072010	Analysis Time...: 20:08	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 60	Analyst ID.....: 403801	Instrument ID...: 732
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	420	170	ug/kg	25
2-Methylnaphthalene	1000	170	ug/kg	32
Naphthalene	7200	170	ug/kg	24
Acenaphthylene	940	170	ug/kg	33
Acenaphthene	180	170	ug/kg	26
Fluorene	830	170	ug/kg	25
Phenanthrene	1800	170	ug/kg	20
Anthracene	1000	820	ug/kg	29
Fluoranthene	6100	170	ug/kg	14
Pyrene	4600	170	ug/kg	44
Benzo (a) anthracene	2300	170	ug/kg	26
Chrysene	2500	170	ug/kg	29
Benzo (b) fluoranthene	3900	170	ug/kg	33
Benzo (k) fluoranthene	1700	170	ug/kg	34
Benzo (a) pyrene	3300	170	ug/kg	46
Indeno (1,2,3-cd) pyrene	1500	170	ug/kg	9.1
Dibenzo (a,h) anthracene	500	170	ug/kg	36
Benzo (ghi) perylene	1800	170	ug/kg	12

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

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LW
4/29/09

Maryland Environmental Service

Client Sample ID: EQBGRAB

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-006 Work Order #....: K8FJX1AC Matrix.....: WATER
 Date Sampled....: 03/11/09 16:00 Date Received...: 03/12/09 10:00 MS Run #.....:
 Prep Date.....: 03/13/09 Analysis Date...: 03/17/09
 Prep Batch #....: 9072073 Analysis Time...: 15:42
 Dilution Factor: 0.95 Initial Wgt/Vol: 1050 mL Final Wgt/Vol...: 1 mL
 Analyst ID.....: 003200 Instrument ID...: 733
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.017
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	ND	0.19	ug/L	0.027
Acenaphthylene	ND	0.19	ug/L	0.0081
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0094
Phenanthrene	ND	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0082
Fluoranthene	ND	0.19	ug/L	0.0095
Pyrene	ND	0.19	ug/L	0.011
Benzo (a) anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo (b) fluoranthene	ND	0.19	ug/L	0.015
Benzo (k) fluoranthene	ND	0.19	ug/L	0.016
Benzo (a) pyrene	ND	0.19	ug/L	0.011
Indeno (1,2,3-cd) pyrene	ND	0.19	ug/L	0.015
Dibenzo (a,h) anthracene	ND	0.19	ug/L	0.012
Benzo (ghi) perylene	ND	0.19	ug/L	0.0082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	74	(23 - 112)
Terphenyl-d14	85	(10 - 132)
2-Fluorobiphenyl	76	(19 - 107)
2-Fluorophenol	70	(10 - 111)
Phenol-d5	68	(15 - 112)
2,4,6-Tribromophenol	76	(16 - 122)

5

Maryland Environmental Service

Client Sample ID: EQBWAT

GC/MS Semivolatiles

Lot-Sample #....: C9C120252-007 Work Order #....: K8FJ21AC Matrix.....: WATER
 Date Sampled....: 03/11/09 16:15 Date Received...: 03/12/09 10:00 MS Run #.....:
 Prep Date.....: 03/13/09 Analysis Date...: 03/18/09
 Prep Batch #....: 9072073 Analysis Time...: 07:00
 Dilution Factor: 0.95 Initial Wgt/Vol: 1050 mL Final Wgt/Vol...: 1 mL
 Analyst ID.....: 003200 Instrument ID...: 733
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	ND	0.19	ug/L	0.017
2-Methylnaphthalene	ND	0.19	ug/L	0.015
Naphthalene	ND	0.19	ug/L	0.027
Acenaphthylene	ND	0.19	ug/L	0.0081
Acenaphthene	ND	0.19	ug/L	0.014
Fluorene	ND	0.19	ug/L	0.0094
Phenanthrene	ND	0.19	ug/L	0.027
Anthracene	ND	0.19	ug/L	0.0082
Fluoranthene	ND	0.19	ug/L	0.0095
Pyrene	ND	0.19	ug/L	0.011
Benzo(a)anthracene	ND	0.19	ug/L	0.017
Chrysene	ND	0.19	ug/L	0.010
Benzo(b)fluoranthene	ND	0.19	ug/L	0.015
Benzo(k)fluoranthene	ND	0.19	ug/L	0.016
Benzo(a)pyrene	ND	0.19	ug/L	0.011
Indeno(1,2,3-cd)pyrene	ND	0.19	ug/L	0.015
Dibenzo(a,h)anthracene	ND	0.19	ug/L	0.012
Benzo(ghi)perylene	ND	0.19	ug/L	0.0082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(23 - 112)
Terphenyl-d14	97	(10 - 132)
2-Fluorobiphenyl	79	(19 - 107)
2-Fluorophenol	75	(10 - 111)
Phenol-d5	80	(15 - 112)
2,4,6-Tribromophenol	86	(16 - 122)

LW
 4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C120252

Client: Maryland Environmental Service, Millersville, MD Date: April 30, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-15-2	C9C120252-001	Soil
1MS	BH-SED-15-2MS	C9C120252-001MS	Soil
1MSD	BH-SED-15-2MSD	C9C120252-001MSD	Soil
2	BH-SED-03D-2	C9C120252-003	Soil
3	DUP-1	C9C120252-005	Soil
4	EQBGRAB	C9C120252-006	Water
5	EQBWAT	C9C120252-007	Water

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for preserved water and soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values except the following.

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
12/08/08	Acrolein	0.022 RRF	L/R	4, 5
01/06/09	Acrolein	0.043 RRF	L/R	1, 2, 3

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - The MS/MSD sample exhibited acceptable %R and RPD values.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks exhibited the following contamination.

Blank ID	Compound	Conc. ug/kg	Action Level ug/kg	Qualifier	Affected Samples
MBLK	Methylene chloride	4.5	45	B	1, 2, 3

Trip, Field, Equipment Blank - Field QC results are summarized below.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
EQBGRAB	None - ND	-	-	-	-
EQBWAT	None - ND	-	-	-	-

Field Duplicates - Field duplicate results are summarized below.

Compound	BH-SED-03D-2 ug/kg	DUP-1 ug/kg	RPD	Qualifier
None	ND	ND	-	-

Tentatively Identified Compounds (TICs) - TICs were not reported.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SKD-15-2

GC/MS Volatiles

Lot-Sample #....: C9C120252-001 Work Order #....: K8FFH1AU Matrix.....: SOLID
Date Sampled....: 03/11/09 Date Received...: 03/12/09 MS Run #.....: 9076035
Prep Date.....: 03/17/09 Analysis Date...: 03/17/09
Prep Batch #....: 9076058 Analysis Time...: 06:29
Dilution Factor: 1.03 Initial Wgt/Vol: 4.85 g Final Wgt/Vol...: 5 mL
% Moisture.....: 40 Analyst ID.....: 010099 Instrument ID...: HP3
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	170	ug/kg	12
Acrylonitrile	ND	170	ug/kg	18
Benzene	ND	8.6	ug/kg	1.2
Bromodichloromethane	ND	8.6	ug/kg	0.97
Bromoform	ND	8.6	ug/kg	0.76
Bromomethane	ND	8.6	ug/kg	1.3
2-Butanone (MEK)	ND	8.6	ug/kg	1.5
Carbon tetrachloride	ND	8.6	ug/kg	0.77
Chloroethane	ND	8.6	ug/kg	2.7
2-Chloroethyl vinyl ether	ND	17	ug/kg	1.3
Chloroform	ND	8.6	ug/kg	1.0
Chloromethane	ND	8.6	ug/kg	1.5
Dibromochloromethane	ND	8.6	ug/kg	1.2
1,2-Dichlorobenzene	ND	8.6	ug/kg	1.4
1,3-Dichlorobenzene	ND	8.6	ug/kg	1.1
1,4-Dichlorobenzene	ND	8.6	ug/kg	1.1
trans-1,2-Dichloroethene	ND	8.6	ug/kg	1.0
Dichlorodifluoromethane	ND	8.6	ug/kg	1.1
1,1-Dichloroethane	ND	8.6	ug/kg	0.99
1,2-Dichloroethane	ND	8.6	ug/kg	1.1
1,1-Dichloroethene	ND	8.6	ug/kg	1.5
1,2-Dichloropropane	ND	8.6	ug/kg	0.94
cis-1,3-Dichloropropene	ND	8.6	ug/kg	1.2
trans-1,3-Dichloropropene	ND	8.6	ug/kg	1.0
Ethylbenzene	ND	8.6	ug/kg	1.1
Methylene chloride	6.7 JBB	8.6	ug/kg	1.2
1,1,2,2-Tetrachloroethane	ND	8.6	ug/kg	1.2
Tetrachloroethene	ND	8.6	ug/kg	1.2
Toluene	ND	8.6	ug/kg	1.3
1,1,1-Trichloroethane	ND	8.6	ug/kg	0.84
1,1,2-Trichloroethane	ND	8.6	ug/kg	1.4
Trichloroethene	ND	8.6	ug/kg	1.1
Trichlorofluoromethane	ND	8.6	ug/kg	1.6
Vinyl chloride	ND	8.6	ug/kg	0.81

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SKD-15-2

GC/MS Volatiles

Lot-Sample #....: C9C120252-001 Work Order #....: K8FFH1AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	88	(52 - 124)
Toluene-d8	99	(72 - 127)
4-Bromofluorobenzene	94	(63 - 120)
Dibromofluoromethane	96	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

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

Maryland Environmental Service

Client Sample ID: BH-SKD-03D-2

GC/MS Volatiles

Lot-Sample #....: C9C120252-003 Work Order #....: K8FH91AU Matrix.....: SOLID
 Date Sampled....: 03/11/09 Date Received...: 03/12/09 MS Run #.....: 9076035
 Prep Date.....: 03/17/09 Analysis Date...: 03/17/09
 Prep Batch #....: 9076058 Analysis Time...: 08:32
 Dilution Factor: 1 Initial Wgt/Vol: 4.99 g Final Wgt/Vol...: 5 mL
 % Moisture.....: 63 Analyst ID.....: 010099 Instrument ID...: HP3
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	270	ug/kg	19
Acrylonitrile	ND	270	ug/kg	28
Benzene	ND	13	ug/kg	1.8
Bromodichloromethane	ND	13	ug/kg	1.5
Bromoform	ND	13	ug/kg	1.2
Bromomethane	ND	13	ug/kg	2.0
2-Butanone (MEK)	ND	13	ug/kg	2.4
Carbon tetrachloride	ND	13	ug/kg	1.2
Chloroethane	ND	13	ug/kg	4.2
2-Chloroethyl vinyl ether	ND	27	ug/kg	2.1
Chloroform	ND	13	ug/kg	1.6
Chloromethane	ND	13	ug/kg	2.3
Dibromochloromethane	ND	13	ug/kg	1.9
1,2-Dichlorobenzene	ND	13	ug/kg	2.1
1,3-Dichlorobenzene	ND	13	ug/kg	1.8
1,4-Dichlorobenzene	ND	13	ug/kg	1.7
trans-1,2-Dichloroethene	ND	13	ug/kg	1.6
Dichlorodifluoromethane	ND	13	ug/kg	1.8
1,1-Dichloroethane	ND	13	ug/kg	1.6
1,2-Dichloroethane	ND	13	ug/kg	1.7
1,1-Dichloroethene	ND	13	ug/kg	2.3
1,2-Dichloropropane	ND	13	ug/kg	1.5
cis-1,3-Dichloropropene	ND	13	ug/kg	1.8
trans-1,3-Dichloropropene	ND	13	ug/kg	1.6
Ethylbenzene	ND	13	ug/kg	1.7
Methylene chloride	15 ND B	13	ug/kg	1.8
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.9
Tetrachloroethene	ND	13	ug/kg	1.8
Toluene	ND	13	ug/kg	2.0
1,1,1-Trichloroethane	ND	13	ug/kg	1.3
1,1,2-Trichloroethane	ND	13	ug/kg	2.2
Trichloroethene	ND	13	ug/kg	1.8
Trichlorofluoromethane	ND	13	ug/kg	2.5
Vinyl chloride	ND	13	ug/kg	1.3

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 4/29/09

Maryland Environmental Service

Client Sample ID: BH-SKD-03D-2

GC/MS Volatiles

Lot-Sample #....: C9C120252-003 Work Order #....: K8FH91AU Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(52 - 124)
Toluene-d8	105	(72 - 127)
4-Bromofluorobenzene	91	(63 - 120)
Dibromofluoromethane	104	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

lew
4/29/09

3

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9C120252-005	Work Order #....: K8FJL1AV	Matrix.....: SOLID
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9076035
Prep Date.....: 03/17/09	Analysis Date...: 03/17/09	
Prep Batch #....: 9076058	Analysis Time...: 08:58	
Dilution Factor: 1.03	Initial Wgt/Vol: 4.87 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 60	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	250	ug/kg	18
Acrylonitrile	ND	250	ug/kg	26
Benzene	ND	13	ug/kg	1.7
Bromodichloromethane	ND	13	ug/kg	1.4
Bromoform	ND	13	ug/kg	1.1
Bromomethane	ND	13	ug/kg	1.9
2-Butanone (MEK)	ND	13	ug/kg	2.2
Carbon tetrachloride	ND	13	ug/kg	1.1
Chloroethane	ND	13	ug/kg	3.9
2-Chloroethyl vinyl ether	ND	25	ug/kg	2.0
Chloroform	ND	13	ug/kg	1.5
Chloromethane	ND	13	ug/kg	2.2
Dibromochloromethane	ND	13	ug/kg	1.8
1,2-Dichlorobenzene	ND	13	ug/kg	2.0
1,3-Dichlorobenzene	ND	13	ug/kg	1.7
1,4-Dichlorobenzene	ND	13	ug/kg	1.6
trans-1,2-Dichloroethene	ND	13	ug/kg	1.5
Dichlorodifluoromethane	ND	13	ug/kg	1.7
1,1-Dichloroethane	ND	13	ug/kg	1.5
1,2-Dichloroethane	ND	13	ug/kg	1.6
1,1-Dichloroethene	ND	13	ug/kg	2.2
1,2-Dichloropropane	ND	13	ug/kg	1.4
cis-1,3-Dichloropropene	ND	13	ug/kg	1.7
trans-1,3-Dichloropropene	ND	13	ug/kg	1.5
Ethylbenzene	ND	13	ug/kg	1.6
Methylene chloride	13 B	13	ug/kg	1.7
1,1,2,2-Tetrachloroethane	ND	13	ug/kg	1.8
Tetrachloroethene	ND	13	ug/kg	1.7
Toluene	ND	13	ug/kg	1.9
1,1,1-Trichloroethane	ND	13	ug/kg	1.2
1,1,2-Trichloroethane	ND	13	ug/kg	2.1
Trichloroethene	ND	13	ug/kg	1.7
Trichlorofluoromethane	ND	13	ug/kg	2.3
Vinyl chloride	ND	13	ug/kg	1.2

