

AECOM 100 Corporate Parkway Suite 341 Amherst, NY 14226 www.aecom.com 716 836 4506 tel 716 834 8785 fax

November 30, 2011

Mr. David Szymanski Project Manager New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 11th Floor Albany, NY 12233-7011

Subject: Groundwater and Surface Water Monitoring Results

September 2011

Mineral Springs Road MGP Site

Dear Mr. Szymanski:

This report provides the results of a groundwater and surface water sampling event completed by AECOM Environment (AECOM) on September 12 and 13, 2011, at the Mineral Springs Road former manufactured gas plant (MGP) site in West Seneca (Buffalo), New York. The sampling event was initially completed August 17 and 18, 2011; however, due to a laboratory error the samples were not analyzed within holding time and the sampling event was redone.

The work at the Mineral Springs site is being conducted under a New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Agreement (number B9-0538-98-08) as described in the Remedial Design, dated February 10, 1999, and the Final Engineering Report, Volume II – Operations and Maintenance (O&M) Plan, dated May 2002.

Summary

A total of 13 groundwater samples and two surface water samples were collected and analyzed this period as specified in the O&M Plan. Sampling locations are shown on the attached figure. The collected samples were analyzed by TestAmerica Laboratories, Inc. (TestAmerica) of Pittsburgh, Pennsylvania (New York State Department of Health [NYSDOH] Environmental Laboratory Approval Program [ELAP] ID 11182), except for free cyanide analyses which were performed by TestAmerica of Shelton, Connecticut (ELAP ID 10602). Table 1, which is taken from the O&M Plan, summarizes the sampling and analytical requirements for the site. Analytical results are summarized in Table 2.

Consistent with the O&M Plan, six onsite and one upgradient monitoring wells were sampled for benzene, ethylbenzene, toluene, and xylene (BTEX) and polycyclic aromatic hydrocarbon (PAH) compounds during this event. Concentrations of BTEX and/or PAH compounds exceeded NYSDEC standard or guidance values in four of the onsite groundwater samples.

Seven onsite and two downgradient offsite monitoring wells were sampled for total and free cyanide analyses only. Total cyanide concentrations exceeded the NYSDEC Groundwater Standard of 200 micrograms per liter (µg/L) in all nine groundwater samples analyzed. Free cyanide was detected in two



of the nine groundwater samples at concentrations of 4 J μ g/L and 7 J μ g/L. There is no NYSDEC Groundwater Standard for free cyanide.

Two onsite surface water samples were collected for BTEX, PAH, and total and free cyanide analyses. BTEX compounds were detected in one surface water sample in concentrations below the NYSDEC Class D surface water standards. PAH compounds were detected in one surface water sample below the NYSDEC Class D surface water standards. Total cyanide was detected in both surface water samples at a maximum concentration of 93 B μ g/L, below the NYSDEC Class D surface water standard of 9,000 μ g/L. Free cyanide was detected in one sample at a concentration of 11 μ g/L, below the NYSDEC Class D surface water standard of 22 μ g/L.

A total of 14 depth-to-water measurements were taken (including one surface water measurement and 13 groundwater measurements). The groundwater measurement from monitoring well MW-17 was inadvertently not collected during this round of measurements. Table 2 summarizes groundwater elevation data and Figure 1 shows groundwater elevation contours for this sampling event.

On August 18, 2011, AECOM also attempted to pump non-aqueous phase liquid (NAPL) from the dense non-aqueous phase liquid (DNAPL) recovery test well with minimal results.

Groundwater elevations

Depth-to-water measurements were collected at 13 monitoring wells and converted to elevations using reference point elevation data. The data have been used to construct the groundwater contours shown in the attached figure. A review of similar information from recent years shows that the groundwater flow direction during this event remained similar to previous sampling events. Groundwater flows onto the site from the south and east, and continues across the site in a generally west-northwesterly direction.

Sampling and analysis

Thirteen monitoring wells were purged and sampled by an AECOM sampling team this event; sampling locations are shown on the attached figure.

TestAmerica of Pittsburgh, PA, performed the analyses of the samples for BTEX, PAH, and total cyanide. TestAmerica of Shelton, Connecticut performed the free cyanide analyses. TestAmerica is currently certified to perform the requested analyses under the NYSDOH Environmental Laboratory Approval Program. The samples were analyzed using the following methods:

BTEX Method SW846 8260B
PAHs Method SW846 8270C
Cyanide (total) Method SW846 9012A
Cyanide (free) Method ASTM D4282-02

Groundwater and surface water sampling and analyses were conducted in accordance with AECOM's Standard Operating Procedures as provided in the project Quality Assurance Plan (QAP) of June 11, 1999. Cyanide samples were protected from light during collection to prevent the dissociation of metal-cyanide compounds, which would artificially elevate free cyanide results. The cyanide samples were also treated with lead carbonate and field filtered to remove potential sulfide interferences.



Analytical results and conclusions

Laboratory results are summarized in Table 2. Laboratory reports and chain-of-custody forms are provided as an attachment. Sample locations, sampling objectives, and a discussion of the analytical results for each of the specific areas of interest at the site are provided in the following sections.

The following discussion of results and data summarized in Table 2 reflect AECOM's review of the associated quality assurance/ quality control data (blanks, duplicates, etc.) including any changes to the laboratory-reported data qualifiers, as noted in the QA/QC section of this report.

Upgradient site perimeter

Monitoring well (MW) MW-17 is located in the southeast corner of the site to monitor upgradient groundwater quality. The groundwater sample collected from MW-17 was analyzed for BTEX, PAH, and total and free cyanide. No BTEX compounds were detected. Ten PAH compounds were detected at concentrations ranging from 0.73 to 4.7 µg/L. The NYSDEC Groundwater Guidance Value was exceeded for benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene. Total cyanide was detected at a concentration of 230 µg/L, above the NYSDEC Groundwater Standard value of 200 µg/L. Free cyanide was not detected. These cyanide results are consistent with historic data from this well.

Downgradient site perimeter

Monitoring wells MW-20 and MW-21 are located downgradient of the western boundary of the site on Calais Street, and wells MW-13, MW-14, MW-22, and MW-23 are located just inside the northern property boundary near Mineral Springs Road. These six wells monitor groundwater quality downgradient of the site. Groundwater samples collected from these six wells were analyzed for total and free cyanide.

All six wells had total cyanide concentrations above the NYSDEC Groundwater Standard of 200 μ g/L. Detected concentrations ranged from 360 μ g/L at MW-23 to 860 μ g/L at MW-22. One of the six wells (MW-23) had a free cyanide concentration of 4.0 J μ g/L. Free cyanide was not detected in the remaining five wells. These analytical results are consistent with the range of concentrations measured in past years.

On-site purifier residuals impacted areas

Monitoring wells MW-12 and MW-16 monitor groundwater quality at locations of known subsurface deposits of purifier box residuals. These deposits were remediated by capping. Groundwater samples from these two wells were analyzed for total and free cyanide.

Both of the wells had a total cyanide groundwater concentration above the NYSDEC Groundwater Standard of 200 μ g/L. Total cyanide concentrations were reported as 720 μ g/L at MW-12 and 700 μ g/L at MW-16. Free cyanide was detected in MW-16 at 7.0 J μ g/L.



These results were compared with historic data from these two wells. The comparison indicates that the most recent analytical results are consistent with past results.

On-site hydrocarbon NAPL impacted areas

Monitoring wells MW-07, MW-10, MW-11A, and MW-19 monitor on-site groundwater quality downgradient of subsurface soils impacted with hydrocarbon NAPL. Samples from these wells were analyzed for BTEX and PAH compounds.

BTEX compounds were detected above NYSDEC Groundwater Standards in MW-7, MW-11A, and MW-19. BTEX compounds were not detected at MW-10. Concentrations of BTEX compounds in MW-7, MW-10, MW-11A, and MW-19 were consistent with historical analytical data.

PAH compounds were detected above NYSDEC Groundwater Standards in MW-07 and MW-19. PAH compounds were detected in MW-11A at concentrations below NYSDEC Groundwater Standards. Concentrations measured were generally consistent with analytical results obtained in past years.

Surface water

Two surface water samples, SW-01 and SW-02, were collected from the NYSDEC Class D Stream running along the south side of the site. These surface water sampling locations monitor the effectiveness of the Eastern Drainage Ditch Cap and also monitor the concentrations of constituents of concern (COC) in surface water downstream of the Mineral Springs site. The collected samples were analyzed for BTEX, PAH compounds, and total and free cyanide.

BTEX compounds were detected in sample SW-01 at low concentrations ranging from 0.15 to 0.60 J μ g/L, which were all below the NYSDEC Class D Stream Standards. No BTEX compounds were detected in sample SW-02.

No PAH compounds were detected in sample SW-01. Three PAH compounds (flouranthene, pyrene, and benzo(b)fluoranthene) were detected in sample SW-02 at low concentrations ranging from 0.92 J to 1.7 J µg/L, which were all below the NYSDEC Class D Stream Standards.

Total cyanide was detected in SW-01 at a concentration of 11 J μ g/L and in SW-02 at a concentration of 93 μ g/L, below the NYSDEC Class D Stream Standard of 9,000 μ g/L.

Free cyanide was detected in SW-02 at a concentration of 11 μ g/L, below the NYSDEC Class D Stream Standard of 22 μ g/L. Sample SW-01 was non-detect for free cyanide.

Quality Assurance / Quality Control (QA/QC) samples

Quality assurance/quality control samples were collected during the sampling event to meet the requirements of the project QAP.

An equipment blank was prepared using analyte free blank water supplied by the analytical laboratory. All downhole tubing used to collect groundwater samples is dedicated to, and stored within, each well. Therefore, the equipment blank was collected by running the blank water through the silicone and polyethylene pump tubing at the peristaltic pump head. Toluene was detected in the equipment blank



associated with the monitoring well samples at 0.18 J μ g/L; all other compounds were non-detect. Toluene was not detected in the laboratory method blank or in the trip blank. Toluene was also detected in one monitoring well sample (MW-07) at a concentrations of 37 μ g/L. AECOM discussed the blank results with the laboratory, which reviewed the analytical documentation. No unusual circumstances were noted and toluene was not detected in the laboratory quality assurance samples. After accounting for the 25X dilution factor, the toluene concentration in the field sample was more than 5X the concentration in the equipment blank. Therefore, consistent with USEPA Region 2 data validation standard operating procedures (SOPs), no qualification of the sample result is required. We also note that the sample was significantly less than the groundwater and surface water standards, for this reason, the equipment blank results do not indicate a significant issue with the usability of the groundwater sample data.

A trip blank sample was prepared by the laboratory and was stored in the sample cooler throughout the sampling event and during transportation back to the laboratory. The trip blank was analyzed for BTEX compounds. No BTEX compounds were detected in the trip blank.

Duplicate samples were collected from MW-23 and submitted for BTEX, PAH, and total and free cyanide analyses. All duplicate sample results were within acceptable ranges as defined by the QAP.

Total cyanide was detected at $6.2 \text{ J}\,\mu\text{g/L}$ in the laboratory method blank at an estimated concentration greater than the method detection limit but less than the laboratory reporting (quantitation) limit; therefore, the laboratory correctly flagged all associated detections with a "B" (blank contamination) qualifier. The AECOM QA officer reviewed the associated sample data relative to the reported blank value. After taking into account the sample dilution factors, the reported cyanide detections for groundwater were more than 10X the associated blank concentration, and therefore, in accordance with USEPA Region 2 data validation SOPs, the data do not require qualification, and the "B" qualifier is not applied to the tabulated groundwater data (see Table 2). The reported value in one surface water sample (11 B μ g/L in SW-01) is greater than the blank value and greater than the quantitation limit, but less than 10X the blank value. Therefore, in accordance with USEPA Region 2 SOPs, this value is qualified as 'estimated' (i.e., a "J" qualifier has been applied on the tabulated data, and the "B" qualifier has been removed).

Sample bottles were provided by TestAmerica Laboratories of Pittsburgh, Pennsylvania. Some sample bottles contained preservatives to stabilize the sample, depending on the analysis being performed. These preservatives raise or lower the pH. All samples were received at laboratory within the acceptable pH range.

DNAPL recovery test well (RTW-1)

On August 18, 2011, the Recovery System at RTW-1 was operated to assess whether DNAPL had accumulated since the August 2010 sampling event. Approximately two liters of water were pumped out. The water contained only trace amounts of NAPL blebs, visually estimated to be less than 1% of total volume.



If you have any questions or comments, please do not hesitate to call me at (607) 277-5716.

Sincerely yours,

Tamara Raby Geologist

Project Manager

Thomas P. Clark, P.E Project Engineer

Encl: Groundwater Contours (Figure 1)

Water Sampling Summary (Table 1) Laboratory Results Summary (Table 2)

Laboratory Reports

cc: C. Burke - NFG

T. Alexander – NFG

S. Messier - NYSDOH

R. Kennedy – Hogdson Russ LLP

T. Clark, AECOM



Table 1 Water Sampling Summary Table Mineral Springs Road MGP Site, September 2011											
Location	Cyanide, Total	Cyanide, Free	BTEX	PAHs	Water Elevation	Benchmark Elevation					
	USEPA SW846 9012A	ASTM D4282-02	USEPA SW846 8260B	USEPA SW846 8270C		(top of PVC casing)					
Upgradient Si	te Perimeter										
MW-17	Х	Х	Х	Х	Х	587.28					
Downgradient	Site Perimet	ter									
MW-13	Х	Х	annually	annually	Х	591.85					
MW-14	Х	X			Х	589.81					
MW-15					Х	590.93					
MW-20	Х	Х			Х	587.30					
MW-21	Χ	X			X	587.88					
MW-22	Χ	X			X	592.50					
MW-23	Χ	X	annually	annually	Χ	589.28					
Onsite Purifie	r Residuals I	mpacted Areas	s								
MW-12	Χ	X			X	591.40					
MW-16	Х	Х			Х	588.99					
Onsite Hydrod	carbon Impac	ted Areas									
MW-07			Х	Х	Х	587.26					
MW-10			Х	Х	Х	587.61					
MW-11			Х	Х	Х	590.03					
MW-19			Х	Х	Х	589.83					
Onsite Surface	e Water										
SW-01	Χ	Х	Χ	Х	Х	top of headwall = 587.0					
SW-02	Х	Х	Х	Х							
QA/QC Sampl	es (frequenc	;y)									
Trip Blank			Х			(one per shipment)					
Field Duplicate	х	Х	х	х		(one per event)					
Equipment Blank	Х	Х	Х	Х		(one per event)					
DNAPL Recov	ery				(nurgo woll	of accumulated DNADL)					
IZ I VV - I					(purge well	of accumulated DNAPL)					
Total	13	13	10 or 12	9 or 11	15						
Container, Preservative	500 ml plastic, NaOH	1 L plastic amber, NaOH	40 mL VOA vial, HCI (x2)	1 L glass amber, NP (x2)							

Table 2 **Groundwater and Surface Water Monitoring Results Mineral Springs Road MGP Site**

September 2011

PARAMETER							GF	ROUNDWATER								SUI	RFACE WATE	R	Quality As	surance / Qua	ality Control
Sample ID:	Groundwater	MW-07	MW-10	MW-11A	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-19	MW-20	MW-21	MW-22	MW-23	Class D Stream	SW-01	SW-02	ТВ	ЕВ	MW-23 Dup
Sample Date :	Standard (1)	09/12/11	09/12/11	09/12/11	09/12/11	09/13/11	09/13/11		09/13/11	09/12/11	09/12/11	09/12/11	09/12/11	09/12/11	09/12/11	Standard (1)	09/13/11	09/12/11	09/12/11	09/12/11	09/12/11
BTEX (µg/L)																					
Benzene	1	600	nd	170		0.72 J				nd	4200				nd	10	0.15 J	nd	nd	nd	nd
Toluene	5	37	nd	nd		nd				nd	nd				nd	6000	0.22 J	nd	nd	0.18	J nd
Ethylbenzene	5	800	nd	63		nd				nd	170 J				nd	150 *	0.60 J	nd	nd	nd	nd
Xylene (sum of isomers)	5 (each)	510	nd	25 J		nd				nd	nd				nd	590 *	0.54 J	nd	nd	nd	nd
BTEX total		1947	nd	258		0.72				nd	4370				nd		1.51	nd	nd	nd	nd
PAHs (μg/L)																					
Naphthalene	10 *	1500	nd	4.0		nd				nd	2700				nd	110 *	nd	nd		nd	nd
Acenaphthylene	NL *	nd	nd	2.8		nd				nd	nd				nd	NL	nd	nd		nd	nd
Acenaphthene	20 *	49	nd	4.6		nd				nd	nd				nd	48 *	nd	nd		nd	nd .
Fluorene	50 *	9.6	nd	nd		nd				nd	nd				nd	4.8 *	nd	nd		nd	nd
Phenanthrene Anthracene	50 *	9.5	nd	nd		nd				nd	nd				nd	45 *	nd	nd		nd	nd
Fluoranthene	50 * 50 *	0.98 J nd	nd nd	nd 0.42 J		nd nd				nd 0.73 J	nd nd				nd nd	35 * NL	nd nd	nd 1.2 J		nd nd	nd nd
Pyrene	50 *	nd	nd	0.42 J		nd				0.75 J	nd				nd	42 *	nd	0.92 J		nd	nd
Benzo(a)anthracene	0.002 *	nd	nd	nd		nd				1.3 J	nd				nd	0.23 *	nd	nd		nd	nd
Chrysene	0.002 *	nd	nd	nd		nd				1.3 J	nd				nd	NL	nd	nd		nd	nd
Benzo(b)fluoranthene	0.002 *	nd	nd	nd		nd				2.0 J	nd				nd	NL	nd	1.7 J		nd	nd
Benzo(k)fluoranthene	0.002 *	nd	nd	nd		nd				1.5 J	nd				nd	NL	nd	nd		nd	nd
Benzo(a)pyrene	NL	nd	nd	nd		nd				1.8 J	nd				nd	0.0012 *	nd	nd		nd	nd
Indeno(1,2,3-cd)pyrene	0.002 *	nd	nd	nd		nd				4.4	nd				nd	NL	nd	nd		nd	nd
Dibenz(a,h)anthracene	NL	nd	nd	nd		nd				4.7	nd				nd	NL	nd	nd		nd	nd
Benzo(g,h,i)perylene	NL	nd	nd	nd		nd				1.6 J	nd				nd	NL	nd	nd		nd	nd
2-Methylnaphthalene	NL	nd	nd	nd		nd				nd	nd				nd	NL	nd	nd		nd	nd
PAHs total		1569.08	nd	12.38		nd				20.08	2700				nd		nd	3.82		nd	nd
CYANIDE (µg/L)																					
Cyanide, total	200				720	620	670		700	230		560	420	860	360	9000	11 J	93		nd	340
Cyanide, free	NL				nd	nd	nd		7.0 J	nd		nd	nd	nd	4.0	J 22	nd	11		nd	7.0
Water Elevation (feet)	NL	579.76	579.53	580.22	579.21	577.73	577.05	578.76	580.04	NM	579.54	576.41	575.29	578.99	577.09	NL	580.19				