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4/29/09

Maryland Environmental Service

Client Sample ID: DUP-1

GC/MS Volatiles

Lot-Sample #....: C9C120252-005 Work Order #....: K8FJL1AV Matrix.....: SOLID

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	96	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	102	(63 - 120)
Dibromofluoromethane	107	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

Ques
4/29/09

4

Maryland Environmental Service

Client Sample ID: EQBGRAB

GC/MS Volatiles

Lot-Sample #....: C9C120252-006 Work Order #....: K8FJX1AA Matrix.....: WATER
 Date Sampled....: 03/11/09 Date Received...: 03/12/09 MS Run #.....: 9077190
 Prep Date.....: 03/18/09 Analysis Date...: 03/18/09
 Prep Batch #....: 9077356 Analysis Time...: 14:24
 Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol...: 5 mL
 Analyst ID.....: 034635 Instrument ID...: HP7
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND R	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

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 Lew
 4/29/09

Maryland Environmental Service

Client Sample ID: EQBWAT

GC/MS Volatiles

Lot-Sample #....: C9C120252-007	Work Order #....: K8FJ21AA	Matrix.....: WATER
Date Sampled....: 03/11/09	Date Received...: 03/12/09	MS Run #.....: 9077190
Prep Date.....: 03/18/09	Analysis Date...: 03/18/09	
Prep Batch #....: 9077356	Analysis Time...: 14:50	
Dilution Factor: 1	Initial Wgt/Vol: 5 mL	Final Wgt/Vol...: 5 mL
Analyst ID.....: 034635	Instrument ID...: HP7	
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND R	100	ug/L	5.7
Acrylonitrile	ND	100	ug/L	6.8
Benzene	ND	5.0	ug/L	0.99
Bromodichloromethane	ND	5.0	ug/L	0.93
Bromoform	ND	5.0	ug/L	1.1
Bromomethane	ND	5.0	ug/L	1.6
2-Butanone (MEK)	ND	5.0	ug/L	1.1
Carbon tetrachloride	ND	5.0	ug/L	1.1
Chloroethane	ND	5.0	ug/L	0.75
2-Chloroethyl vinyl ether	ND	10	ug/L	1.9
Chloroform	ND	5.0	ug/L	1.0
Chloromethane	ND	5.0	ug/L	1.4
Dibromochloromethane	ND	5.0	ug/L	0.65
1,2-Dichlorobenzene	ND	5.0	ug/L	0.68
1,3-Dichlorobenzene	ND	5.0	ug/L	0.51
1,4-Dichlorobenzene	ND	5.0	ug/L	0.53
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.75
Dichlorodifluoromethane	ND	5.0	ug/L	0.64
1,1-Dichloroethane	ND	5.0	ug/L	1.0
1,2-Dichloroethane	ND	5.0	ug/L	0.96
1,1-Dichloroethene	ND	5.0	ug/L	1.1
1,2-Dichloropropane	ND	5.0	ug/L	1.3
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.73
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.58
Ethylbenzene	ND	5.0	ug/L	0.62
Methylene chloride	ND	5.0	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.93
Tetrachloroethene	ND	5.0	ug/L	0.82
Toluene	ND	5.0	ug/L	0.85
1,1,1-Trichloroethane	ND	5.0	ug/L	1.0
1,1,2-Trichloroethane	ND	5.0	ug/L	1.2
Trichloroethene	ND	5.0	ug/L	0.80
Trichlorofluoromethane	ND	5.0	ug/L	1.1
Vinyl chloride	ND	5.0	ug/L	1.3

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4/29/09

Maryland Environmental Service

Client Sample ID: EQBWAT

GC/MS Volatiles

Lot-Sample #....: C9C120252-007 Work Order #....: K8FJ21AA Matrix.....: WATER

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	93	(62 - 123)
Toluene-d8	109	(80 - 120)
4-Bromofluorobenzene	97	(75 - 120)
Dibromofluoromethane	89	(80 - 120)

hw
4/29/09

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

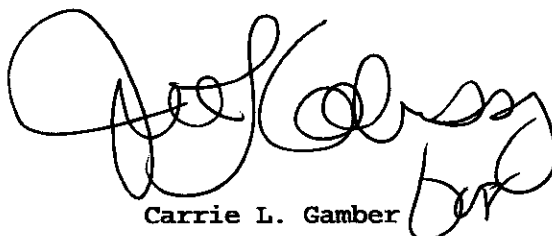
MES Sparrows Point 18001868

Lot #: C9C120260

Megan Simon

**Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108**

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

April 10, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C120260

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 12, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

April 9, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006

Case: EAMSGS; SDG: 9C120260

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on March 13th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/13/09 ETR No: 130604			
788275	BH-SED-15-2	03/11/09	SOLID
788276	BH-SED-03D-2	03/11/09	SOLID
788277	DUP-1	03/11/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

There were no exceptions to the method quality control criteria during the analyses of these samples by ASTM Methods D422 and D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, reading "Ron Pentkowski".

Ron Pentkowski
Project Manager

Enclosure

Client: EA Engineering Science, and Technology, Inc.					Project Manager: Frank Barranco					Chain of Custody Record										
15 Loveton Circle Sparks, MD 21152					Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250					Laboratory: TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber										
Project Name: Sparrows Point Offshore Areas																				
Project#: 14534.06																				
Page 1 of 2					Sediment Samples															
Date	Time	Water	Sediment	Sample Identification	No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids					Remarks		
HOB			X															SEE PROJECT SPECIFIC ANALYTE LIST		
3/11/09	1100		X	BH-SED-15-2	5	X	X	X	X	X		X	X					5 day expedited turn around requested		
	1100		X	BH-SED-15-2 MS	5	X	X	X	X	X		X	X							
	1100		X	BH-SED-15-2 MSD	5	X	X	X	X	X		X	X							
	1105		X	BH-SED-15-TOC	1							X								
	1105		X	BH-SED-15-TOC MS	1							X								
	1105		X	BH-SED-15-TOC MSD	1							X								
	1300		X	BH-SED-03D-2	5	X	X	X	X	X		X	X							
	1305		X	BH-SED-03D-TOC	1							X								
				DUP-1	6	X	X	X	X	X	X	X	X							
Sampled by: (Signature) Todd Ward					Date/Time 3/11/09 1305					Relinquished by: (Signature) Todd Ward					Date/Time 3/11/09 1700					SEDIMENT
Relinquished by: (Signature) Patricia R. French					Date/Time 3/12/09 1100					Received by Laboratory: (Signature) Patricia R. French					Date/Time 3/12/09 1100					

Cooler Receipt Form
TestAmerica Pittsburgh

Client: E.A. Engineering Project: _____ Quote: 82013

Cooler Rec'd & Opened for Temp. Check on: 3/12/09

Coolers Opened and Unpacked on: 3/12/09 By: PRF

(Signature)

TestAmerica Pittsburgh Lot Number: C9C120260

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

UP: Unpreserved

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

Comments:

[illegible]

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

Nitric Acid _____
Sulfuric Acid _____

Hydrochloric Acid _____
Sodium Hydroxide _____



FedEx Tracking Number **8565 6932 7050**

1 From This portion can be removed for Recipient's records.
Date 1/11/09 FedEx Tracking Number 856569327050

Sender's Name TODD WARD Phone 410 196-1200

Company W. A. ENGINEERING SCIENCE & TECH

Address 15 LUNEVTON CIR Dept./Floor/Suite/Room

City CHARLES CLERMONT State MD ZIP 21115

2 Your Internal Billing Reference 11514061000000000000

3 To
Recipient's Name THOMAS W. HARRINGTON Phone 410 763-2418

Company THOMAS W. HARRINGTON

Recipient's Address 301 S. HARRISON Dept./Floor/Suite/Room

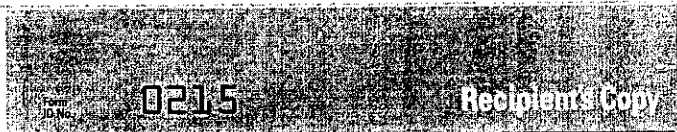
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address 15 LUNEVTON CIR
To request a package be held at a specific FedEx location, print FedEx address here.

City CHARLES CLERMONT State MD ZIP 21115



8565 6932 7050



4a Express Package Service Packages up to 150 lbs.
☐ FedEx Priority Overnight Next business morning. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight Next business afternoon. * Saturday Delivery NOT available.
☐ FedEx First Overnight Earliest next business morning delivery to select locations. * Saturday Delivery NOT available.
☐ FedEx 2Day Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Express Saver Third business day. * Saturday Delivery NOT available.
* To next locations.
FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service Packages over 150 lbs.
☐ FedEx 1Day Freight* Next business day. * Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 2Day Freight Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 3Day Freight Third business day. * Saturday Delivery NOT available.
* To next locations.

5 Packaging
☐ FedEx Envelope* ☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. ☐ FedEx Box ☐ FedEx Tube ☐ Other
* Declared value limit: \$500

6 Special Handling Include FedEx address in Section 3.
☐ SATURDAY Delivery Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
☐ HOLD Weekday at FedEx Location Not available for FedEx First Overnight.
☐ HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods? One box must be checked.
☐ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 x kg ☐ Cargo Aircraft Only
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.
☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check ☐ Money Order

Total Packages 1 Total Weight 1.00 Total Charges 51.9
Credit Card Auth.

*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.
☐ No Signature Required Package may be left without obtaining a signature for delivery.
☐ Direct Signature Anyone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

Rev. Date 8/05 Part #158279-01/1994-2005 FedEx® PRINTED IN U.S.A. *SRS

C9C120260

INTER-COMPANY LOG

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-03-12
Analytical Due Date: 2009-03-26
Report Due Date: 2009-03-27

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-15-2 DATE SAMPLED: 20090311 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8FJ61AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8FJ61AA METAL: XX

SMP#: 2 CLIENT ID: BH-SED-03D-2 DATE SAMPLED: 20090311 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8FJ81AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8FJ81AA METAL: XX

SMP#: 3 CLIENT ID: DUP-1 DATE SAMPLED: 20090311 MATRIX: A SOLID
SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8FKC1AC METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER K8FKC1AA METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY:

Patrick R. Faust

DATE: 3/17/09 1700

RECEIVED FOR LAB BY:

[Signature]

DATE: 3/13/09 1025

DATA SUMMARY PACKAGE

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9C120260



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

DUP-1

Lab Name: TestAmerica Burlington

Contract: C9C120260

SDG No.: 9C120260

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 788277

Matrix: SOLID

Client: STLPAP

Date Received: 03/13/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/31/09		%	1	0.0	317.3	

Printed on: 04/08/09 11:43 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130604
SDG: 9C120260

Start Date:	3/31/2009
Start Time:	2200
End Date:	4/1/2009
Analyst:	MAP

[illegible]

Particle Size of Soils by ASTM D422

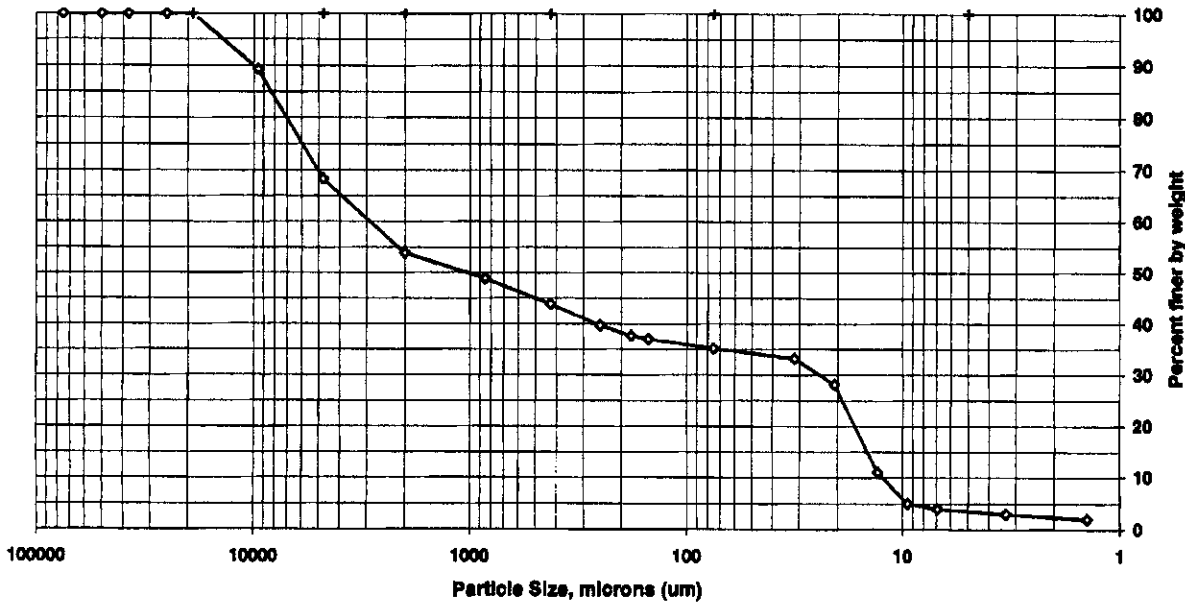
Client Code: STLPAP
Sample ID: BH-SED-15-2
Lab ID: 788275

SDG: 9C120260
ETR(s): 130604

Date Received: 3/13/2009
Start Date: 3/16/2009
End Date: 4/8/2009

Percent Solids:	51.2%
Specific Gravity:	2.650
Maximum Particle Size:	19 mm

Non-soil material:	shells
Shape (> #10):	angular
Hardness (> #10):	hard



Sieve size	Particle size, μm	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	89.3	10.7
#4	4750	68.3	21.0
#10	2000	53.9	14.4
#20	850	48.9	5.0
#40	425	43.9	5.0
#60	250	39.7	4.2
#80	180	37.7	2.0
#100	150	37.0	0.7
#200	75	35.2	1.8
Hydrometer	31.6	33.2	2.0
	20.6	28.2	5.0
	13.0	11.1	17.1
	9.5	5.0	6.0
	6.9	4.0	1.0
	3.3	3.0	1.0
V	1.4	2.0	1.0

Soil Classification	Percent of Total Sample
Gravel	31.7
Sand	33.1
Coarse Sand	14.4
Medium Sand	10.0
Fine Sand	8.7
Silt	31.1
Clay	4.0

Preparation Method: D2217
Dispersion Device: Mechanical mixer with
a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

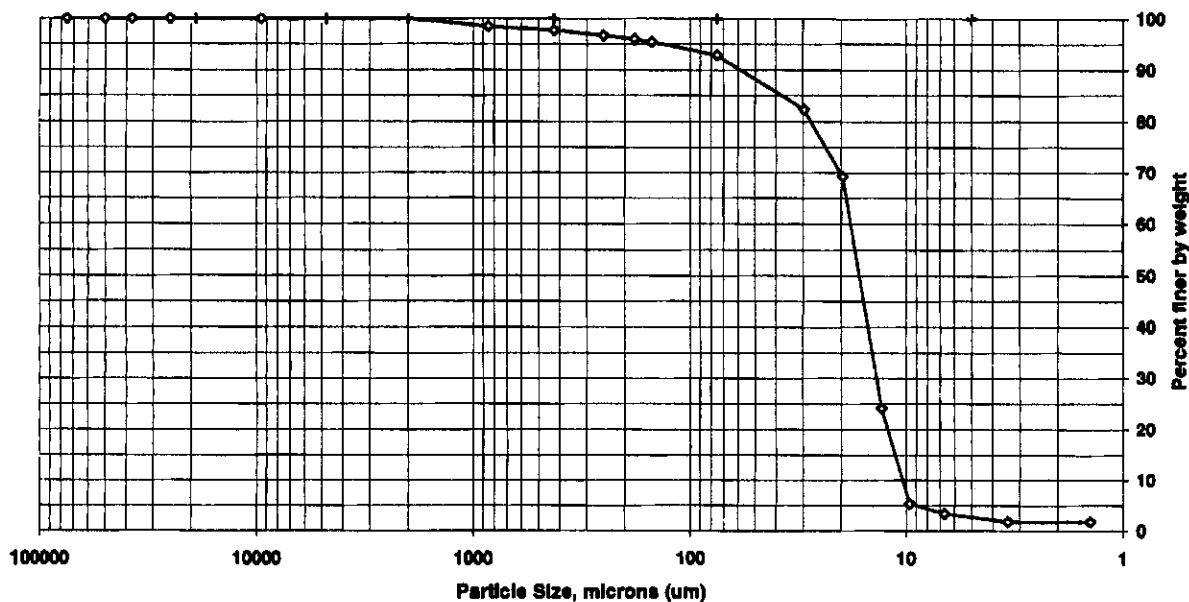
Client Code: STLPAP
 Sample ID: BH-SED-03D-2
 Lab ID: 788276

SDG: 9C120260
 ETR(s): 130604

Date Received: 3/13/2009
 Start Date: 3/16/2009
 End Date: 4/8/2009

Percent Solids: 28.2%
 Specific Gravity: 2.650
 Maximum Particle Size: Med sand

Non-soil material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	98.5	1.5
#40	425	97.7	0.8
#60	250	96.7	1.0
#80	180	96.0	0.7
#100	150	95.4	0.6
#200	75	92.9	2.5
Hydrometer	29.8	82.3	10.5
	19.6	69.2	13.1
	13.0	24.1	45.1
	9.8	5.3	18.8
	6.7	3.4	1.9
	3.4	1.9	1.6
V	1.4	1.9	0.0

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	7.1
Coarse Sand	0.0
Medium Sand	2.3
Fine Sand	4.8
Silt	89.4
Clay	3.4

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

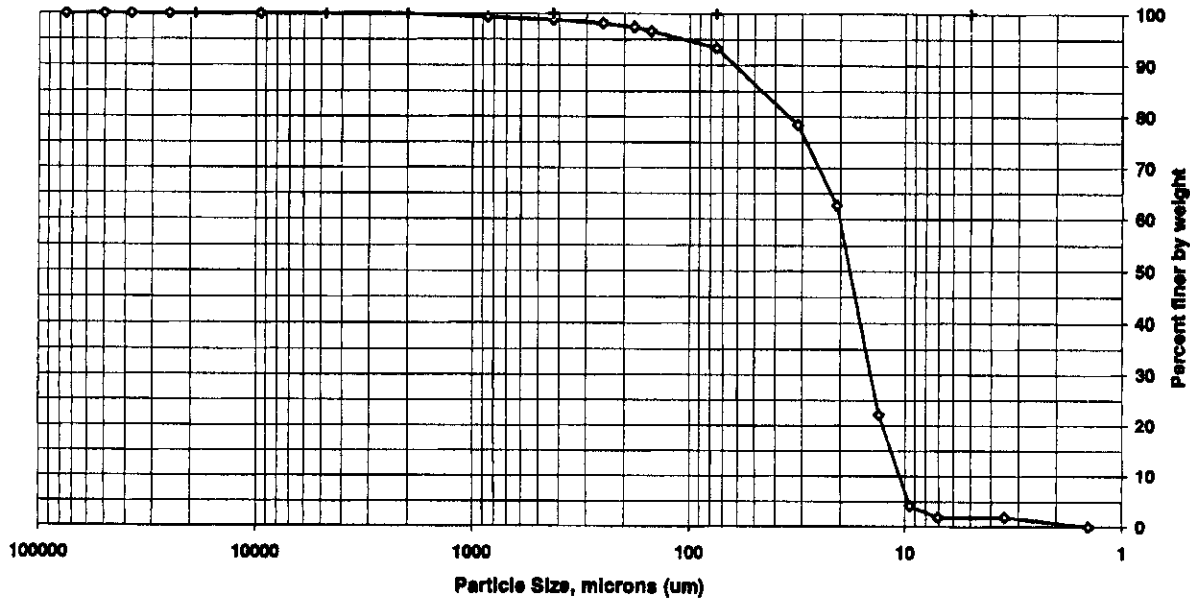
Client Code: STLPAP
 Sample ID: DUP-1
 Lab ID: 788277

SDG: 9C120260
 ETR(s): 130604

Date Received: 3/13/2009
 Start Date: 3/16/2009
 End Date: 4/8/2009

Percent Solids: 24.0%
 Specific Gravity: 2.650
 Maximum Particle Size: Med sand

Non-soil material: na
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	100.0	0.0
#20	850	99.3	0.7
#40	425	98.8	0.5
#60	250	98.1	0.7
#80	180	97.4	0.7
#100	150	96.6	0.8
#200	75	93.4	3.3
Hydrometer	31.4	78.5	14.9
	20.7	62.7	15.8
	13.2	22.1	40.5
	9.5	4.1	18.0
	7.0	1.9	2.3
	3.5	1.9	0.0
V	1.4	0.0	1.9

Soil Classification	Percent of Total Sample
Gravel	0.0
Sand	6.6
Coarse Sand	0.0
Medium Sand	1.2
Fine Sand	5.4
Silt	91.5
Clay	1.9

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

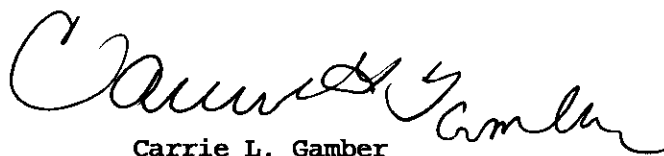
MES Sparrows Point 18001868

Lot #: C9C130178

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

March 27, 2009



NELAC REPORTING:

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
NFESC	NA	NAVY	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW	X
		HW	X
California – NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E871008-04)	WW	X
		HW	X
Illinois – NELAC	(#002064)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	X
		HW	X
Louisiana – NELAC	(#04041)	WW	X
		HW	X
New Hampshire – NELAC	(#203008)	WW	X
		–	–
New Jersey – NELAC	(PA-005)	WW	X
		HW	X
New York – NELAC	(#11182)	WW	X
		HW	X
North Carolina	(#434)	WW	X
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014002)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
		HW	X
Wisconsin	998027800	WW	X
		HW	X

The codes utilized for program types are described below:

HW Hazardous Waste certification
 WW Non-potable Water and/or Wastewater certification
 X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 2/5/2009 C:\Documents and Settings\derubeisn\My Documents\NELAC NARRATIVE Pttsburgh.doc

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C130178

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 13, 2009. The cooler was received within the proper temperature range.

Note: The initial weight extracted for the sediment samples was adjusted to account for the percent moisture of each sample whenever possible.

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

GC/MS Volatiles:

The method blank had methylene chloride detected between the MDL and the reporting limit. The result was flagged with a "J" qualifier. Any sample that had this compound detected had the result flagged with a "B" qualifier.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

GC/MS Semivolatiles:

Due to the concentration of target compounds detected, sample BH-SED-16-0 was analyzed at a dilution. The sample had the surrogates diluted out.

The matrix spike and matrix spike duplicate had surrogates and the spikes diluted out.

All non-CCC compounds that have >15% RSD were evaluated to see if a better curve could be drawn using a quadratic curve. All compounds <30% RSD will use an average response factor curve if no visible improvement is accomplished using a quadratic curve. A quadratic curve will be used for a compound where it is determined to be the "best-fit" evaluation.

Metals:

The serial dilution of sample BH-SED-16-0 was outside of the percent difference control limits for antimony and cadmium. The results were flagged with an "E" qualifier.

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C130178

Metals (cont):

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

The method blank had chromium detected above the reporting limit. All associated samples had chromium detected at a concentration that was greater than 10X the concentration detected in the method blank. All data was reported.

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

For the matrix spike and matrix spike duplicate, arsenic, chromium, copper, lead, selenium, and zinc recoveries were not calculated due to the concentration of analyte in the sample being >4 times the concentration of spike added.

General Chemistry:

There were no problems associated with the analysis.

METHODS SUMMARY

C9C130178

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organics GCMS BNA 8270C	SW846 8270C	
Total Residue as Percent Solids	SM20 2540G	
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

- EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C9C130178

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
K8G12	001	BH-SED-16-0	03/12/09	10:05
K8G2A	002	BH-SED-16-T0C	03/12/09	10:10

NOTE (S) :

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

Client: EA Engineering Science, and Technology, Inc. 15 Loveton Circle Sparks, MD 21152				Project Manager: Frank Barranco Phone: 410-329-5137 Field Contact: Todd Ward Phone: 410-746-1250				Parameters/Method Numbers for Analysis										Chain of Custody Record	
Project Name: Sparrows Point Offshore Areas								Laboratory: TestAmerica - Pittsburgh 301 Alpha Drive, RIDC Park Pittsburgh, PA 15238 phone: 412-963-2428 fax: 412-963-2468 ATTN: Carrie Gamber										Remarks	
Project#: 14534.06																			
Page 1 of 1				Sediment Samples															
Date	Time	Water	Sediment	Sample Identification	No. of Containers	Metals 6010B/7471A	Cyanide 9012A	Grain Size ASTM D422	Moisture Content ASTM D2216-90	Volatile Organic Cmpds 5035A/8260B	Total Organic Carbon (Lloyd Kahn)	PAHs 8270C	Total Solids						
3/12/09	1005		X	BH-SED-16-O	5	X	X	X	X	X		X	X						
3/12/09	1010		X	BH-SED-16-TOC	1						X								
																	5 day expedited turn around time requested		
Sampled by: (Signature) <i>Todd Ward</i>				Date/Time 3/12/09 1010		Relinquished by: (Signature) <i>Todd Ward</i>				Date/Time 3/12/09 1700				SEDIMENT					
Relinquished by: (Signature)				Date/Time		Received by Laboratory: (Signature) <i>Jim Uccie</i>				Date/Time 3/13/09 0950									

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA Engineering Project: Sparrows Pt. Quote: 82013
Cooler Rec'd & Opened for Temp. Check on: 3/13/09
Coolers Opened and Unpacked on: 3/13/09 By: M. Ulinie
(Signature)
TestAmerica Pittsburgh Lot Number: C9C130178

	Yes	No	NA
1. Were custody seals on the outside of the cooler? _____		<input checked="" type="checkbox"/>	
If YES, how many and where? Quantity <u>0</u> Location <u>—</u>			
Were signatures and date correct? _____			<input checked="" type="checkbox"/>
2. Were custody papers included inside the cooler? _____	<input checked="" type="checkbox"/>		
3. Were custody papers properly filled out (ink, signed, match labels)? _____	<input checked="" type="checkbox"/>		
4. Did you sign the custody papers in the appropriate place? _____	<input checked="" type="checkbox"/>		
5. Was shippers packing slip attached to this form? _____	<input checked="" type="checkbox"/>		
6. Were packing materials used? _____	<input checked="" type="checkbox"/>		
If YES, what type? <u>Bubble Bags</u>			
7. Were the samples received within the acceptable temperature range? _____	<input checked="" type="checkbox"/>		
8. Were the samples appropriately preserved? _____			<input checked="" type="checkbox"/>
9. Were all bottles sealed in separate plastic bags? _____	<input checked="" type="checkbox"/>		
10. Did all bottles arrive in good condition (unbroken)? _____	<input checked="" type="checkbox"/>		
11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____	<input checked="" type="checkbox"/>		
12. Did all bottle labels and/or tags agree with custody papers? _____	<input checked="" type="checkbox"/>		
13. Were correct bottles used for tests indicated? _____	<input checked="" type="checkbox"/>		
14. Were all VOA vials checked for the presence of air bubbles? _____			<input checked="" type="checkbox"/>
15. Was a sufficient amount of sample sent in each bottle? _____	<input checked="" type="checkbox"/>		
16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO			

Explain any discrepancies: _____

Level 2 Review _____
Was contacted on _____ by _____ to resolve discrepancies.