NL Not listed

nd Not detected above method detection limit

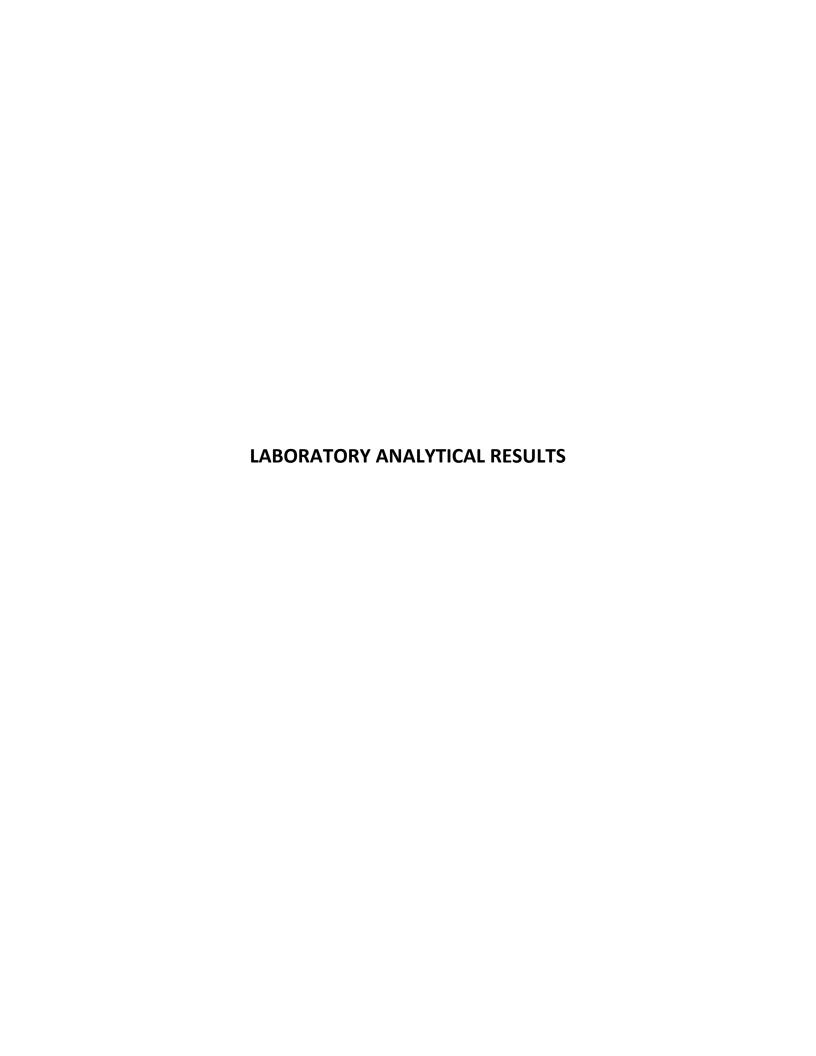
--- Not analyzed

J Indicates laboratory estimated value B The compound was detected in the associated method blank. (1) NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1)

* Groundwater or Surface Water Guidance Value (no Standard value listed)

Concentrations exceeding NYSDEC regulatory standard or guidance value







THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

TestAmerica Job ID: 180-3868-1

Client Project/Site: AECOM, Mineral Springs

For:

AECOM, Inc. 1001 West Seneca Street Suite 204 Ithaca, New York 14850

Attn: Tamara Raby

Whitney Xtai

Authorized for release by:

10/24/2011 05:33:44 PM

Whitney Ritari Project Manager I

whitney.ritari@testamericainc.com



www.testamericainc.com

Visit us at:

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Client: AECOM, Inc. Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions	
Certification Summary	
Sample Summary	6
Method Summary	7
Client Sample Results	8
QC Sample Results	21
QC Association	26
Chain of Custody	29
Receipt Checklists	32

Case Narrative

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

Job ID: 180-3868-1

Laboratory: TestAmerica Pittsburgh

Narrative

CASE NARRATIVE

Client: AECOM, Inc.

Project: AECOM, Mineral Springs

Report Number: 180-3868-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 09/14/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

LOW LEVEL VOLATILE ORGANIC COMPOUNDS

Due to the concentration of target compounds detected, samples MW-7 091211 (180-3868-2)[25X], MW-11A 091211 (180-3868-10)[10X] and MW-19 091211 (180-3868-15)[250X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Due to the concentration of target compounds detected, samples MW-7 091211 (180-3868-2)[10X] and MW-19 091211 (180-3868-15) [20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

GENERAL CHEMISTRY

Samples MW-23 091211 (180-3868-3)[5X], MW-73 091211 (180-3868-4)[5X], MW-20 091211 (180-3868-5)[5X], MW-21 091211 (180-3868-6)[5X], MW-13 091211 (180-3868-7)[5X], MW-22 091211 (180-3868-8)[5X], MW-12 091211 (180-3868-11)[5X], MW-14 091311 (180-3868-12)[5X] and MW-16 091311 (180-3868-13)[5X] were analyzed at a dilution for total cyanide. The reporting limits have been adjusted accordingly.

Cyanide, Total was detected in method blank MB 220-54954/4-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

TestAmerica Job ID: 180-3868-1

3

4

5

6

8

10

Definitions/Glossary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

Qualifiers

GC/MS VOA

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

lifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Е Result exceeded calibration range.

General Chemistry

r Description
Į

В Compound was found in the blank and sample.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly	used abbreviations may	or may not be	present in this report.
Abbicviation	These commonly	asca applicatations ma	y or may not be	present in tins report.

₩ Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CNF** Contains no Free Liquid

DL, RA, RE, IN Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Estimated Detection Limit EDL

EPA United States Environmental Protection Agency

MDL Method Detection Limit ML Minimum Level (Dioxin)

ND Not detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

RL Reporting Limit

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ**

Certification Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	ACLASS	DoD ELAP		ADE-1422
TestAmerica Pittsburgh	Arkansas	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAC	9	4224CA
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAC	4	E871008
TestAmerica Pittsburgh	Illinois	NELAC	5	002602
TestAmerica Pittsburgh	Kansas	NELAC	7	E-10350
TestAmerica Pittsburgh	Louisiana	NELAC	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAC	1	203011
TestAmerica Pittsburgh	New Jersey	NELAC	2	PA005
TestAmerica Pittsburgh	New York	NELAC	2	11182
TestAmerica Pittsburgh	North Carolina	North Carolina DENR	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAC	3	02-00416
TestAmerica Pittsburgh	Pennsylvania	State Program	3	02-416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014002
TestAmerica Pittsburgh	USDA	USDA		P330-10-00139
TestAmerica Pittsburgh	USDA	USDA		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAC	8	STLP
TestAmerica Pittsburgh	Virginia	NELAC	3	460189
TestAmerica Pittsburgh	West Virginia	West Virginia DEP	3	142
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800
TestAmerica Connecticut	Connecticut	State Program	1	PH-0497
TestAmerica Connecticut	Massachusetts	State Program	1	M-CT023
TestAmerica Connecticut	New Jersey	NELAC	2	CT410
TestAmerica Connecticut	New York	NELAC	2	10602
TestAmerica Connecticut	NRC	NRC		06-30139-01
TestAmerica Connecticut	Rhode Island	State Program	1	LAO00226
TestAmerica Connecticut	USDA	USDA		P330-11-00082

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

3

5

7

10

Sample Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-3868-1	EB 091211	Water	09/12/11 10:30	09/14/11 10:00
180-3868-2	MW-7 091211	Water	09/12/11 11:20	09/14/11 10:00
180-3868-3	MW-23 091211	Water	09/12/11 12:25	09/14/11 10:00
180-3868-4	MW-73 091211	Water	09/12/11 09:00	09/14/11 10:00
180-3868-5	MW-20 091211	Water	09/12/11 14:30	09/14/11 10:00
180-3868-6	MW-21 091211	Water	09/12/11 15:40	09/14/11 10:00
180-3868-7	MW-13 091211	Water	09/13/11 09:30	09/14/11 10:00
180-3868-8	MW-22 091211	Water	09/12/11 00:00	09/14/11 10:00
180-3868-9	MW-10 091211	Water	09/12/11 10:50	09/14/11 10:00
180-3868-10	MW-11A 091211	Water	09/12/11 12:05	09/14/11 10:00
180-3868-11	MW-12 091211	Water	09/12/11 13:35	09/14/11 10:00
180-3868-12	MW-14 091311	Water	09/13/11 10:20	09/14/11 10:00
180-3868-13	MW-16 091311	Water	09/13/11 09:20	09/14/11 10:00
180-3868-14	MW-17 091211	Water	09/12/11 15:00	09/14/11 10:00
180-3868-15	MW-19 091211	Water	09/12/11 12:55	09/14/11 10:00
180-3868-16	SW-02 091211	Water	09/12/11 00:00	09/14/11 10:00
180-3868-17	SW-01 091311	Water	09/13/11 09:15	09/14/11 10:00
180-3868-18	TRIP BLANK	Water	09/12/11 12:00	09/14/11 10:00

3

4

6

7

8

9

10

11

Method Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
335.4	Cyanide, Total	MCAWW	TAL CT
D4282_02	Cyanide, Free	ASTM	TAL CT

Protocol References:

ASTM = ASTM International

 $\label{eq:mcanal} \mbox{MCAWW} = \mbox{"Methods For Chemical Analysis Of Water And Wastes"}, \mbox{EPA-}600/4-79-020, \mbox{March 1983 And Subsequent Revisions}.$

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CT = TestAmerica Connecticut, 128 Long Hill Cross Road, Shelton, CT 06484, TEL (203)929-8140