C9C130178

10

(1 - 56)

255

500

fedex.com 1800.GoFedEx 1800.463.3339

FedEx US Airbill

Express

FedEx Tracking Number

8565 6932 7017

1 From This portion can be removed for Recipient's records.
Date 3/12/09 FedEx Tracking Number 856569327017
Sender's Name TODD WARD Phone 410 746-1250
Company E A ENGINEERING SCIENCE & TECH
Address 15 LOVETON CIR
City SPARKS GLENCOE State MD ZIP 21152
2 Your Internal Billing Reference 1453406.0002.0007A
3 To
Recipient's Name SAMPLE MANAGEMENT Phone 412 963-2428
Company TESTAMERICA - PITTSBURGH
Recipient's Address 301 ALPHA DRIVE
Address RIDC PARK
City PITTSBURGH State PA ZIP 15238



8565 6932 7017

0326961324

Recipient's Copy

4a Express Package Service
☒ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.
☐ FedEx First Overnight
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
☐ FedEx 2Day
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.
* To meet locations. FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service
☐ FedEx 1Day Freight*
Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 2Day Freight
Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 3Day Freight
Third business day.** Saturday Delivery NOT available.
* Call for Confirmation. ** To meet locations.

5 Packaging
☐ FedEx Envelope*
☐ FedEx Pak*
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
☐ FedEx Box
☐ FedEx Tube
☒ Other
* Declared value limit \$500.

6 Special Handling
Include FedEx address in Section 3.
☐ SATURDAY Delivery
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
☐ HOLD Weekday at FedEx Location
Not available for FedEx First Overnight.
☐ HOLD Saturday at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
One box must be checked.
☒ No
☐ Yes
As per attached Shipper's Declaration.
☐ Yes
Shipper's Declaration not required.
☐ Dry Ice
Dry ice, 9, UN 1845 x kg
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.
☐ Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.
☒ Sender
Acct. No. in Section 1 will be billed.
☐ Recipient
☐ Third Party
☐ Credit Card
☐ Cash/Check
Obtain Recip. Acct. No.
Total Packages 1 Total Weight Total Charges
Credit Card Auth.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.
☐ No Signature Required
Package may be left without obtaining a signature for delivery.
☐ Direct Signature
Anyone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

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DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

GC/MS Volatiles

Lot-Sample #....: C9C130178-001	Work Order #....: K8G121AX	Matrix.....: SOLID
Date Sampled...: 03/12/09	Date Received...: 03/13/09	MS Run #.....: 9076035
Prep Date.....: 03/17/09	Analysis Date...: 03/17/09	
Prep Batch #....: 9076058	Analysis Time...: 09:23	
Dilution Factor: 0.97	Initial Wgt/Vol: 5.13 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 55	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acrolein	ND	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.95
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.95
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.2
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.4
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	12 B	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

(Continued on next page)

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

GC/MS Volatiles

Lot-Sample #...: C9C130178-001 Work Order #...: K8G121AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(52 - 124)
Toluene-d8	103	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	110	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

SW846 8260B SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C130178

Extraction: XXA4DQK01

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	88	99	94	96	00
02	BH-SED-16-0	95	103	103	110	00
03	METHOD BLK. K8LV81AA	99	102	87	96	00
04	LCS K8LV81AC	103	100	107	99	00
05	LAB MS/MSD D	102	101	103	99	00
06	LAB MS/MSD S	103	99	101	99	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(52-124)
 (72-127)
 (63-120)
 (68-121)

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C170000

WO #: K8LV81AC

BATCH: 9076058

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	40.0	38.1	95	59 - 129	
Trichloroethene	40.0	37.8	95	76 - 119	
Benzene	40.0	39.2	98	77 - 120	
Toluene	40.0	40.2	100	78 - 124	
Chlorobenzene	40.0	39.8	100	79 - 120	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C120252

WO #: K8FFH1CX

BATCH: 9076058

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	71.6	ND	78.0	109	59 - 129	
Trichloroethene	71.6	ND	74.5	104	76 - 119	
Benzene	71.6	ND	78.1	109	77 - 120	
Toluene	71.6	ND	78.7	110	78 - 124	
Chlorobenzene	71.6	ND	76.6	107	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C9C120252

WO #: K8FFH1C0

BATCH: 9076058

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
1,1-Dichloroethene	76.9	76.1	99	2.4	25	59 - 129	
Trichloroethene	76.9	78.6	102	5.4	21	76 - 119	
Benzene	76.9	80.0	104	2.4	20	77 - 120	
Toluene	76.9	84.1	109	6.6	21	78 - 124	
Chlorobenzene	76.9	81.5	106	6.2	20	79 - 120	

NOTES (S) :

Results and reporting limits have been adjusted for dry weight.

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

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K8LV81AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: 3031701.D

Lot Number: C9C130178

Date Analyzed: 03/17/09

Time Analyzed: 06:05

Matrix: SOLID

Date Extracted: 03/17/09

GC Column: RTX-624 ID: .18

Extraction Method: 5035

Instrument ID: HP3

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	INTRA-LAB QC	K8FFH1AU	3031702.D	03/17/09	06:29
02	LAB MS/MSD	K8FFH1CX S	3031705.D	03/17/09	07:43
03	LAB MS/MSD	K8FFH1C0 D	3031706.D	03/17/09	08:08
04	BH-SED-16-0	K8G121AX	3031709.D	03/17/09	09:23
05	CHECK SAMPLE	K8LV81AC C	3031704.D	03/17/09	07:19
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C130178
MB Lot-Sample #: C9C170000-058

Work Order #...: K8LV81AA

Matrix.....: SOLID

Analysis Date...: 03/17/09
Dilution Factor: 1

Prep Date.....: 03/17/09

Prep Batch #...: 9076058

Analysis Time...: 06:05

Initial Wgt/Vol: 5 g

Final Wgt/Vol...: 5 mL

Analyst ID.....: 010099

Instrument ID...: HP3

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acrolein	ND	100	ug/kg	SW846	8260B
Acrylonitrile	ND	100	ug/kg	SW846	8260B
Benzene	ND	5.0	ug/kg	SW846	8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846	8260B
Bromoform	ND	5.0	ug/kg	SW846	8260B
Bromomethane	ND	5.0	ug/kg	SW846	8260B
2-Butanone (MEK)	ND	5.0	ug/kg	SW846	8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846	8260B
Chloroethane	ND	5.0	ug/kg	SW846	8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846	8260B
Chloroform	ND	5.0	ug/kg	SW846	8260B
Chloromethane	ND	5.0	ug/kg	SW846	8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846	8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846	8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846	8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846	8260B
Ethylbenzene	ND	5.0	ug/kg	SW846	8260B
Methylene chloride	4.5 J	5.0	ug/kg	SW846	8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846	8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846	8260B
Toluene	ND	5.0	ug/kg	SW846	8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846	8260B
Trichloroethene	ND	5.0	ug/kg	SW846	8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846	8260B
Vinyl chloride	ND	5.0	ug/kg	SW846	8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	99	(52 - 124)
Toluene-d8	102	(72 - 127)
4-Bromofluorobenzene	87	(63 - 120)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C9C130178

Work Order #...: K8LV81AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromofluoromethane	96	(68 - 121)		

NOTE(S) :

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

J Estimated result. Result is less than RL.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C130178
 Lab File ID (Standard): CC30317 Date Analyzed: 03/17/09
 Instrument ID: HP3 Time Analyzed: 0527
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	309993	7.40	74666	10.48	191173	12.81
UPPER LIMIT	619986	7.60	149332	10.68	382346	13.01
LOWER LIMIT	154997	7.20	37333	10.28	95587	12.61
EPA SAMPLE NO.						
01 INTRA-LAB BL	529469	7.41	122297	10.49	196386	12.81
02 INTRA-LAB CH	262059	7.40	65041	10.49	172170	12.81
03 BH-SED-16-0	296883	7.41	72476	10.49	158391	12.81
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.20 minutes of internal standard RT
 RT LOWER LIMIT = - 0.20 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

GC/MS SEMIVOLATILE SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

GC/MS Semivolatiles

Lot-Sample #....: C9C130178-001	Work Order #....: K8G121AC	Matrix.....: SOLID
Date Sampled....: 03/12/09 10:05	Date Received...: 03/13/09 09:50	MS Run #.....: 9077020
Prep Date.....: 03/18/09	Analysis Date...: 03/19/09	
Prep Batch #....: 9077032	Analysis Time...: 15:34	
Dilution Factor: 10	Initial Wgt/Vol: 30 g	Final Wgt/Vol...: 0.5 mL
% Moisture.....: 55	Analyst ID.....: 003200	Instrument ID...: 731
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1-Methylnaphthalene	140 J	150	ug/kg	22
2-Methylnaphthalene	340	150	ug/kg	29
Naphthalene	1900	150	ug/kg	21
Acenaphthylene	860	150	ug/kg	29
Acenaphthene	98 J	150	ug/kg	24
Fluorene	290	150	ug/kg	22
Phenanthrene	990	150	ug/kg	18
Anthracene	800	730	ug/kg	26
Fluoranthene	4500	150	ug/kg	12
Pyrene	5200	150	ug/kg	39
Benzo (a) anthracene	3400	150	ug/kg	23
Chrysene	3100	150	ug/kg	26
Benzo (b) fluoranthene	8300	150	ug/kg	30
Benzo (k) fluoranthene	ND	150	ug/kg	31
Benzo (a) pyrene	5500	150	ug/kg	41
Indeno (1,2,3-cd) pyrene	3100	150	ug/kg	8.1
Dibenzo (a,h) anthracene	1000	150	ug/kg	32
Benzo (ghi) perylene	3400	150	ug/kg	11

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	NC,DIL	(27 - 110)
Terphenyl-d14	NC,DIL	(21 - 130)
2-Fluorobiphenyl	NC,DIL	(28 - 108)
2-Fluorophenol	NC,DIL	(28 - 107)
Phenol-d5	NC,DIL	(30 - 112)
2,4,6-Tribromophenol	NC,DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

SW846 8270C SURROGATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C130178

Extraction: XXA4F4201

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	BH-SED-16-0	0 D	0 D	0 D	0 D	0 D	0 D	06
02	METHOD BLK. K8N4X1AA	83	80	78	79	77	84	00
03	LCS K8N4X1AC	81	92	80	76	77	100	00
04	BH-SED-16-0 D	0 D	0 D	0 D	0 D	0 D	0 D	06
05	BH-SED-16-0 S	0 D	0 D	0 D	0 D	0 D	0 D	06

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = Terphenyl-d14
 SRG03 = 2-Fluorobiphenyl
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(27-110)
 (21-130)
 (28-108)
 (28-107)
 (30-112)
 (21-116)

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Lot #: C9C180000

WO #: K8N4X1AC

BATCH: 9077032

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	333	232	70	39- 105	
2-Chlorophenol	333	237	71	40- 105	
1,4-Dichlorobenzene	333	233	70	41- 101	
N-Nitrosodi-n-propylamine	333	244	73	42- 108	
1,2,4-Trichlorobenzene	333	262	79	41- 105	
4-Chloro-3-methylphenol	333	276	83	43- 110	
Acenaphthene	333	267	80	42- 104	
4-Nitrophenol	333	373	112	27- 131	
2,4-Dinitrotoluene	333	320	96	48- 118	
Pentachlorophenol	333	265	80	18- 125	
Pyrene	333	287	86	39- 113	
4-Methylphenol	667	465	70	43- 107	
Hexachloroethane	333	223	67	40- 102	
Naphthalene	333	245	74	42- 104	
4-Bromophenyl phenyl ethe	333	288	86	43- 111	
Butyl benzyl phthalate	333	299	90	40- 117	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-16-0

Level: (low/med) LOW

Lot #: C9C130178

WO #: K8G121CR

BATCH: 9077032

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Phenol	734	ND		0*	39 - 105	NC DIL
2-Chlorophenol	734	ND		0*	40 - 105	NC DIL
1,4-Dichlorobenzene	734	ND		0*	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	734	ND		0*	42 - 108	NC DIL
1,2,4-Trichlorobenzene	734	ND		0*	41 - 105	NC DIL
4-Chloro-3-methylphenol	734	ND		0*	43 - 110	NC DIL
Acenaphthene	734	98		0*	42 - 104	NC DIL
4-Nitrophenol	734	ND		0*	27 - 131	NC DIL
2,4-Dinitrotoluene	734	ND		0*	48 - 118	NC DIL
Pentachlorophenol	734	ND		0*	18 - 125	NC DIL
Pyrene	734	5200		0*	39 - 113	NC DIL
4-Methylphenol	1470	ND		0*	43 - 107	NC DIL
Hexachloroethane	734	ND		0*	40 - 102	NC DIL
Naphthalene	734	1900		0*	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	734	ND		0*	43 - 111	NC DIL
Butyl benzyl phthalate	734	ND		0*	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Laboratories, Inc.

Client: Maryland Environmental Service

Lab Code: TALPIT

SDG No:

Matrix Spike ID: BH-SED-16-0

Level: (low/med) LOW

Lot #: C9C130178

WO #: K8G121CT

BATCH: 9077032

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
Phenol	734		0*		40	39 - 105	NC DIL
2-Chlorophenol	734		0*		37	40 - 105	NC DIL
1,4-Dichlorobenzene	734		0*		32	41 - 101	NC DIL
N-Nitrosodi-n-propylamine	734		0*		32	42 - 108	NC DIL
1,2,4-Trichlorobenzene	734		0*		36	41 - 105	NC DIL
4-Chloro-3-methylphenol	734		0*		31	43 - 110	NC DIL
Acenaphthene	734		0*		34	42 - 104	NC DIL
4-Nitrophenol	734		0*		33	27 - 131	NC DIL
2,4-Dinitrotoluene	734		0*		33	48 - 118	NC DIL
Pentachlorophenol	734		0*		34	18 - 125	NC DIL
Pyrene	734		0*		28	39 - 113	NC DIL
4-Methylphenol	1470		0*		36	43 - 107	NC DIL
Hexachloroethane	734		0*		34	40 - 102	NC DIL
Naphthalene	734		0*		25	42 - 104	NC DIL
4-Bromophenyl phenyl ethe	734		0*		20	43 - 111	NC DIL
Butyl benzyl phthalate	734		0*		34	40 - 117	NC DIL

NOTES (S) :

NC The recovery and/or RPD were not calculated.

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

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 16 outside limitsSpike Recovery: 16 out of 16 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

K8N4X1AA

Lab Name: TestAmerica Laboratories, Inc.

Lab Code: TALPIT

SDG Number:

Lab File ID: V0319013.

Lot Number: C9C130178

Date Analyzed: 03/19/09

Time Analyzed: 11:03

Matrix: SOLID

Date Extracted:03/18/09

GC Column: DB5 ID: .25

Extraction Method:

Instrument ID: 731

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BH-SED-16-0	K8G121AC	V0319015.	03/19/09	15:34
02	BH-SED-16-0	K8G121CR S	V0319016.	03/19/09	15:56
03	BH-SED-16-0	K8G121CT D	V0319017.	03/19/09	16:17
04	CHECK SAMPLE	K8N4X1AC C	V0319014.	03/19/09	11:25
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C9C130178
MB Lot-Sample #: C9C180000-032

Work Order #...: K8N4X1AA

Matrix.....: SOLID

Analysis Date...: 03/19/09
Dilution Factor: 0.5

Prep Date.....: 03/18/09
Prep Batch #...: 9077032
Initial Wgt/Vol: 30 g
Analyst ID.....: 003200

Analysis Time...: 11:03
Final Wgt/Vol...: 0.5 mL
Instrument ID...: 731

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
2-Methylnaphthalene	ND	3.4	ug/kg		SW846 8270C
1-Methylnaphthalene	ND	3.4	ug/kg		SW846 8270C
Naphthalene	ND	3.4	ug/kg		SW846 8270C
Acenaphthylene	ND	3.4	ug/kg		SW846 8270C
Acenaphthene	ND	3.4	ug/kg		SW846 8270C
Fluorene	ND	3.4	ug/kg		SW846 8270C
Phenanthrene	ND	3.4	ug/kg		SW846 8270C
Anthracene	ND	16	ug/kg		SW846 8270C
Fluoranthene	ND	3.4	ug/kg		SW846 8270C
Pyrene	ND	3.4	ug/kg		SW846 8270C
Benzo (a) anthracene	ND	3.4	ug/kg		SW846 8270C
Chrysene	ND	3.4	ug/kg		SW846 8270C
Benzo (b) fluoranthene	ND	3.4	ug/kg		SW846 8270C
Benzo (k) fluoranthene	ND	3.4	ug/kg		SW846 8270C
Benzo (a) pyrene	ND	3.4	ug/kg		SW846 8270C
Indeno (1,2,3-cd) pyrene	ND	3.4	ug/kg		SW846 8270C
Dibenzo (a,h) anthracene	ND	3.4	ug/kg		SW846 8270C
Benzo (ghi) perylene	ND	3.4	ug/kg		SW846 8270C

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Nitrobenzene-d5	83	(27 - 110)
Terphenyl-d14	80	(21 - 130)
2-Fluorobiphenyl	78	(28 - 108)
2-Fluorophenol	79	(28 - 107)
Phenol-d5	77	(30 - 112)
2,4,6-Tribromophenol	84	(21 - 116)

NOTE (S) :

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH Contract:
 Lab Code: TA Case No.: SAS No.: SDG No.: C9C130178
 Lab File ID (Standard): V03190CC Date Analyzed: 03/19/09
 Instrument ID: 731 Time Analyzed: 0550

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	105326	4.44	416103	5.42	242298	6.76
UPPER LIMIT	210652	4.94	832206	5.92	484596	7.26
LOWER LIMIT	52663	3.94	208052	4.92	121149	6.26
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	123722	4.45	461760	5.41	268210	6.76
02 INTRA-LAB CH	111184	4.45	404045	5.41	241522	6.76
03 BH-SED-16-0	97835	4.44	362188	5.41	210872	6.75
04 BH-SED-16-0M	95032	4.44	356361	5.41	221136	6.75
05 BH-SED-16-0M	95393	4.44	354441	5.41	217353	6.75
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: TESTAMERICA PITTSBURGH

Contract:

Lab Code: TA

Case No.:

SAS No.:

SDG No.: C9C130178

Lab File ID (Standard): V03190CC

Date Analyzed: 03/19/09

Instrument ID: 731

Time Analyzed: 0550

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	462639	7.91	491293	9.96	551064	11.32
UPPER LIMIT	925278	8.41	982586	10.46	1102128	11.82
LOWER LIMIT	231320	7.41	245647	9.46	275532	10.82
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	490913	7.90	546043	9.97	711764	11.34
02 INTRA-LAB CH	487163	7.91	542134	9.97	677289	11.34
03 BH-SED-16-0	411090	7.90	541200	9.96	696641	11.33
04 BH-SED-16-OM	427943	7.90	533827	9.96	668138	11.33
05 BH-SED-16-OM	419155	7.90	559734	9.96	687290	11.32
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

METALS SUMMARY

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

TOTAL Metals

Lot-Sample #....: C9C130178-001

Matrix.....: SOLID

Date Sampled....: 03/12/09

Date Received...: 03/13/09

% Moisture.....: 55

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Prep Batch #....: 9076479						
Silver	1.5 J	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AQ
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0026	
Arsenic	62.5	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AD
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.018	
Beryllium	1.1	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AE
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0041	
Cadmium	4.3 E	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AF
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.010	
Chromium	219 J	0.22	mg/kg	SW846 6020	03/17-03/19/09	K8G121AG
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0088	
Copper	148 J	0.22	mg/kg	SW846 6020	03/17-03/19/09	K8G121AH
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0094	
Nickel	34.1 J	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AJ
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0075	
Lead	1160 J	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AK
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0037	
Antimony	1.8 J,E	0.22	mg/kg	SW846 6020	03/17-03/19/09	K8G121AL
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0036	

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Maryland Environmental Service

Client Sample ID: BH-SED-16-0

TOTAL Metals

Lot-Sample #...: C9C130178-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	8.0	0.55	mg/kg	SW846 6020	03/17-03/19/09	K8G121AM
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.045	
Thallium	0.60	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AN
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0022	
Zinc	1310 J	0.55	mg/kg	SW846 6020	03/17-03/19/09	K8G121AP
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.013	

Prep Batch #...: 9078018

Mercury	0.94 J	0.036	mg/kg	SW846 7471A	03/19/09	K8G121AR
		Dilution Factor: 0.5		Analysis Time...: 08:38	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9078010	MDL.....: 0.0028	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

E Matrix interference.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: C9C130178

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: C9C170000-479 Prep Batch #...: 9076479						
Antimony	0.023 B	0.10	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AJ
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Arsenic	ND	0.050	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AA
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Beryllium	ND	0.050	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AC
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Cadmium	ND	0.050	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AD
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Chromium	0.11	0.10	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AE
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Copper	0.011 B	0.10	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AF
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Lead	0.016 B	0.050	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AH
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Nickel	0.015 B	0.050	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AG
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Selenium	ND	0.25	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AK
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Silver	0.0074 B	0.050	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AN
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	
Thallium	ND	0.050	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AL
		Dilution Factor: 0.5				
		Analysis Time...: 12:41		Analyst ID.....: 401509	Instrument ID...: ICP	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: C9C130178

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Zinc	0.20 B	0.25	mg/kg	SW846 6020	03/17-03/19/09	K8N2P1AM
Dilution Factor: 0.5						
Analysis Time...: 12:41		Analyst ID.....: 401509		Instrument ID...: ICP		

MB Lot-Sample #: C9C190000-018 Prep Batch #....: 9078018

Mercury	0.0046 B	0.016	mg/kg	SW846 7471A	03/19/09	K8Q641AA
Dilution Factor: 0.5						
Analysis Time...: 08:34		Analyst ID.....: 031043		Instrument ID...: HGH		

NOTE(S) :

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

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C130178

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C170000-479 Prep Batch #....: 9076479					
Arsenic	86	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AP	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Beryllium	94	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AQ	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Cadmium	88	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AR	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Chromium	99	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AT	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Copper	105	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AU	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Nickel	102	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AV	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Lead	98	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AW	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Antimony	85	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AX	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Selenium	84	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1AO	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			
Thallium	95	(80 - 120)	SW846 6020	03/17-03/19/09 K8N2P1A1	
		Dilution Factor: 0.5		Analysis Time...: 12:46	Analyst ID.....: 401509
		Instrument ID...: ICPMS			

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C130178

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	88	(80 - 120)	SW846 6020	03/17-03/19/09	K8N2P1A2
Dilution Factor: 0.5 Analysis Time..: 12:46 Analyst ID.....: 401509					
Instrument ID..: ICPMS					
Silver	107	(80 - 120)	SW846 6020	03/17-03/19/09	K8N2P1A3
Dilution Factor: 0.5 Analysis Time..: 12:46 Analyst ID.....: 401509					
Instrument ID..: ICPMS					
LCS Lot-Sample#: C9C190000-018 Prep Batch #....: 9078018					
Mercury	103	(80 - 120)	SW846 7471A	03/19/09	K8Q641AC
Dilution Factor: 0.5 Analysis Time..: 08:36 Analyst ID.....: 031043					
Instrument ID..: HGHYDRA					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C130178

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: C9C170000-479 Prep Batch #....: 9076479							
Arsenic	2.00	1.71	mg/kg	86	SW846 6020	03/17-03/19/09	K8N2P1AP
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Beryllium	2.50	2.36	mg/kg	94	SW846 6020	03/17-03/19/09	K8N2P1AQ
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Cadmium	2.50	2.21	mg/kg	88	SW846 6020	03/17-03/19/09	K8N2P1AR
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Chromium	10.0	9.94	mg/kg	99	SW846 6020	03/17-03/19/09	K8N2P1AT
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Copper	12.5	13.1	mg/kg	105	SW846 6020	03/17-03/19/09	K8N2P1AU
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Nickel	25.0	25.5	mg/kg	102	SW846 6020	03/17-03/19/09	K8N2P1AV
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Lead	1.00	0.984	mg/kg	98	SW846 6020	03/17-03/19/09	K8N2P1AW
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Antimony	25.0	21.2	mg/kg	85	SW846 6020	03/17-03/19/09	K8N2P1AX
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Selenium	0.500	0.422	mg/kg	84	SW846 6020	03/17-03/19/09	K8N2P1A0
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			
Thallium	2.50	2.38	mg/kg	95	SW846 6020	03/17-03/19/09	K8N2P1A1
				Dilution Factor: 0.5	Analysis Time...: 12:46	Analyst ID.....: 401509	
				Instrument ID...: ICPMS			

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C130178

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	25.0	22.1	mg/kg	88	SW846 6020	03/17-03/19/09	K8N2P1A2
Dilution Factor: 0.5 Analysis Time...: 12:46 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
Silver	2.50	2.67	mg/kg	107	SW846 6020	03/17-03/19/09	K8N2P1A3
Dilution Factor: 0.5 Analysis Time...: 12:46 Analyst ID.....: 401509							
Instrument ID...: ICPMS							
LCS Lot-Sample#: C9C190000-018 Prep Batch #...: 9078018							
Mercury	0.208	0.215	mg/kg	103	SW846 7471A	03/19/09	K8Q641AC
Dilution Factor: 0.5 Analysis Time...: 08:36 Analyst ID.....: 031043							
Instrument ID...: HGHYDRA							