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Δ

7

8

9

10

11

Project/Site: AECOM, Mineral Springs

Lab Sample ID: 180-3868-1

TestAmerica Job ID: 180-3868-1

Matrix: Water

Client Sample ID: EB 091211

Date Collected: 09/12/11 10:30 Date Received: 09/14/11 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			09/19/11 15:28	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/19/11 15:28	1
Toluene	0.18	J	1.0	0.15	ug/L			09/19/11 15:28	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/19/11 15:28	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	91		70 - 128			-		09/19/11 15:28	1
1,2-Dichloroethane-d4 (Surr)	87		64 - 135					09/19/11 15:28	1
4-Bromofluorobenzene (Surr)	76		70 - 118					09/19/11 15:28	1
Toluene-d8 (Surr)	88		71 _ 118					09/19/11 15:28	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.9	0.14	ug/L		09/15/11 07:58	09/16/11 17:17	1
Acenaphthylene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 17:17	1
Anthracene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 17:17	1
Benzo[a]anthracene	ND		1.9	0.14	ug/L		09/15/11 07:58	09/16/11 17:17	1
Benzo[a]pyrene	ND		1.9	0.13	ug/L		09/15/11 07:58	09/16/11 17:17	1
Benzo[b]fluoranthene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 17:17	1
Benzo[g,h,i]perylene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 17:17	1
Benzo[k]fluoranthene	ND		1.9	0.53	ug/L		09/15/11 07:58	09/16/11 17:17	1
Chrysene	ND		1.9	0.14	ug/L		09/15/11 07:58	09/16/11 17:17	1
Dibenz(a,h)anthracene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 17:17	1
Fluoranthene	ND		1.9	0.16	ug/L		09/15/11 07:58	09/16/11 17:17	1
Fluorene	ND		1.9	0.21	ug/L		09/15/11 07:58	09/16/11 17:17	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.19	ug/L		09/15/11 07:58	09/16/11 17:17	1
Naphthalene	ND		1.9	0.14	ug/L		09/15/11 07:58	09/16/11 17:17	1
Phenanthrene	ND		1.9	0.41	ug/L		09/15/11 07:58	09/16/11 17:17	1
Pyrene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 17:17	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	66		37 - 104	09/15/11 07:58	09/16/11 17:17	1
2-Fluorobiphenyl	63		35 - 108	09/15/11 07:58	09/16/11 17:17	1
Terphenyl-d14	70		25 - 130	09/15/11 07:58	09/16/11 17:17	1
2,4,6-Tribromophenol	81		33 - 122	09/15/11 07:58	09/16/11 17:17	1
2-Fluorophenol	64		26 - 100	09/15/11 07:58	09/16/11 17:17	1
Phenol-d5	70		30 - 102	09/15/11 07:58	09/16/11 17:17	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	2.9	ug/L		09/20/11 09:55	09/21/11 11:35	1
Cyanide, Free	ND		10	3.4	ug/L		09/19/11 11:00	09/19/11 16:55	1

Client Sample ID: MW-7 091211 Lab Sample ID: 180-3868-2

Date Collected: 09/12/11 11:20
Date Received: 09/14/11 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)								
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	600	25	2.6 ug/L			09/20/11 15:41	25

Matrix: Water

Client Sample Results

Client: AECOM, Inc.

Toluene-d8 (Surr)

Project/Site: AECOM, Mineral Springs

Client Sample ID: MW-7 091211 Lab Sample ID: 180-3868-2

Date Collected: 09/12/11 11:20 Matrix: Water

Date Received: 09/14/11 10:00

Method: 8260B - Volatile Orga	nic Compounds (GC/MS)	(Continued)						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	800	25	5.7	ug/L			09/20/11 15:41	25
Toluene	37	25	3.8	ug/L			09/20/11 15:41	25
Xylenes, Total	510	75	12	ug/L			09/20/11 15:41	25
Surrogate	% Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	92	70 - 128			-		09/20/11 15:41	25
1,2-Dichloroethane-d4 (Surr)	85	64 - 135					09/20/11 15:41	25
4-Bromofluorobenzene (Surr)	78	70 ₋ 118					09/20/11 15:41	25

71 - 118

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	49		2.1	0.15	ug/L		09/15/11 07:58	09/16/11 17:41	1
Acenaphthylene	ND		2.1	0.16	ug/L		09/15/11 07:58	09/16/11 17:41	1
Anthracene	0.98	J	2.1	0.16	ug/L		09/15/11 07:58	09/16/11 17:41	1
Benzo[a]anthracene	ND		2.1	0.16	ug/L		09/15/11 07:58	09/16/11 17:41	1
Benzo[a]pyrene	ND		2.1	0.14	ug/L		09/15/11 07:58	09/16/11 17:41	1
Benzo[b]fluoranthene	ND		2.1	0.17	ug/L		09/15/11 07:58	09/16/11 17:41	1
Benzo[g,h,i]perylene	ND		2.1	0.16	ug/L		09/15/11 07:58	09/16/11 17:41	1
Benzo[k]fluoranthene	ND		2.1	0.58	ug/L		09/15/11 07:58	09/16/11 17:41	1
Chrysene	ND		2.1	0.15	ug/L		09/15/11 07:58	09/16/11 17:41	1
Dibenz(a,h)anthracene	ND		2.1	0.16	ug/L		09/15/11 07:58	09/16/11 17:41	1
Fluoranthene	ND		2.1	0.17	ug/L		09/15/11 07:58	09/16/11 17:41	1
Fluorene	9.6		2.1	0.23	ug/L		09/15/11 07:58	09/16/11 17:41	1
Indeno[1,2,3-cd]pyrene	ND		2.1	0.21	ug/L		09/15/11 07:58	09/16/11 17:41	1
Naphthalene	1000	E	2.1	0.15	ug/L		09/15/11 07:58	09/16/11 17:41	1
Phenanthrene	9.5		2.1	0.45	ug/L		09/15/11 07:58	09/16/11 17:41	1
Pyrene	ND		2.1	0.17	ug/L		09/15/11 07:58	09/16/11 17:41	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	61		37 - 104	09/15/11 07:58	09/16/11 17:41	1
2-Fluorobiphenyl	57		35 - 108	09/15/11 07:58	09/16/11 17:41	1
Terphenyl-d14	54		25 - 130	09/15/11 07:58	09/16/11 17:41	1
2,4,6-Tribromophenol	78		33 - 122	09/15/11 07:58	09/16/11 17:41	1
2-Fluorophenol	62		26 - 100	09/15/11 07:58	09/16/11 17:41	1
Phenol-d5	67		30 - 102	09/15/11 07:58	09/16/11 17:41	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	65	21	1.5	ug/L		09/15/11 07:58	09/16/11 21:57	10
Acenaphthylene	ND	21	1.6	ug/L		09/15/11 07:58	09/16/11 21:57	10
Anthracene	ND	21	1.6	ug/L		09/15/11 07:58	09/16/11 21:57	10
Benzo[a]anthracene	ND	21	1.6	ug/L		09/15/11 07:58	09/16/11 21:57	10
Benzo[a]pyrene	ND	21	1.4	ug/L		09/15/11 07:58	09/16/11 21:57	10
Benzo[b]fluoranthene	ND	21	1.7	ug/L		09/15/11 07:58	09/16/11 21:57	10
Benzo[g,h,i]perylene	ND	21	1.6	ug/L		09/15/11 07:58	09/16/11 21:57	10
Benzo[k]fluoranthene	ND	21	5.8	ug/L		09/15/11 07:58	09/16/11 21:57	10
Chrysene	ND	21	1.5	ug/L		09/15/11 07:58	09/16/11 21:57	10
Dibenz(a,h)anthracene	ND	21	1.6	ug/L		09/15/11 07:58	09/16/11 21:57	10
Fluoranthene	ND	21	1.7	ug/L		09/15/11 07:58	09/16/11 21:57	10
Fluorene	12 J	21	2.3	ug/L		09/15/11 07:58	09/16/11 21:57	10

TestAmerica Job ID: 180-3868-1

09/20/11 15:41

Client Sample ID: MW-7 091211

Date Collected: 09/12/11 11:20 Date Received: 09/14/11 10:00 Lab Sample ID: 180-3868-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		21	2.1	ug/L		09/15/11 07:58	09/16/11 21:57	10
Naphthalene	1500		21	1.5	ug/L		09/15/11 07:58	09/16/11 21:57	10
Phenanthrene	11	J	21	4.5	ug/L		09/15/11 07:58	09/16/11 21:57	10
Pyrene	ND		21	1.7	ug/L		09/15/11 07:58	09/16/11 21:57	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	60		37 - 104				09/15/11 07:58	09/16/11 21:57	10
2-Fluorobiphenyl	53		35 - 108				09/15/11 07:58	09/16/11 21:57	10
Terphenyl-d14	52		25 - 130				09/15/11 07:58	09/16/11 21:57	10
2,4,6-Tribromophenol	76		33 - 122				09/15/11 07:58	09/16/11 21:57	10
2-Fluorophenol	61		26 - 100				09/15/11 07:58	09/16/11 21:57	10

Client Sample ID: MW-23 091211

Date Collected: 09/12/11 12:25

Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			09/19/11 16:14	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/19/11 16:14	1
Toluene	ND		1.0	0.15	ug/L			09/19/11 16:14	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/19/11 16:14	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	89		70 - 128			-		09/19/11 16:14	1
1,2-Dichloroethane-d4 (Surr)	82		64 - 135					09/19/11 16:14	1
4-Bromofluorobenzene (Surr)	79		70 - 118					09/19/11 16:14	1
Toluene-d8 (Surr)	85		71 - 118					09/19/11 16:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.9	0.14	ug/L		09/15/11 07:58	09/16/11 18:05	1
Acenaphthylene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 18:05	1
Anthracene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 18:05	1
Benzo[a]anthracene	ND		1.9	0.14	ug/L		09/15/11 07:58	09/16/11 18:05	1
Benzo[a]pyrene	ND		1.9	0.13	ug/L		09/15/11 07:58	09/16/11 18:05	1
Benzo[b]fluoranthene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 18:05	1
Benzo[g,h,i]perylene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 18:05	1
Benzo[k]fluoranthene	ND		1.9	0.53	ug/L		09/15/11 07:58	09/16/11 18:05	1
Chrysene	ND		1.9	0.13	ug/L		09/15/11 07:58	09/16/11 18:05	1
Dibenz(a,h)anthracene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 18:05	1
Fluoranthene	ND		1.9	0.16	ug/L		09/15/11 07:58	09/16/11 18:05	1
Fluorene	ND		1.9	0.21	ug/L		09/15/11 07:58	09/16/11 18:05	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.19	ug/L		09/15/11 07:58	09/16/11 18:05	1
Naphthalene	ND		1.9	0.13	ug/L		09/15/11 07:58	09/16/11 18:05	1
Phenanthrene	ND		1.9	0.41	ug/L		09/15/11 07:58	09/16/11 18:05	1
Pyrene	ND		1.9	0.15	ug/L		09/15/11 07:58	09/16/11 18:05	1

Project/Site: AECOM, Mineral Springs

Client Sample ID: MW-23 091211

Date Collected: 09/12/11 12:25 Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-3