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C130178

Matrix.....: SOLID

Date Sampled...: 03/12/09

Date Received...: 03/13/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: C9C130178-001 Prep Batch #...: 9076479							
% Moisture.....: 55							
Antimony	46 N	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121CF
	46 N	(75 - 125)	0.04	(0-20)	SW846 6020	03/17-03/19/09	K8G121CG
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Arsenic	NC	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121A0
	NC	(75 - 125)		(0-20)	SW846 6020	03/17-03/19/09	K8G121A1
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Beryllium	85	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121A2
	83	(75 - 125)	2.1	(0-20)	SW846 6020	03/17-03/19/09	K8G121A3
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Cadmium	73 N	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121A4
	70 N	(75 - 125)	2.0	(0-20)	SW846 6020	03/17-03/19/09	K8G121A5
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Chromium	NC	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121A6
	NC	(75 - 125)		(0-20)	SW846 6020	03/17-03/19/09	K8G121A7
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Copper	NC	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121A8
	NC	(75 - 125)		(0-20)	SW846 6020	03/17-03/19/09	K8G121A9
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Lead	NC	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121CD
	NC	(75 - 125)		(0-20)	SW846 6020	03/17-03/19/09	K8G121CE
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: C9C130178

Matrix.....: SOLID

Date Sampled...: 03/12/09

Date Received...: 03/13/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Nickel	90	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121CA
	90	(75 - 125)	0.02	(0-20)	SW846 6020	03/17-03/19/09	K8G121CC
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Selenium	NC	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121CH
	NC	(75 - 125)		(0-20)	SW846 6020	03/17-03/19/09	K8G121CJ
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Silver	88	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121CP
	88	(75 - 125)	0.55	(0-20)	SW846 6020	03/17-03/19/09	K8G121CQ
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Thallium	91	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121CK
	87	(75 - 125)	3.3	(0-20)	SW846 6020	03/17-03/19/09	K8G121CL
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							
Zinc	NC	(75 - 125)			SW846 6020	03/17-03/19/09	K8G121CM
	NC	(75 - 125)		(0-20)	SW846 6020	03/17-03/19/09	K8G121CN
Dilution Factor: 0.5							
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509							
MS Run #.....: 9076268							

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C130178

Matrix.....: SOLID

Date Sampled...: 03/12/09

Date Received...: 03/13/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C130178-001 Prep Batch #...: 9076479

% Moisture.....: 55

Antimony

1.8	55.1	27.3 N	mg/kg	46		SW846 6020	03/17-03/19/09	K8G121CF
1.8	55.1	27.3 N	mg/kg	46	0.04	SW846 6020	03/17-03/19/09	K8G121CG
Dilution Factor: 0.5								
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9076268								

Arsenic

62.5	4.40	65.1 NC	mg/kg			SW846 6020	03/17-03/19/09	K8G121A0
62.5	4.40	62.4 NC	mg/kg			SW846 6020	03/17-03/19/09	K8G121A1
Dilution Factor: 0.5								
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9076268								

Beryllium

1.1	5.51	5.80	mg/kg	85		SW846 6020	03/17-03/19/09	K8G121A2
1.1	5.51	5.68	mg/kg	83	2.1	SW846 6020	03/17-03/19/09	K8G121A3
Dilution Factor: 0.5								
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9076268								

Cadmium

4.3	5.51	8.32 N	mg/kg	73		SW846 6020	03/17-03/19/09	K8G121A4
4.3	5.51	8.15 N	mg/kg	70	2.0	SW846 6020	03/17-03/19/09	K8G121A5
Dilution Factor: 0.5								
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9076268								

Chromium

219	22.0	238 NC	mg/kg			SW846 6020	03/17-03/19/09	K8G121A6
219	22.0	236 NC	mg/kg			SW846 6020	03/17-03/19/09	K8G121A7
Dilution Factor: 0.5								
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9076268								

Copper

148	27.5	164 NC	mg/kg			SW846 6020	03/17-03/19/09	K8G121A8
148	27.5	162 NC	mg/kg			SW846 6020	03/17-03/19/09	K8G121A9
Dilution Factor: 0.5								
Analysis Time...: 12:58 Instrument ID...: ICPMS Analyst ID.....: 401509								
MS Run #.....: 9076268								

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: C9C130178

Matrix.....: SOLID

Date Sampled....: 03/12/09

Date Received...: 03/13/09

	SAMPLE	SPIKE	MEASRD		PERCNT				PREPARATION-	WORK
PARAMETER	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD		ANALYSIS DATE	ORDER #
Lead										
	1160	2.20	1120 NC	mg/kg			SW846 6020		03/17-03/19/09	K8G121CD
	1160	2.20	1100 NC	mg/kg			SW846 6020		03/17-03/19/09	K8G121CE
			Dilution Factor: 0.5							
			Analysis Time...: 12:58		Instrument ID...: ICPMS			Analyst ID.....: 401509		
			MS Run #.....: 9076268							
Nickel										
	34.1	55.1	83.8	mg/kg	90		SW846 6020		03/17-03/19/09	K8G121CA
	34.1	55.1	83.8	mg/kg	90	0.02	SW846 6020		03/17-03/19/09	K8G121CC
			Dilution Factor: 0.5							
			Analysis Time...: 12:58		Instrument ID...: ICPMS			Analyst ID.....: 401509		
			MS Run #.....: 9076268							
Selenium										
	8.0	1.10	8.68 NC	mg/kg			SW846 6020		03/17-03/19/09	K8G121CH
	8.0	1.10	8.35 NC	mg/kg			SW846 6020		03/17-03/19/09	K8G121CJ
			Dilution Factor: 0.5							
			Analysis Time...: 12:58		Instrument ID...: ICPMS			Analyst ID.....: 401509		
			MS Run #.....: 9076268							
Silver										
	1.5	5.51	6.37	mg/kg	88		SW846 6020		03/17-03/19/09	K8G121CP
	1.5	5.51	6.41	mg/kg	88	0.55	SW846 6020		03/17-03/19/09	K8G121CQ
			Dilution Factor: 0.5							
			Analysis Time...: 12:58		Instrument ID...: ICPMS			Analyst ID.....: 401509		
			MS Run #.....: 9076268							
Thallium										
	0.60	5.51	5.60	mg/kg	91		SW846 6020		03/17-03/19/09	K8G121CK
	0.60	5.51	5.41	mg/kg	87	3.3	SW846 6020		03/17-03/19/09	K8G121CL
			Dilution Factor: 0.5							
			Analysis Time...: 12:58		Instrument ID...: ICPMS			Analyst ID.....: 401509		
			MS Run #.....: 9076268							
Zinc										
	1310	55.1	1310 NC	mg/kg			SW846 6020		03/17-03/19/09	K8G121CM
	1310	55.1	1280 NC	mg/kg			SW846 6020		03/17-03/19/09	K8G121CN
			Dilution Factor: 0.5							
			Analysis Time...: 12:58		Instrument ID...: ICPMS			Analyst ID.....: 401509		
			MS Run #.....: 9076268							

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: C9C130178

Matrix.....: SOLID

Date Sampled...: 03/10/09

Date Received...: 03/14/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C140175-008 Prep Batch #...: 9078018

% Moisture.....: 33

Mercury	103	(75 - 125)		SW846 7471A	03/19/09	K8J9K1AC
	100	(75 - 125)	2.5 (0-20)	SW846 7471A	03/19/09	K8J9K1AD

Dilution Factor: 0.65

Analysis Time...: 08:46

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9078010

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: C9C130178

Matrix.....: SOLID

Date Sampled...: 03/10/09

Date Received...: 03/14/09

PARAMETER	AMOUNT	AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: C9C140175-008 Prep Batch #...: 9078018

% Moisture.....: 33

Mercury

0.029	0.163	0.197	mg/kg	103			SW846 7471A	03/19/09	K8J9K1AC
0.029	0.163	0.192	mg/kg	100	2.5		SW846 7471A	03/19/09	K8J9K1AD

Dilution Factor: 0.65

Analysis Time...: 08:46

Instrument ID...: HGHYDRA

Analyst ID.....: 031043

MS Run #.....: 9078010

NOTE(S) :

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

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY SUMMARY

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C130178

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-16-0	C9C130178 001	K8G121AT	4.3	mg/kg	0.19	1.1	1	3/16/2009 - 3/16/2009 11:22	9075077

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH

Method: SM20 2540G

Client Name: Maryland Environmental Service

Lot Number: C9C130178

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-16-0	C9C130178 001	K8G121AA	45.4	%	0.0	1.0	1	3/16/2009 - 3/17/2009 05:10	9075133
BH-SED-16-T0C	C9C130178 002	K8G2A1AC	82.2	%	0.0	1.0	1	3/17/2009 - 3/18/2009 08:00	9076353

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH

Method:

EPA

Lloyd Kahn

Client Name: Maryland Environmental Service

Lot Number:

C9C130178

Matrix: SOLID

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-16-TOC	C9C130178 002	K8G2A1AA	182 B	mg/kg	42.4	371	0.61	3/14/2009 - 3/14/2009 16:47	9073023

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: SW846 9012A
Report ID: C9C130178
Date/Time Received: 3/13/2009 10:15:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C160000077B	077 MB	K8KFF1AA	ND	mg/kg	0.50	3/16/2009 - 3/16/2009 11:22	9075077	

MES Sparrows Point 18001868

Percent Solids

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SM20 2540G
 Report ID: C9C130178
 Date/Time Received: 3/5/2009 9:45:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
INTRA-LAB QC	001 DUP	K74TN1AH	81.4	%	1.0	3/17/2009 - 3/18/2009 08:00	9076353	1.0 / 20
INTRA-LAB QC	008 DUP	K8J9K1CM	69.1	%	1.0	3/18/2009 - 3/17/2009 05:10	9075133	3.6 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
Client Name: Maryland Environmental Service
Matrix: SOLID

Method: EPA Lloyd Kahn
Report ID: C9C130178
Date/Time Received: 3/11/2009 10:00:00AM

Client Sample ID	Sample Number	Workorder	Result	Units	Reporting Limit	Prep Date-Analysis Date/Time	QC Batch	RPD / Limit (%)
BLK - C9C140000023B	023 MB	K8JPL1AA	ND	mg/kg	1250	3/14/2009 - 3/14/2009 13:34	9073023	

MES Sparrows Point 18001868

Cyanide, Total

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: SW846 9012A
 Lot Number: C9C160000
 Date/Time Received: 3/13/2009 10:15:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K8KFF1AC	108	41 - 159	3/16/2009 . 3/16/2009 11:22	9075077	
LAB MS/MSD	MS	K8GKK1A0	77	75 - 125	3/16/2009 . 3/16/2009 11:22	9075077	18 / 20
LAB MS/MSD	MSD	K8GKK1A1	64 N	75 - 125	3/16/2009 . 3/16/2009 11:22	9075077	18 / 20

MES Sparrows Point 18001868

TOC

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C140000
 Date/Time Received: 3/11/2009 10:00:00AM

Client Sample ID	QC Sample Type	Workorder	Recovery (%)	Control Limits (%)	Prep Date - Analysis Date/Time	QC Batch	RPD / Limit (%)
CHECK SAMPLE	LCS	K8JPL1AC	101	75 - 125	3/14/2009 - 3/14/2009 13:44	9073023	3.1 / 20
LAB MS/MSD	MSD	K8FH61AG	100	75 - 125	3/14/2009 - 3/14/2009 16:17	9073023	18 / 20
DUPLICATE CHECK	LCSD	K8JPL1AD	105	75 - 125	3/14/2009 - 3/14/2009 13:54	9073023	3.1 / 20
LAB MS/MSD	MS	K8FH61AF	99	75 - 125	3/14/2009 - 3/14/2009 16:07	9073023	18 / 20

CYANIDE, TOTAL ORGANIC CARBON (TOC)
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C130178

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-16-0	C9C130178-001	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within the recommended holding times for all of the above wet chemistry parameters.

Calibration - The ICV and CCV %R values were acceptable.

Method and Calibration Blanks - The method blanks and continuing calibration blanks were free of contamination.

Field and Equipment Blank - Field QC samples were not included in this data package.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following:

MS Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
Reference	Cyanide	Ok/64%/Ok	L/UJ	All

LCS - The LCS samples exhibited acceptable %R values.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - All results reported with a (B) qualifier by the laboratory were further qualified as estimated (J) except those results already qualified.

MES Sparrows Point 18001868

Cyanide, Total

1

Lab Name: TESTAMERICA PITTSBURGH

Method: SW846 9012A

Client Name: Maryland Environmental Service

Lot Number: C9C130178

Matrix: SOLID

Distillation procedure

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-16-0	C9C130178 001	K8G121AT	4.3	mg/kg	0.19	1.1	1	3/16/2009 - 3/16/2009 11:22	9075077

lw
4/29/09

MES Sparrows Point 18001868

TOC

1

Lab Name: TESTAMERICA PITTSBURGH
 Client Name: Maryland Environmental Service
 Matrix: SOLID

Method: EPA Lloyd Kahn
 Lot Number: C9C130178

NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Client Sample ID	Sample Number	Workorder	Result	Units	Min. Detection Limit	Reporting Limit	Dilution Factor	Prep Date - Analysis Date/Time	QC Batch
BH-SED-16-TOC	C9C130178 002	K8G2A1AA	182	mg/kg	42.4	371	0.61	3/14/2009 - 3/14/2009 16:47	9073023

METALS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C130178

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-16-0	C9C130178-001	Soil
1MS	BH-SED-16-0MS	C9C130178-001MS	Soil
1MSD	BH-SED-16-0MSD	C9C130178-001MSD	Soil

The USEPA "Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses", April 1993, was used in evaluating the data in this summary report.