TestAmerica Job ID: 180-3868-1

Matrix: Water

Surrogate % Recovery Qualifier Limits Prepared Analyzed Dil Fac Nitrobenzene-d5 60 37 - 104 09/15/11 07:58 09/16/11 18:05 2-Fluorobiphenyl 57 35 - 108 09/15/11 07:58 09/16/11 18:05 Terphenyl-d14 59 25 - 130 09/15/11 07:58 09/16/11 18:05 2,4,6-Tribromophenol 72 33 - 122 09/15/11 07:58 09/16/11 18:05 2-Fluorophenol 58 26 - 100 09/15/11 07:58 09/16/11 18:05 Phenol-d5 59 30 - 102 09/15/11 07:58 09/16/11 18:05

General Chemistry

Contrat Chomically									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	360	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:03	5
Cyanide, Free	4.0	J	10	3.4	ug/L		09/19/11 11:00	09/19/11 16:57	1

Client Sample ID: MW-73 091211

Date Collected: 09/12/11 09:00 Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

moniour ozooz rolamo organio o	opouuo (C C , C ,							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			09/19/11 16:38	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/19/11 16:38	1
Toluene	ND		1.0	0.15	ug/L			09/19/11 16:38	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/19/11 16:38	1

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	86	70 - 128		9/19/11 16:38	1
1,2-Dichloroethane-d4 (Surr)	83	64 - 135	0.	9/19/11 16:38	1
4-Bromofluorobenzene (Surr)	76	70 - 118	0	9/19/11 16:38	1
Toluene-d8 (Surr)	92	71 - 118	0.	9/19/11 16:38	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.14	ug/L		09/15/11 07:58	09/16/11 18:28	1
Acenaphthylene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 18:28	1
Anthracene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 18:28	1
Benzo[a]anthracene	ND		2.0	0.14	ug/L		09/15/11 07:58	09/16/11 18:28	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		09/15/11 07:58	09/16/11 18:28	1
Benzo[b]fluoranthene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 18:28	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 18:28	1
Benzo[k]fluoranthene	ND		2.0	0.54	ug/L		09/15/11 07:58	09/16/11 18:28	1
Chrysene	ND		2.0	0.14	ug/L		09/15/11 07:58	09/16/11 18:28	1
Dibenz(a,h)anthracene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 18:28	1
Fluoranthene	ND		2.0	0.16	ug/L		09/15/11 07:58	09/16/11 18:28	1
Fluorene	ND		2.0	0.21	ug/L		09/15/11 07:58	09/16/11 18:28	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		09/15/11 07:58	09/16/11 18:28	1
Naphthalene	ND		2.0	0.14	ug/L		09/15/11 07:58	09/16/11 18:28	1
Phenanthrene	ND		2.0	0.42	ug/L		09/15/11 07:58	09/16/11 18:28	1
Pyrene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 18:28	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	75		37 - 104	09/15/11 07:58	09/16/11 18:28	1
2-Fluorobiphenyl	71		35 - 108	09/15/11 07:58	09/16/11 18:28	1

Lab Sample ID: 180-3868-4

TestAmerica Job ID: 180-3868-1

Matrix: Water

Client Sample ID: MW-73 091211

Date Collected: 09/12/11 09:00 Date Received: 09/14/11 10:00

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	64		25 - 130	09/15/11 07:58	09/16/11 18:28	1
2,4,6-Tribromophenol	78		33 - 122	09/15/11 07:58	09/16/11 18:28	1
2-Fluorophenol	69		26 - 100	09/15/11 07:58	09/16/11 18:28	1
Phenol-d5	75		30 - 102	09/15/11 07:58	09/16/11 18:28	1

General Chemistry

General Oneilistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	340	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:06	5
Cyanide, Free	7.0	J	10	3.4	ug/L		09/19/11 11:00	09/19/11 17:01	1

Client Sample ID: MW-20 091211

Date Collected: 09/12/11 14:30 Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-5

Matrix: Water

General Chemistry

General Onemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	560	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:07	5
Cyanide, Free	ND		10	3.4	ug/L		09/19/11 11:00	09/19/11 17:03	1

Client Sample ID: MW-21 091211

Date Collected: 09/12/11 15:40 Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-6

Matrix: Water

General Chemistry

Conoral Chombury									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	420	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:08	5
Cyanide, Free	ND		10	3.4	ug/L		09/19/11 11:00	09/19/11 17:05	1

Client Sample ID: MW-13 091211

Date Collected: 09/13/11 09:30

Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-7

Matrix: Water

	Method: 8260B -	Volatile Ord	ganic Com	pounds	(GC/MS)	
--	-----------------	--------------	-----------	--------	---------	--

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.72 J	1.0	0.11	ug/L			09/19/11 17:02	1
Ethylbenzene	ND	1.0	0.23	ug/L			09/19/11 17:02	1
Toluene	ND	1.0	0.15	ug/L			09/19/11 17:02	1
Xylenes, Total	ND	3.0	0.49	ug/L			09/19/11 17:02	1

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	81	70 - 128		09/19/11 17:02	1
1,2-Dichloroethane-d4 (Surr)	77	64 - 135		09/19/11 17:02	1
4-Bromofluorobenzene (Surr)	71	70 - 118		09/19/11 17:02	1
Toluene-d8 (Surr)	87	71 - 118		09/19/11 17:02	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND —	1.9	0.14 ug/L		09/15/11 07:58	09/16/11 18:52	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued) Analyte Result Qualifier MDL Unit Prepared Dil Fac Analyzed Acenaphthylene ND 1.9 0.15 ug/L 09/15/11 07:58 09/16/11 18:52 Anthracene ND 1.9 0.15 ug/L 09/15/11 07:58 09/16/11 18:52 Benzo[a]anthracene ND 1.9 0.14 ug/L 09/15/11 07:58 09/16/11 18:52 Benzo[a]pyrene ND 1.9 0.13 ug/L 09/15/11 07:58 09/16/11 18:52 Benzo[b]fluoranthene ND 1.9 0.15 ug/L 09/15/11 07:58 09/16/11 18:52 Benzo[g,h,i]perylene ND 0.15 ug/L 09/16/11 18:52 1.9 09/15/11 07:58 Benzo[k]fluoranthene ND 1.9 0.53 ug/L 09/15/11 07:58 09/16/11 18:52 Chrysene ND 1.9 0.13 ug/L 09/15/11 07:58 09/16/11 18:52 Dibenz(a,h)anthracene ND 1.9 0.15 ug/L 09/15/11 07:58 09/16/11 18:52 Fluoranthene ND 1.9 0.16 ug/L 09/15/11 07:58 09/16/11 18:52 09/16/11 18:52 Fluorene ND 1.9 0.21 ug/L 09/15/11 07:58 Indeno[1,2,3-cd]pyrene ND 1.9 0.19 ug/L 09/15/11 07:58 09/16/11 18:52 Naphthalene ND 1.9 0.13 ug/L 09/15/11 07:58 09/16/11 18:52 Phenanthrene ND 1.9 0.41 ug/L 09/15/11 07:58 09/16/11 18:52 Pyrene ND 0.15 ug/L 1.9 09/15/11 07:58 09/16/11 18:52

Surrogate	% Recovery Qu	alifier Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	58	37 - 104	09/15/11 07:58	09/16/11 18:52	1
2-Fluorobiphenyl	56	35 - 108	09/15/11 07:58	09/16/11 18:52	1
Terphenyl-d14	55	25 _ 130	09/15/11 07:58	09/16/11 18:52	1
2,4,6-Tribromophenol	68	33 _ 122	09/15/11 07:58	09/16/11 18:52	1
2-Fluorophenol	57	26 - 100	09/15/11 07:58	09/16/11 18:52	1
Phenol-d5	57	30 - 102	09/15/11 07:58	09/16/11 18:52	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	620	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:09	5
Cyanide, Free	ND		10	3.4	ug/L		09/19/11 11:00	09/19/11 17:06	1

Client Sample ID: MW-22 091211 Lab Sample ID: 180-3868-8

Date Collected: 09/12/11 00:00 Date Received: 09/14/11 10:00

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	860	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:10	5
Cyanide, Free	ND		10	3.4	ug/L		09/19/11 11:00	09/19/11 17:08	1

Client Sample ID: MW-10 091211 Lab Sample ID: 180-3868-9

Date Collected: 09/12/11 10:50 Matrix: Water
Date Received: 09/14/11 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND ND	1.0	0.11	ug/L			09/19/11 17:26	1	
Ethylbenzene	ND	1.0	0.23	ug/L			09/19/11 17:26	1	
Toluene	ND	1.0	0.15	ug/L			09/19/11 17:26	1	
Xylenes, Total	ND	3.0	0.49	ug/L			09/19/11 17:26	1	

Matrix: Water

Lab Sample ID: 180-3868-9

TestAmerica Job ID: 180-3868-1

Matrix: Water

Client Sample ID: MW-10 091211

Date Collected: 09/12/11 10:50 Date Received: 09/14/11 10:00

Surrogate	% Recovery Qu	ualifier Limits	Prepared Ana	alyzed Dil Fac
Dibromofluoromethane (Surr)	79	70 - 128	09/19/	/11 17:26 1
1,2-Dichloroethane-d4 (Surr)	75	64 - 135	09/19/	/11 17:26 1
4-Bromofluorobenzene (Surr)	71	70 - 118	09/19/	/11 17:26 1
Toluene-d8 (Surr)	88	71 - 118	09/19/	11 17:26 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.3	0.17	ug/L		09/15/11 07:58	09/16/11 19:15	1
Acenaphthylene	ND		2.3	0.18	ug/L		09/15/11 07:58	09/16/11 19:15	1
Anthracene	ND		2.3	0.18	ug/L		09/15/11 07:58	09/16/11 19:15	1
Benzo[a]anthracene	ND		2.3	0.17	ug/L		09/15/11 07:58	09/16/11 19:15	1
Benzo[a]pyrene	ND		2.3	0.16	ug/L		09/15/11 07:58	09/16/11 19:15	1
Benzo[b]fluoranthene	ND		2.3	0.18	ug/L		09/15/11 07:58	09/16/11 19:15	1
Benzo[g,h,i]perylene	ND		2.3	0.18	ug/L		09/15/11 07:58	09/16/11 19:15	1
Benzo[k]fluoranthene	ND		2.3	0.64	ug/L		09/15/11 07:58	09/16/11 19:15	1
Chrysene	ND		2.3	0.16	ug/L		09/15/11 07:58	09/16/11 19:15	1
Dibenz(a,h)anthracene	ND		2.3	0.18	ug/L		09/15/11 07:58	09/16/11 19:15	1
Fluoranthene	ND		2.3	0.19	ug/L		09/15/11 07:58	09/16/11 19:15	1
Fluorene	ND		2.3	0.25	ug/L		09/15/11 07:58	09/16/11 19:15	1
Indeno[1,2,3-cd]pyrene	ND		2.3	0.23	ug/L		09/15/11 07:58	09/16/11 19:15	1
Naphthalene	ND		2.3	0.16	ug/L		09/15/11 07:58	09/16/11 19:15	1
Phenanthrene	ND		2.3	0.50	ug/L		09/15/11 07:58	09/16/11 19:15	1
Pyrene	ND		2.3	0.18	ug/L		09/15/11 07:58	09/16/11 19:15	1

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	67	37 - 104	09/15/11 07:58	09/16/11 19:15	1
2-Fluorobiphenyl	63	35 - 108	09/15/11 07:58	09/16/11 19:15	1
Terphenyl-d14	61	25 - 130	09/15/11 07:58	09/16/11 19:15	1
2,4,6-Tribromophenol	86	33 - 122	09/15/11 07:58	09/16/11 19:15	1
2-Fluorophenol	67	26 - 100	09/15/11 07:58	09/16/11 19:15	1
Phenol-d5	74	30 - 102	09/15/11 07:58	09/16/11 19:15	1

Client Sample ID: MW-11A 091211

Date Collected: 09/12/11 12:05

Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	170		10	1.1	ug/L			09/20/11 13:38	10
Ethylbenzene	63		10	2.3	ug/L			09/20/11 13:38	10
Toluene	ND		10	1.5	ug/L			09/20/11 13:38	10
Xylenes, Total	25	J	30	4.9	ug/L			09/20/11 13:38	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		70 - 128			-		09/20/11 13:38	10
1,2-Dichloroethane-d4 (Surr)	88		64 - 135					09/20/11 13:38	10
4-Bromofluorobenzene (Surr)	82		70 - 118					09/20/11 13:38	10
Toluene-d8 (Surr)	96		71 - 118					09/20/11 13:38	10

TestAmerica Job ID: 180-3868-1

Client Sample ID: MW-11A 091211

Date Collected: 09/12/11 12:05 Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-10

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) Analyte Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed 2.0 09/15/11 07:58 09/16/11 19:38 Acenaphthene 4.6 0.14 ug/L 2.0 0.15 ug/L 09/15/11 07:58 09/16/11 19:38 Acenaphthylene 2.8 Anthracene ND 2.0 0.15 ug/L 09/15/11 07:58 09/16/11 19:38 Benzo[a]anthracene ND 2.0 0.14 ug/L 09/15/11 07:58 09/16/11 19:38 Benzo[a]pyrene ND 2.0 0.13 ug/L 09/15/11 07:58 09/16/11 19:38 09/15/11 07:58 09/16/11 19:38 Benzo[b]fluoranthene ND 0.15 ug/L 2.0 Benzo[g,h,i]perylene ND 2.0 0.15 ug/L 09/15/11 07:58 09/16/11 19:38 Benzo[k]fluoranthene ND 2.0 0.54 09/15/11 07:58 09/16/11 19:38 ug/L Chrysene ND 2.0 0.14 ug/L 09/15/11 07:58 09/16/11 19:38 Dibenz(a,h)anthracene ND 2.0 0.15 ug/L 09/15/11 07:58 09/16/11 19:38 **Fluoranthene** 0.42 J 2.0 0.16 ug/L 09/15/11 07:58 09/16/11 19:38 Fluorene ND 2.0 0.21 ug/L 09/15/11 07:58 09/16/11 19:38 ND Indeno[1,2,3-cd]pyrene 2.0 0.20 ug/L 09/15/11 07:58 09/16/11 19:38 **Naphthalene** 4.0 2.0 0.14 ug/L 09/15/11 07:58 09/16/11 19:38 Phenanthrene ND 2.0 0.42 ug/L 09/15/11 07:58 09/16/11 19:38

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	62		37 - 104	09/15/11 07:58	09/16/11 19:38	1
2-Fluorobiphenyl	57		35 - 108	09/15/11 07:58	09/16/11 19:38	1
Terphenyl-d14	50		25 _ 130	09/15/11 07:58	09/16/11 19:38	1
2,4,6-Tribromophenol	75		33 - 122	09/15/11 07:58	09/16/11 19:38	1
2-Fluorophenol	63		26 - 100	09/15/11 07:58	09/16/11 19:38	1
Phenol-d5	67		30 - 102	09/15/11 07:58	09/16/11 19:38	1

2.0

0.15 ug/L

0.56 J

Client Sample ID: MW-12 091211

Date Collected: 09/12/11 13:35

Pyrene

Date Received: 09/14/11 10:00

_ab	Sample	ID:	180-3868-11	
			Matrice Water	

09/16/11 19:38

09/15/11 07:58

Matrix: Water

Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	720	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:11	5
Cyanide, Free	ND		10	3.4	ug/L		09/19/11 11:00	09/19/11 17:09	1

Client Sample ID: MW-14 091311 Lab Sample ID: 180-3868-12

Date Collected: 09/13/11 10:20

Date Received: 09/14/11 10:00

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	670	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:12	5
Cvanide, Free	ND		10	3.4	ua/L		09/19/11 11:00	09/19/11 17:14	1

TestAmerica Pi 10/24/

Page 15 of 34

Client Sample ID: MW-16 091311

Date Collected: 09/13/11 09:20 Date Received: 09/14/11 10:00 Lab Sample ID: 180-3868-13

Matrix: Water

	General Chemistry									
İ	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Cyanide, Total	700	В	50	15	ug/L		09/20/11 09:55	09/21/11 12:13	5
	Cyanide, Free	7.0	J	10	3.4	ug/L		09/19/11 11:00	09/19/11 17:16	1

Client Sample ID: MW-17 091211

Date Collected: 09/12/11 15:00

Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-14

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			09/19/11 17:49	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/19/11 17:49	1
Toluene	ND		1.0	0.15	ug/L			09/19/11 17:49	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/19/11 17:49	1
Surrogate	% Recovery	Qualifier	l imits				Prenared	Analyzed	Dil Fac

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	96	70 - 128		09/19/11 17:49	1
1,2-Dichloroethane-d4 (Surr)	87	64 - 135		09/19/11 17:49	1
4-Bromofluorobenzene (Surr)	83	70 - 118		09/19/11 17:49	1
Toluene-d8 (Surr)	85	71 - 118		09/19/11 17:49	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.2	0.16	ug/L		09/15/11 07:58	09/16/11 20:01	1
Acenaphthylene	ND		2.2	0.17	ug/L		09/15/11 07:58	09/16/11 20:01	1
Anthracene	ND		2.2	0.17	ug/L		09/15/11 07:58	09/16/11 20:01	1
Benzo[a]anthracene	1.3	J	2.2	0.16	ug/L		09/15/11 07:58	09/16/11 20:01	1
Benzo[a]pyrene	1.8	J	2.2	0.15	ug/L		09/15/11 07:58	09/16/11 20:01	1
Benzo[b]fluoranthene	2.0	J	2.2	0.17	ug/L		09/15/11 07:58	09/16/11 20:01	1
Benzo[g,h,i]perylene	1.6	J	2.2	0.16	ug/L		09/15/11 07:58	09/16/11 20:01	1
Benzo[k]fluoranthene	1.5	J	2.2	0.59	ug/L		09/15/11 07:58	09/16/11 20:01	1
Chrysene	1.3	J	2.2	0.15	ug/L		09/15/11 07:58	09/16/11 20:01	1
Dibenz(a,h)anthracene	4.7		2.2	0.17	ug/L		09/15/11 07:58	09/16/11 20:01	1
Fluoranthene	0.73	J	2.2	0.18	ug/L		09/15/11 07:58	09/16/11 20:01	1
Fluorene	ND		2.2	0.23	ug/L		09/15/11 07:58	09/16/11 20:01	1
Indeno[1,2,3-cd]pyrene	4.4		2.2	0.22	ug/L		09/15/11 07:58	09/16/11 20:01	1
Naphthalene	ND		2.2	0.15	ug/L		09/15/11 07:58	09/16/11 20:01	1
Phenanthrene	ND		2.2	0.46	ug/L		09/15/11 07:58	09/16/11 20:01	1
Pvrene	0.75		2.2	0.17	ua/L		09/15/11 07:58	09/16/11 20:01	1

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	65	37 - 104	09/15/11 07:58	09/16/11 20:01	1
2-Fluorobiphenyl	62	35 _ 108	09/15/11 07:58	09/16/11 20:01	1
Terphenyl-d14	53	25 - 130	09/15/11 07:58	09/16/11 20:01	1
2,4,6-Tribromophenol	72	33 _ 122	09/15/11 07:58	09/16/11 20:01	1
2-Fluorophenol	62	26 - 100	09/15/11 07:58	09/16/11 20:01	1
Phenol-d5	67	30 - 102	09/15/11 07:58	09/16/11 20:01	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	230	В	10	2.9	ug/L		09/20/11 12:30	09/21/11 11:50	1

Client Sample ID: MW-17 091211

Date Collected: 09/12/11 15:00 Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-14

TestAmerica Job ID: 180-3868-1

Matrix: Water

General Chemistry (Continued)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	ND	10	3.4	ug/L		09/19/11 11:00	09/19/11 17:18	1

Client Sample ID: MW-19 091211 Lab Sample ID: 180-3868-15

Matrix: Water

Date Received: 09/14/11 10:00

Date Collected: 09/12/11 12:55

Method: 8260B - Volatile Organic Compounds (GC/MS) Analyte MDL Unit Result Qualifier RL D Prepared Analyzed Dil Fac 250 **Benzene** 4200 26 ug/L 09/20/11 14:02 250 Ethylbenzene 170 250 57 ug/L 09/20/11 14:02 250 Toluene ND 250 38 ug/L 09/20/11 14:02 250 Xylenes, Total ND 750 120 ug/L 09/20/11 14:02 250 Surrogate % Recovery Qualifier Limits Prepared Analyzed Dil Fac Dibromofluoromethane (Surr) 88 70 - 128 09/20/11 14:02 250 1,2-Dichloroethane-d4 (Surr) 84 64 - 135 09/20/11 14:02 250 4-Bromofluorobenzene (Surr) 74 70 - 118 09/20/11 14:02 250 Toluene-d8 (Surr) 91 09/20/11 14:02 71 - 118 250