Holding Times - All samples were prepared and analyzed within 28 days for mercury and 180 days for all other metals.

Calibration - The ICV and CCV %R values were acceptable.

CRDL Standard - The CRDL standards exhibited acceptable %R values.

Method and Calibration Blanks - The method blanks and continuing calibration blanks exhibited contamination for several compounds, however, all sample results are non-detect or greater than 5X the blank concentration.

Field and Equipment Blank - Field QC samples were not included in this data package.

ICP Interference Check Sample - All %R values were acceptable.

Matrix Spike/Duplicate - The matrix spike/duplicate samples exhibited acceptable %R and RPD values except the following.

MS Sample ID	Compound	MS/MSD %R/RPD	Qualifier	Affected Samples
1	Antimony	46%/46%/Ok	None	Already qualified due to ICP Serial Dilution
	Cadmium	73%/70%/Ok	None	

Matrix Duplicate - The matrix duplicate samples exhibited acceptable RPD values.

LCS - The LCS samples exhibited acceptable %R values.

ICP Serial Dilution - The ICP serial dilution sample exhibited acceptable %D values except the following:

ICP Sample ID	Compound	%D	Qualifier	Affected Samples
1	Antimony	20.6%	J	All Samples
	Cadmium	20.2%	J	

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

TOTAL Metals

Lot-Sample #....: C9C130178-001

Date Sampled....: 03/12/09

% Moisture.....: 55

Date Received...: 03/13/09

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 9076479						
Silver	1.5 ✓	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AQ
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0026	
Arsenic	62.5	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AD
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.018	
Beryllium	1.1	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AE
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0041	
Cadmium	4.3 E J	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AF
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.010	
Chromium	219 J	0.22	mg/kg	SW846 6020	03/17-03/19/09	K8G121AG
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0088	
Copper	148 J	0.22	mg/kg	SW846 6020	03/17-03/19/09	K8G121AH
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0094	
Nickel	34.1 J	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AJ
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0075	
Lead	1160 J	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AK
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0037	
Antimony	1.8 J/E J	0.22	mg/kg	SW846 6020	03/17-03/19/09	K8G121AL
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0036	

(Continued on next page)

AW
4/29/09

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

TOTAL Metals

Lot-Sample #....: C9C130178-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Selenium	8.0	0.55	mg/kg	SW846 6020	03/17-03/19/09	K8G121AM
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.045	
Thallium	0.60	0.11	mg/kg	SW846 6020	03/17-03/19/09	K8G121AN
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.0022	
Zinc	1310 ✓	0.55	mg/kg	SW846 6020	03/17-03/19/09	K8G121AP
		Dilution Factor: 0.5		Analysis Time...: 12:50	Analyst ID.....: 401509	
		Instrument ID...: ICPMS		MS Run #.....: 9076268	MDL.....: 0.013	

Prep Batch #....: 9078018

Mercury	0.94 ✓	0.036	mg/kg	SW846 7471A	03/19/09	K8G121AR
		Dilution Factor: 0.5		Analysis Time...: 08:38	Analyst ID.....: 031043	
		Instrument ID...: HGHYDRA		MS Run #.....: 9078010	MDL.....: 0.0028	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

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

E Matrix interference.

POLYNUCLEAR AROMATIC HYDRCARBONS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C130178

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-16-0	C9C130178-001	Soil
1MS	BH-SED-16-0MS	C9C130178-001MS	Soil
1MSD	BH-SED-16-0MSD	C9C130178-001MSD	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were extracted within 14 days for soil samples and analyzed within 40 days for all samples.

GC/MS Tuning - All of the DFTPP tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - Many surrogate recoveries were not calculated because they were diluted out. No qualifiers were required.

MS/MSD - All %R and RPD values were not recovered due to dilution.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank - The method blanks were free of contamination.

Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Compound Quantitation - No discrepancies were identified.

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

GC/MS Semivolatiles

Lot-Sample #....: C9C130178-001 Work Order #....: K8G121AC Matrix.....: SOLID
 Date Sampled....: 03/12/09 10:05 Date Received...: 03/13/09 09:50 MS Run #.....: 9077020
 Prep Date.....: 03/18/09 Analysis Date...: 03/19/09
 Prep Batch #....: 9077032 Analysis Time...: 15:34
 Dilution Factor: 10 Initial Wgt/Vol: 30 g Final Wgt/Vol...: 0.5 mL
 % Moisture.....: 55 Analyst ID.....: 003200 Instrument ID...: 731
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Methylnaphthalene	140 J	150	ug/kg	22
2-Methylnaphthalene	340	150	ug/kg	29
Naphthalene	1900	150	ug/kg	21
Acenaphthylene	860	150	ug/kg	29
Acenaphthene	98 J	150	ug/kg	24
Fluorene	290	150	ug/kg	22
Phenanthrene	990	150	ug/kg	18
Anthracene	800	730	ug/kg	26
Fluoranthene	4500	150	ug/kg	12
Pyrene	5200	150	ug/kg	39
Benzo (a) anthracene	3400	150	ug/kg	23
Chrysene	3100	150	ug/kg	26
Benzo (b) fluoranthene	8300	150	ug/kg	30
Benzo (k) fluoranthene	ND	150	ug/kg	31
Benzo (a) pyrene	5500	150	ug/kg	41
Indeno (1,2,3-cd) pyrene	3100	150	ug/kg	8.1
Dibenzo (a,h) anthracene	1000	150	ug/kg	32
Benzo (ghi) perylene	3400	150	ug/kg	11

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	NC, DIL	(27 - 110)
Terphenyl-d14	NC, DIL	(21 - 130)
2-Fluorobiphenyl	NC, DIL	(28 - 108)
2-Fluorophenol	NC, DIL	(28 - 107)
Phenol-d5	NC, DIL	(30 - 112)
2,4,6-Tribromophenol	NC, DIL	(21 - 116)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

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

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

HW
4/29/09

VOLATILE ORGANIC COMPOUNDS
USEPA Region III - Level IV Review

Site: Sparrows Point SDG #: C9C130178

Client: Maryland Environmental Service, Millersville, MD Date: April 29, 2009

Laboratory: Test America, Inc., Pittsburgh, PA Reviewer: Nancy Weaver

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	BH-SED-16-0	C9C130178-001	Soil

The USEPA "Region III Modifications to the National Functional Guidelines for Organic Data Review", September 1994, was used in evaluating the data in this summary report.

Holding Times - All samples were analyzed within 14 days for soil samples.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Initial Calibration - The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration - The continuing calibrations exhibited acceptable %D and RRF values.

Surrogates - All samples exhibited acceptable surrogate recoveries.

MS/MSD - A MS/MSD sample was not analyzed.

Laboratory Control Sample - The LCS samples exhibited acceptable %R values.

Internal Standard (IS) Area Performance - All internal standards met response and retention time (RT) criteria.

Method Blank -The method blanks exhibited the following contamination.

Blank ID	Compound	Conc. ug/kg	Action Level ug/kg	Qualifier	Affected Samples
MBLK	Methylene chloride	4.5	45	B	1

Trip, Field, Equipment Blank - Field QC samples were not included in this data package.

Field Duplicates - Field duplicate samples were not included in this data package.

Tentatively Identified Compounds (TICs) - TICs were not reported

Compound Quantitation - No discrepancies were identified.

1

Maryland Environmental Service

Client Sample ID: BH-SED-16-0

GC/MS Volatiles

Lot-Sample #....: C9C130178-001	Work Order #....: K8G121AX	Matrix.....: SOLID
Date Sampled....: 03/12/09	Date Received...: 03/13/09	MS Run #.....: 9076035
Prep Date.....: 03/17/09	Analysis Date...: 03/17/09	
Prep Batch #....: 9076058	Analysis Time...: 09:23	
Dilution Factor: 0.97	Initial Wgt/Vol: 5.13 g	Final Wgt/Vol...: 5 mL
% Moisture.....: 55	Analyst ID.....: 010099	Instrument ID...: HP3
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acrolein	ND	210	ug/kg	15
Acrylonitrile	ND	210	ug/kg	22
Benzene	ND	11	ug/kg	1.4
Bromodichloromethane	ND	11	ug/kg	1.2
Bromoform	ND	11	ug/kg	0.95
Bromomethane	ND	11	ug/kg	1.6
2-Butanone (MEK)	ND	11	ug/kg	1.9
Carbon tetrachloride	ND	11	ug/kg	0.95
Chloroethane	ND	11	ug/kg	3.3
2-Chloroethyl vinyl ether	ND	21	ug/kg	1.7
Chloroform	ND	11	ug/kg	1.2
Chloromethane	ND	11	ug/kg	1.8
Dibromochloromethane	ND	11	ug/kg	1.5
1,2-Dichlorobenzene	ND	11	ug/kg	1.7
1,3-Dichlorobenzene	ND	11	ug/kg	1.4
1,4-Dichlorobenzene	ND	11	ug/kg	1.4
trans-1,2-Dichloroethene	ND	11	ug/kg	1.3
Dichlorodifluoromethane	ND	11	ug/kg	1.4
1,1-Dichloroethane	ND	11	ug/kg	1.2
1,2-Dichloroethane	ND	11	ug/kg	1.3
1,1-Dichloroethene	ND	11	ug/kg	1.8
1,2-Dichloropropane	ND	11	ug/kg	1.2
cis-1,3-Dichloropropene	ND	11	ug/kg	1.4
trans-1,3-Dichloropropene	ND	11	ug/kg	1.3
Ethylbenzene	ND	11	ug/kg	1.4
Methylene chloride	12 μ B	11	ug/kg	1.4
1,1,2,2-Tetrachloroethane	ND	11	ug/kg	1.5
Tetrachloroethene	ND	11	ug/kg	1.5
Toluene	ND	11	ug/kg	1.6
1,1,1-Trichloroethane	ND	11	ug/kg	1.0
1,1,2-Trichloroethane	ND	11	ug/kg	1.8
Trichloroethene	ND	11	ug/kg	1.4
Trichlorofluoromethane	ND	11	ug/kg	2.0
Vinyl chloride	ND	11	ug/kg	1.0

(Continued on next page)

luw
4/29/09

1

Maryland Environmental Service

Client Sample ID: BH-SKD-16-0

GC/MS Volatiles

Lot-Sample #...: C9C130178-001 Work Order #...: K8G121AX Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	95	(52 - 124)
Toluene-d8	103	(72 - 127)
4-Bromofluorobenzene	103	(63 - 120)
Dibromofluoromethane	110	(68 - 121)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

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

luw
4/29/09

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. MES SPARROWS

MES Sparrows Point 18001868

Lot #: C9C160101

Megan Simon

Maryland Environmental Service
259 Najoles Road
Millersville, MD 21108

TESTAMERICA LABORATORIES, INC.



Carrie L. Gamber
Project Manager

April 2, 2009

CASE NARRATIVE
Maryland Environmental Service
Sparrows Point

LOT # C9C160101

Sample Receiving:

TestAmerica's Pittsburgh laboratory received samples on March 16, 2009. The cooler was received within the proper temperature range.

TestAmerica's Burlington laboratory analyzed the grain size and moisture.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

April 1, 2009

Ms. Carrie Gamber
TestAmerica, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238

Re: Laboratory Project No. 29006
Case: EAMSGS; SDG: 9C160101

Dear Ms. Gamber:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on March 16th, 2009. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/16/09 ETR No: 130630			
788462	BH-SED-16-0	03/12/09	SOLID
788462DP	BH-SED-16-0REP	03/12/09	SOLID

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

There were no exceptions to the method quality control criteria during the analyses of these samples by ASTM Methods D422 and D2216.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.



THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

A handwritten signature in black ink, reading "Ron Pentkowski". The signature is written in a cursive, flowing style.

Ron Pentkowski
Project Manager

Enclosure

Cooler Receipt Form

TestAmerica Pittsburgh

Client: EA Engineering Project: Sparrows Pt. Quote: 82013
Cooler Rec'd & Opened for Temp. Check on: 3/13/09
Coolers Opened and Unpacked on: 3/13/09 By: M. Vainie
(Signature)
TestAmerica Pittsburgh Lot Number: C9C130178

- | | Yes | No | NA |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Were custody seals on the outside of the cooler? _____ | | <input checked="" type="checkbox"/> | |
| If YES, how many and where? Quantity <u>1</u> Location <u>—</u> | | | |
| Were signatures and date correct? _____ | | | <input checked="" type="checkbox"/> |
| 2. Were custody papers included inside the cooler? _____ | <input checked="" type="checkbox"/> | | |
| 3. Were custody papers properly filled out (ink, signed, match labels)? _____ | <input checked="" type="checkbox"/> | | |
| 4. Did you sign the custody papers in the appropriate place? _____ | <input checked="" type="checkbox"/> | | |
| 5. Was shippers packing slip attached to this form? _____ | <input checked="" type="checkbox"/> | | |
| 6. Were packing materials used? _____ | <input checked="" type="checkbox"/> | | |
| If YES, what type? <u>Bubble Bags</u> | | | |
| 7. Were the samples received within the acceptable temperature range? _____ | <input checked="" type="checkbox"/> | | |
| 8. Were the samples appropriately preserved? _____ | | | <input checked="" type="checkbox"/> |
| 9. Were all bottles sealed in separate plastic bags? _____ | <input checked="" type="checkbox"/> | | |
| 10. Did all bottles arrive in good condition (unbroken)? _____ | <input checked="" type="checkbox"/> | | |
| 11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____ | <input checked="" type="checkbox"/> | | |
| 12. Did all bottle labels and/or tags agree with custody papers? _____ | <input checked="" type="checkbox"/> | | |
| 13. Were correct bottles used for tests indicated? _____ | <input checked="" type="checkbox"/> | | |
| 14. Were all VOA vials checked for the presence of air bubbles? _____ | | | <input checked="" type="checkbox"/> |
| 15. Was a sufficient amount of sample sent in each bottle? _____ | <input checked="" type="checkbox"/> | | |
| 16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER DHL US CARGO | | | |

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

TestAmerica Pittsburgh

P: Preserved
UP: Unpreserved

[illegible]

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

Comments: _____

[illegible]

* Acceptable Temperature Range: $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

[illegible]

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

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

Nitric Acid _____
Sulfuric Acid _____

Hydrochloric Acid _____
Sodium Hydroxide _____

C9C160101

6

(1 - 16)

255

500

fedex.com 1800.GoFedEx 1800.463.3339

FedEx Express US Airbill

FedEx Tracking Number

8565 6932 7017

1 From This portion can be removed for Recipient's records.
Date 3/1/09 FedEx Tracking Number 856569327017
Sender's Name TECH ENGINEERING SOLUTIONS & TECH Phone 710 740-1450
Company TECH ENGINEERING SOLUTIONS & TECH
Address 15 LEXINGTON CTR
City PARKS GLENCOE State MD ZIP 21152

2 Your Internal Billing Reference 1404906, 0002, 00074

3 To
Recipient's Name TECH ENGINEERING SOLUTIONS & TECH Phone 710 740-1450
Company TECH ENGINEERING SOLUTIONS & TECH
Recipient's Address 301 4TH AVE
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Address 301 4TH AVE
To request a package be held at a specific FedEx location, print FedEx address here.
City MTT State MD ZIP 21152



8565 6932 7017

0326961024

Form ID No 0215 Recipient's Copy

4a Express Package Service
☒ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.
☐ FedEx First Overnight
Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
☐ FedEx 2Day
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Express Saver
Third business day.* Saturday Delivery NOT available.
* To most locations. Minimum charge: One-pound rate.

4b Express Freight Service
☐ FedEx 1Day Freight*
Next business day.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 2Day Freight
Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx 3Day Freight
Third business day.* Saturday Delivery NOT available.
* To most locations.

5 Packaging
☐ FedEx Envelope*
☐ FedEx Pak*
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
☐ FedEx Box
☐ FedEx Tube
☒ Other
* Declared value limit \$500.

6 Special Handling
Include FedEx address in Section 3.
☐ SATURDAY Delivery
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
☐ HOLD Weekday at FedEx Location
Not available for FedEx First Overnight.
☐ HOLD Saturday at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Does this shipment contain dangerous goods?
One box must be checked.
☐ No
☐ Yes
As per attached Shipper's Declaration.
☐ Yes
Shipper's Declaration not required.
☐ Dry Ice
Dry Ice, 9, UN 1845 _____ x _____ kg
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.
☐ Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
☐ Sender
Acct. No. in Section 1 will be billed.
☐ Recipient
☐ Third Party
☐ Credit Card
Obtain Recip. Acct. No.
☐ Cash/Check

Total Packages 1 Total Weight _____ Total Charges _____
Credit Card Auth. _____

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.
☐ No Signature Required
Package may be left without obtaining a signature for delivery.
☐ Direct Signature
Anyone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.

Rev. Date 8/05-Part #108270-01094-2005 FedEx-PRINTED IN U.S.A.-SR5

519

COMMENTS:

Project Manager: Carrie L. Gamber
Project: MES SPARROWS MES Sparrows Point 1800
Report Type: C1 CLP - CD only
Client: 472905 - Maryland Environmental Service

Date Received: 2009-03-13
Analytical Due Date: 2009-04-08
Report Due Date: 2009-04-09

WORK LOCATION: H2 TestAmerica Burlington

SMP#: 1 CLIENT ID: BH-SED-16-0 DATE SAMPLED: 20090312 MATRIX: A SOLID

SAMPLE COMMENTS:

METHOD: Z0 NONE NONE SOLID, D2216-90, Moisture Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K8G121AV

METAL: XX

METHOD: Z0 NONE NONE SOLID, GrainSize(sieve&hydro) Burlington

EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET

WORKORDER K8G121AU

METAL: XX

The sample(s) listed on this form are being sent to your location for the specified analysis. If you have any questions, please contact the Project Manager listed above. PLEASE RETURN THE ORIGINAL SIGNED FORM WITH THE REPORT AT THE COMPLETION OF ANALYSIS.

Thank You

TestAmerica Pittsburgh
Sample Receiving.

RELINQUISHED BY: Jim Vicenise DATE: 3/13/09

RECEIVED FOR LAB BY: Chen Kelt DATE: 3/16/09

**TestAmerica
South Burlington, VT
Sample Data Summary
Package**

9C160101



Sample Data Summary – Geotechnical

GEOTECHNICAL / GENERAL CHEMISTRY

Sample Report Summary

Client Sample No.

BH-SED-16-0

Lab Name: TestAmerica Burlington

Contract: C9C160101

SDG No.: 9C160101

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 788462

Matrix: SOLID

Client: STLPAP

Date Received: 03/16/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
D2216	Moisture Content	03/27/09		%	1	0.0	121.5	

Printed on: 04/01/09 10:07 AM

GEOTECHNICAL / GENERAL CHEMISTRY

Duplicate Sample Report Summary

Client Sample No.

BH-SED-16-0REP

Lab Name: TestAmerica Burlington

Contract: C9C160101

SDG No.: 9C160101

Lab Code: TALVT

Case No.: EAMSGS

Lab Sample ID: 788462DP

Matrix: SOLID

Client: STLPAP

Date Received: 03/16/09

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	Sample Result Conc.	Sample Result Qual.	Duplicate Sample Result Conc.	Duplicate Sample Result Qual.	RPD ¹
D2216	Moisture Content	03/27/09		%	121.5		116.3		4

¹ - Control Limit for RPD is +/- 20%, unless otherwise specified.

Printed on: 04/01/09 10:07 AM

ASTM Method D2216: Standard Test Method for Determination of Water (Moisture) Content of Soil and Rock by Mass Calculations

Client Code: STLPAP
ETR: 130630
SDG: 9C160101

Start Date:	03/27/09
Start Time:	2140
End Date:	03/30/09
Analyst:	MAP

[illegible]

Particle Size of Soils by ASTM D422

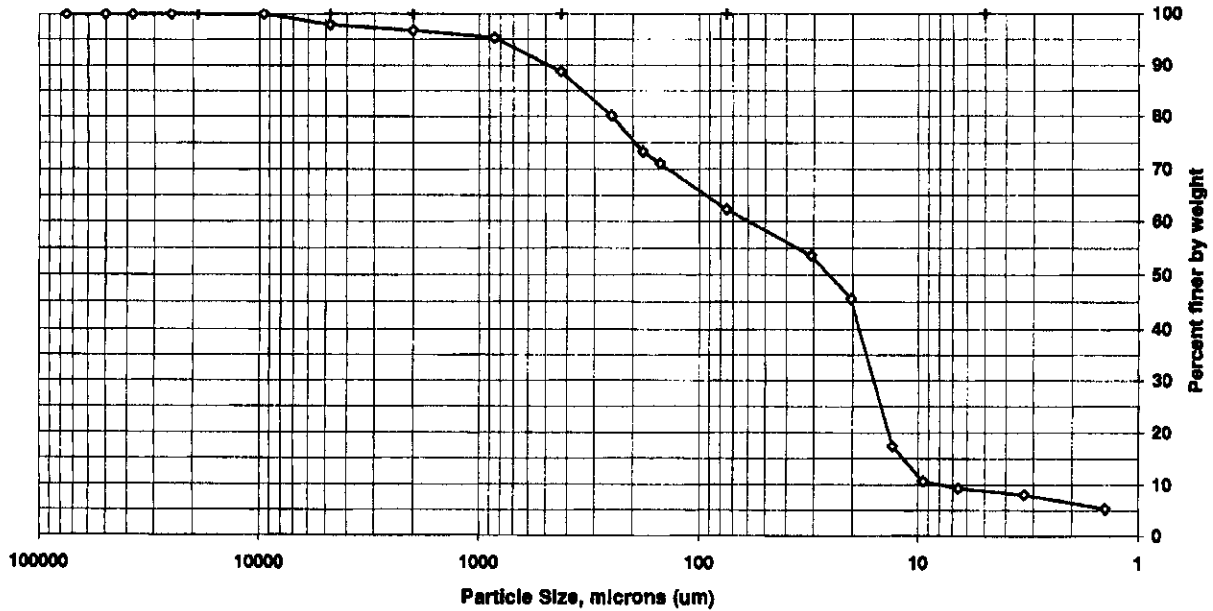
Client Code: STLPAP
 Sample ID: BH-SED-16-0
 Lab ID: 788462

SDG: 9C160101
 ETR(e): 130630

Date Received: 3/16/2009
 Start Date: 3/16/2009
 End Date: 4/1/2009

Percent Solids: 45.1%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: shells
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	97.9	2.1
#10	2000	96.8	1.1
#20	850	95.4	1.4
#40	425	88.8	6.6
#60	250	80.1	8.6
#80	180	73.3	6.8
#100	150	71.1	2.3
#200	75	62.3	8.8
Hydrometer	30.9	53.6	8.7
	20.3	45.6	8.0
	13.1	17.4	28.2
	9.5	10.7	6.7
	6.6	9.4	1.3
	3.3	8.0	1.3
V	1.4	5.4	2.7

Soil Classification	Percent of Total Sample
Gravel	2.1
Sand	35.6
Coarse Sand	1.1
Medium Sand	8.0
Fine Sand	26.5
Silt	52.9
Clay	9.4

Preparation Method: **D2217**
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

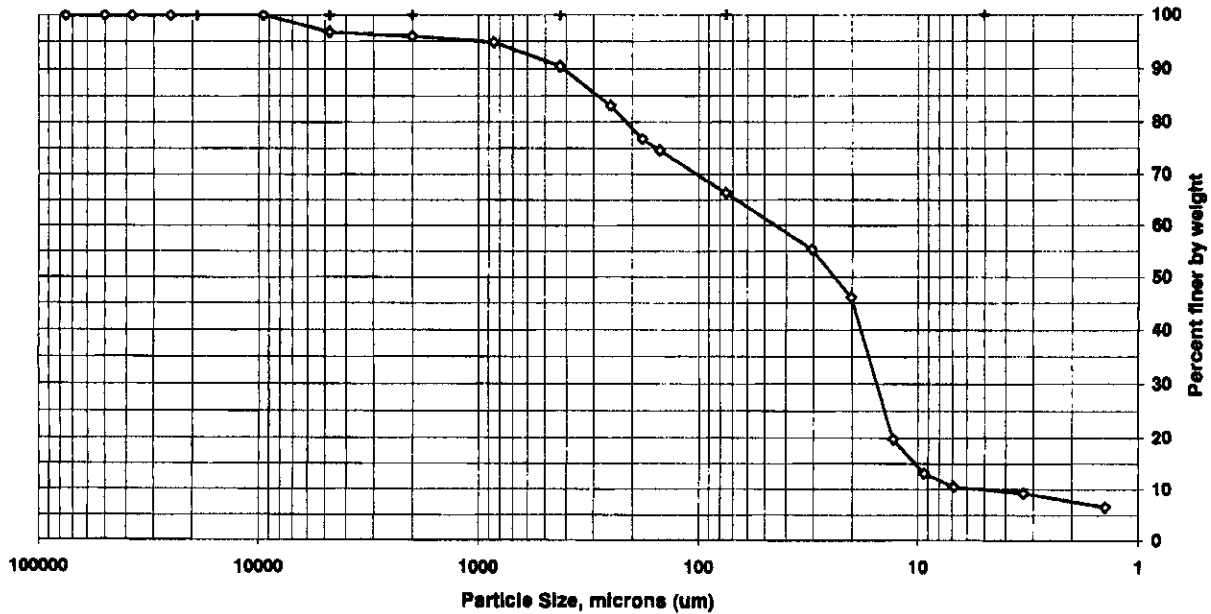
Client Code: STLPAP
 Sample ID: BH-SED-16-OREP
 Lab ID: 788462DP

SDG: 9C160101
 ETR(s): 130630

Date Received: 3/16/2009
 Start Date: 3/16/2009
 End Date: 4/1/2009

Percent Solids: 46.2%
 Specific Gravity: 2.650
 Maximum Particle Size: 9.5 mm

Non-soil material: shells
 Shape (> #10): na
 Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	96.7	3.3
#10	2000	96.0	0.8
#20	850	94.8	1.1
#40	425	90.5	4.4
#60	250	83.1	7.3
#80	180	76.8	6.4
#100	150	74.6	2.1
#200	75	66.4	8.3
Hydrometer	30.5	55.3	11.0
	20.1	48.1	9.2
	13.0	19.8	26.4
	9.4	13.2	6.6
	6.9	10.5	2.6
	3.3	9.2	1.3
V	1.4	6.6	2.6

Soil Classification	Percent of Total Sample
Gravel	3.3
Sand	30.4
Coarse Sand	0.8
Medium Sand	5.5
Fine Sand	24.1
Silt	55.8
Clay	10.5

Preparation Method: D2217
 Dispersion Device: Mechanical mixer with a metal paddle.
 Dispersion Period: 1 minute