Method: 8270C - Semivolatile Organic Compounds (GC/MS) Analyte Result Qualifier RL MDL Unit D Prepared Dil Fac Analyzed ND 2.2 Acenaphthene 0.16 ug/L 09/15/11 07:58 09/16/11 20:24 Acenaphthylene ND 2.2 0.17 ug/L 09/15/11 07:58 09/16/11 20:24 ND 2.2 Anthracene 0.17 ug/L 09/15/11 07:58 09/16/11 20:24 Benzo[a]anthracene ND 2.2 0.16 ug/L 09/15/11 07:58 09/16/11 20:24 Benzo[a]pyrene ND 22 0.15 ug/L 09/15/11 07:58 09/16/11 20:24 Benzo[b]fluoranthene ND 2.2 0.17 ug/L 09/15/11 07:58 09/16/11 20:24 Benzo[g,h,i]perylene ND 2.2 0.16 ug/L 09/15/11 07:58 09/16/11 20:24 Benzo[k]fluoranthene ND 2.2 0.59 ug/L 09/15/11 07:58 09/16/11 20:24 Chrysene ND 2.2 0.15 ug/L 09/15/11 07:58 09/16/11 20:24 Dibenz(a,h)anthracene ND 2.2 0.17 ug/L 09/15/11 07:58 09/16/11 20:24 Fluoranthene ND 2.2 0.18 ug/L 09/15/11 07:58 09/16/11 20:24 Fluorene NΠ 2.2 0.23 ug/L 09/15/11 07:58 09/16/11 20:24 2.2 09/15/11 07:58 09/16/11 20:24 Indeno[1,2,3-cd]pyrene ND 0.22 ug/L 22 09/15/11 07:58 09/16/11 20:24 **Naphthalene** 1400 0.15 ug/L Phenanthrene ND 2.2 0.46 ug/L 09/15/11 07:58 09/16/11 20:24 Pyrene ND 2.2 0.17 ug/L 09/15/11 07:58 09/16/11 20:24

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	47	37 - 104	09/15/11 07:58	09/16/11 20:24	1
2-Fluorobiphenyl	53	35 - 108	09/15/11 07:58	09/16/11 20:24	1
Terphenyl-d14	44	25 - 130	09/15/11 07:58	09/16/11 20:24	1
2,4,6-Tribromophenol	70	33 - 122	09/15/11 07:58	09/16/11 20:24	1
2-Fluorophenol	54	26 - 100	09/15/11 07:58	09/16/11 20:24	1
Phenol-d5	59	30 - 102	09/15/11 07:58	09/16/11 20:24	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND ND	43	3.1	ug/L		09/15/11 07:58	09/17/11 15:18	20
Acenaphthylene	ND	43	3.3	ug/L		09/15/11 07:58	09/17/11 15:18	20

Client Sample ID: MW-19 091211

Date Collected: 09/12/11 12:55 Date Received: 09/14/11 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		43	3.3	ug/L		09/15/11 07:58	09/17/11 15:18	20
Benzo[a]anthracene	ND		43	3.2	ug/L		09/15/11 07:58	09/17/11 15:18	20
Benzo[a]pyrene	ND		43	2.9	ug/L		09/15/11 07:58	09/17/11 15:18	20
Benzo[b]fluoranthene	ND		43	3.4	ug/L		09/15/11 07:58	09/17/11 15:18	20
Benzo[g,h,i]perylene	ND		43	3.3	ug/L		09/15/11 07:58	09/17/11 15:18	20
Benzo[k]fluoranthene	ND		43	12	ug/L		09/15/11 07:58	09/17/11 15:18	20
Chrysene	ND		43	3.0	ug/L		09/15/11 07:58	09/17/11 15:18	20
Dibenz(a,h)anthracene	ND		43	3.4	ug/L		09/15/11 07:58	09/17/11 15:18	20
Fluoranthene	ND		43	3.5	ug/L		09/15/11 07:58	09/17/11 15:18	20
Fluorene	ND		43	4.7	ug/L		09/15/11 07:58	09/17/11 15:18	20
Indeno[1,2,3-cd]pyrene	ND		43	4.3	ug/L		09/15/11 07:58	09/17/11 15:18	20
Naphthalene	2700		43	3.0	ug/L		09/15/11 07:58	09/17/11 15:18	20
Phenanthrene	ND		43	9.3	ug/L		09/15/11 07:58	09/17/11 15:18	20
Pyrene	ND		43	3.4	ug/L		09/15/11 07:58	09/17/11 15:18	20

Surrogate	% Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	57	37 - 104	09/15/11 07:58	09/17/11 15:18	20
2-Fluorobiphenyl	58	35 _ 108	09/15/11 07:58	09/17/11 15:18	20
Terphenyl-d14	45	25 - 130	09/15/11 07:58	09/17/11 15:18	20
2,4,6-Tribromophenol	54	33 _ 122	09/15/11 07:58	09/17/11 15:18	20
2-Fluorophenol	49	26 - 100	09/15/11 07:58	09/17/11 15:18	20
Phenol-d5	56	30 - 102	09/15/11 07:58	09/17/11 15:18	20

Client Sample ID: SW-02 091211

Date Collected: 09/12/11 00:00 Date Received: 09/14/11 10:00

Lab	Samp	le ID	: 180	0-38	68- 1	6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			09/20/11 14:25	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/20/11 14:25	1
Toluene	ND		1.0	0.15	ug/L			09/20/11 14:25	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/20/11 14:25	1

Surrogate	% Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	91	70 - 128		09/20/11 14:25	1
1,2-Dichloroethane-d4 (Surr)	87	64 - 135		09/20/11 14:25	1
4-Bromofluorobenzene (Surr)	80	70 - 118		09/20/11 14:25	1
Toluene-d8 (Surr)	94	71 - 118		09/20/11 14:25	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND -	2.4	0.18	ug/L		09/15/11 07:58	09/16/11 20:47	1
Acenaphthylene	ND	2.4	0.19	ug/L		09/15/11 07:58	09/16/11 20:47	1
Anthracene	ND	2.4	0.19	ug/L		09/15/11 07:58	09/16/11 20:47	1
Benzo[a]anthracene	ND	2.4	0.18	ug/L		09/15/11 07:58	09/16/11 20:47	1
Benzo[a]pyrene	ND	2.4	0.16	ug/L		09/15/11 07:58	09/16/11 20:47	1
Benzo[b]fluoranthene	1.7 J	2.4	0.19	ug/L		09/15/11 07:58	09/16/11 20:47	1
Benzo[g,h,i]perylene	ND	2.4	0.18	ug/L		09/15/11 07:58	09/16/11 20:47	1
Benzo[k]fluoranthene	ND	2.4	0.67	ug/L		09/15/11 07:58	09/16/11 20:47	1

Client Sample ID: SW-02 091211

Date Collected: 09/12/11 00:00 Date Received: 09/14/11 10:00 Lab Sample ID: 180-3868-16

TestAmerica Job ID: 180-3868-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		2.4	0.17	ug/L		09/15/11 07:58	09/16/11 20:47	1
Dibenz(a,h)anthracene	ND		2.4	0.19	ug/L		09/15/11 07:58	09/16/11 20:47	1
Fluoranthene	1.2	J	2.4	0.20	ug/L		09/15/11 07:58	09/16/11 20:47	1
Fluorene	ND		2.4	0.26	ug/L		09/15/11 07:58	09/16/11 20:47	1
Indeno[1,2,3-cd]pyrene	ND		2.4	0.24	ug/L		09/15/11 07:58	09/16/11 20:47	1
Naphthalene	ND		2.4	0.17	ug/L		09/15/11 07:58	09/16/11 20:47	1
Phenanthrene	ND		2.4	0.52	ug/L		09/15/11 07:58	09/16/11 20:47	1
Pyrene	0.92	J	2.4	0.19	ug/L		09/15/11 07:58	09/16/11 20:47	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	69		37 - 104				09/15/11 07:58	09/16/11 20:47	1
2-Fluorobiphenyl	49		35 - 108				09/15/11 07:58	09/16/11 20:47	1
Terphenyl-d14	46		25 - 130				09/15/11 07:58	09/16/11 20:47	1
2,4,6-Tribromophenol	75		33 - 122				09/15/11 07:58	09/16/11 20:47	1
2-Fluorophenol	67		26 - 100				09/15/11 07:58	09/16/11 20:47	1
Phenol-d5	71		30 - 102				09/15/11 07:58	09/16/11 20:47	1

RL

10

10

MDL Unit

2.9 ug/L

3.4 ug/L

Client Sample ID: SW-01 091311

Result Qualifier

93 B

11

Date Collected: 09/13/11 09:15 Date Received: 09/14/11 10:00

General Chemistry

Analyte

Cyanide, Total

Cyanide, Free

Lab Sample ID: 180-3868-17

Analyzed

09/21/11 11:53

09/19/11 17:19

Prepared

09/20/11 12:30

09/19/11 11:00

Matrix: Water

Dil Fac

Method: 8260B - Volatile Orga	inic Compounds	(GC/IVIS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.15	J	1.0	0.11	ug/L			09/20/11 15:18	1
Ethylbenzene	0.60	J	1.0	0.23	ug/L			09/20/11 15:18	1
Toluene	0.22	J	1.0	0.15	ug/L			09/20/11 15:18	1
Xylenes, Total	0.54	J	3.0	0.49	ug/L			09/20/11 15:18	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	93		70 - 128			-		09/20/11 15:18	1
1,2-Dichloroethane-d4 (Surr)	88		64 - 135					09/20/11 15:18	1
4-Bromofluorobenzene (Surr)	85		70 - 118					09/20/11 15:18	1
Toluene-d8 (Surr)	100		71 - 118					09/20/11 15:18	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND ND	3.7	0.27	ug/L		09/15/11 07:58	09/16/11 21:10	1
Acenaphthylene	ND	3.7	0.28	ug/L		09/15/11 07:58	09/16/11 21:10	1
Anthracene	ND	3.7	0.29	ug/L		09/15/11 07:58	09/16/11 21:10	1
Benzo[a]anthracene	ND	3.7	0.27	ug/L		09/15/11 07:58	09/16/11 21:10	1
Benzo[a]pyrene	ND	3.7	0.25	ug/L		09/15/11 07:58	09/16/11 21:10	1
Benzo[b]fluoranthene	ND	3.7	0.29	ug/L		09/15/11 07:58	09/16/11 21:10	1
Benzo[g,h,i]perylene	ND	3.7	0.28	ug/L		09/15/11 07:58	09/16/11 21:10	1
Benzo[k]fluoranthene	ND	3.7	1.0	ug/L		09/15/11 07:58	09/16/11 21:10	1
Chrysene	ND	3.7	0.26	ug/L		09/15/11 07:58	09/16/11 21:10	1

Client Sample ID: SW-01 091311

Date Collected: 09/13/11 09:15 Date Received: 09/14/11 10:00

Lab Sample ID: 180-3868-17

TestAmerica Job ID: 180-3868-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		3.7	0.29	ug/L		09/15/11 07:58	09/16/11 21:10	1
Fluoranthene	ND		3.7	0.30	ug/L		09/15/11 07:58	09/16/11 21:10	1
Fluorene	ND		3.7	0.40	ug/L		09/15/11 07:58	09/16/11 21:10	1
Indeno[1,2,3-cd]pyrene	ND		3.7	0.37	ug/L		09/15/11 07:58	09/16/11 21:10	1
Naphthalene	ND		3.7	0.26	ug/L		09/15/11 07:58	09/16/11 21:10	1
Phenanthrene	ND		3.7	0.79	ug/L		09/15/11 07:58	09/16/11 21:10	1
Pyrene	ND		3.7	0.29	ug/L		09/15/11 07:58	09/16/11 21:10	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	60		37 - 104				09/15/11 07:58	09/16/11 21:10	1
2-Fluorobiphenyl	57		35 - 108				09/15/11 07:58	09/16/11 21:10	1
Terphenyl-d14	68		25 - 130				09/15/11 07:58	09/16/11 21:10	1
2,4,6-Tribromophenol	78		33 - 122				09/15/11 07:58	09/16/11 21:10	1
2-Fluorophenol	64		26 - 100				09/15/11 07:58	09/16/11 21:10	1
Phenol-d5	67		30 - 102				09/15/11 07:58	09/16/11 21:10	1

RL

10

10

Result Qualifier

11 B

ND

MDL Unit

2.9 ug/L

3.4 ug/L

Client Sample ID: TRIP BLANK

Date Collected: 09/12/11 12:00

Date Received: 09/14/11 10:00

General Chemistry

Analyte

Cyanide, Total

Cyanide, Free

Lab Sample ID: 180-3868-18

Analyzed

09/21/11 11:54

09/19/11 17:24

Prepared

09/20/11 12:30

09/19/11 11:00

Matrix: Water

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			09/19/11 15:51	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/19/11 15:51	1
Toluene	ND		1.0	0.15	ug/L			09/19/11 15:51	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/19/11 15:51	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	89		70 - 128			-		09/19/11 15:51	1
1,2-Dichloroethane-d4 (Surr)	84		64 - 135					09/19/11 15:51	1
4-Bromofluorobenzene (Surr)	78		70 - 118					09/19/11 15:51	1
Toluene-d8 (Surr)	95		71 - 118					09/19/11 15:51	1

Project/Site: AECOM, Mineral Springs

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-14506/3

Matrix: Water

Analysis Batch: 14506

Client Sample ID: Method Blank

Prep Type: Total/NA

	141.0								
Analyte	Result C	Qualifier	RL	MDL	Unit) Pr	epared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			09/19/11 08:13	1
Ethylbenzene	ND		1.0	0.23	ug/L			09/19/11 08:13	1
Toluene	ND		1.0	0.15	ug/L			09/19/11 08:13	1
Xylenes, Total	ND		3.0	0.49	ug/L			09/19/11 08:13	1

MB MB

MR MR

	Surrogate	% Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	Dibromofluoromethane (Surr)	85		70 - 128	-		09/19/11 08:13	1
İ	1,2-Dichloroethane-d4 (Surr)	78		64 - 135			09/19/11 08:13	1
l	4-Bromofluorobenzene (Surr)	75		70 - 118			09/19/11 08:13	1
İ	Toluene-d8 (Surr)	75		71 - 118			09/19/11 08:13	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Lab Sample ID: LCS 180-14506/10

Matrix: Water

Analysis Batch: 14506

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	92		70 - 128
1,2-Dichloroethane-d4 (Surr)	79		64 - 135
4-Bromofluorobenzene (Surr)	79		70 - 118
Toluene-d8 (Surr)	86		71 - 118

Lab Sample ID: MB 180-14703/3 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 14703

мв мв

Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Benzene	ND —	1.0	0.11 ug/L		09/20/11 09:45	1
Ethylbenzene	ND	1.0	0.23 ug/L		09/20/11 09:45	1
Toluene	ND	1.0	0.15 ug/L		09/20/11 09:45	1
Xylenes, Total	ND	3.0	0.49 ug/L		09/20/11 09:45	1

мв мв

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		70 - 128		09/20/11 09:45	1
1,2-Dichloroethane-d4 (Surr)	85		64 - 135		09/20/11 09:45	1
4-Bromofluorobenzene (Surr)	85		70 - 118		09/20/11 09:45	1
Toluene-d8 (Surr)	86		71 - 118		09/20/11 09:45	1

Lab Sample ID: LCS 180-14703/12

Matrix: Water

Analysis Batch: 14703

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	106		70 - 128
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
4-Bromofluorobenzene (Surr)	88		70 - 118
Toluene-d8 (Surr)	83		71 - 118

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-14090/1-A

Matrix: Water

Analysis Batch: 14386

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 14090

r many one Date min i rece									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.14	ug/L		09/15/11 07:58	09/16/11 11:55	1
Acenaphthylene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 11:55	1
Anthracene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 11:55	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 11:55	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		09/15/11 07:58	09/16/11 11:55	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		09/15/11 07:58	09/16/11 11:55	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		09/15/11 07:58	09/16/11 11:55	1
Benzo[k]fluoranthene	ND		2.0	0.55	ug/L		09/15/11 07:58	09/16/11 11:55	1
Chrysene	ND		2.0	0.14	ug/L		09/15/11 07:58	09/16/11 11:55	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		09/15/11 07:58	09/16/11 11:55	1
Fluoranthene	ND		2.0	0.16	ug/L		09/15/11 07:58	09/16/11 11:55	1
Fluorene	ND		2.0	0.22	ug/L		09/15/11 07:58	09/16/11 11:55	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		09/15/11 07:58	09/16/11 11:55	1
Naphthalene	ND		2.0	0.14	ug/L		09/15/11 07:58	09/16/11 11:55	1
Phenanthrene	ND		2.0	0.43	ug/L		09/15/11 07:58	09/16/11 11:55	1
Pyrene	ND		2.0	0.16	ug/L		09/15/11 07:58	09/16/11 11:55	1

MB MB

Surrogate	% Recovery Q	ualifier Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71	37 - 104	09/15/11 07:58	09/16/11 11:55	1
2-Fluorobiphenyl	73	35 - 108	09/15/11 07:58	09/16/11 11:55	1
Terphenyl-d14	78	25 - 130	09/15/11 07:58	09/16/11 11:55	1
2,4,6-Tribromophenol	81	33 - 122	09/15/11 07:58	09/16/11 11:55	1
2-Fluorophenol	76	26 - 100	09/15/11 07:58	09/16/11 11:55	1
Phenol-d5	82	30 - 102	09/15/11 07:58	09/16/11 11:55	1

Lab Sample ID: LCS 180-14090/2-A

Matrix: Water

Analysis Batch: 14386

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14090

-1						
ı		Spike	LCS	LCS		% Rec.
	Analyte	Added	Result	Qualifier Unit	D % Rec	Limits
	Acenaphthene	200	125	ug/L	62	39 - 106
١	Acenaphthylene	200	127	ug/L	64	40 - 113
ı	Anthracene	200	135	ug/L	67	37 - 108
١	Benzo[a]anthracene	200	127	ug/L	63	40 - 103
١	Benzo[a]pyrene	200	135	ug/L	67	37 - 105
ı	Benzo[b]fluoranthene	200	133	ug/L	66	35 - 100
١	Benzo[g,h,i]perylene	200	144	ug/L	72	31 - 118
ı	Benzo[k]fluoranthene	200	133	ug/L	67	37 - 108
١	Chrysene	200	133	ug/L	66	39 - 103
١	Dibenz(a,h)anthracene	200	134	ug/L	67	32 _ 117
ı	Fluoranthene	200	129	ug/L	65	35 _ 111
١	Fluorene	200	128	ug/L	64	39 - 107
ı	Indeno[1,2,3-cd]pyrene	200	125	ug/L	63	32 _ 116
١	Naphthalene	200	97.7	ug/L	49	35 - 98
١	Phenanthrene	200	133	ug/L	67	34 - 107
ı	Pyrene	200	130	ug/L	65	36 _ 115

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
Nitrohenzene-d5	48		37 - 104

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-14090/2-A

Lab Sample ID: LCSD 180-14090/3-A

Matrix: Water

Analysis Batch: 14386

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 14090

LCS LCS

Surrogate	% Recovery	Qualifier	Limits
2-Fluorobiphenyl	54		35 - 108
Terphenyl-d14	73		25 - 130
2,4,6-Tribromophenol	79		33 - 122
2-Fluorophenol	50		26 - 100
Phenol-d5	62		30 - 102

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 14090

Matrix: Water

Analysis Batch: 14386

	Spike	LCSD	LCSD			% Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	% Rec	Limits	RPD	Limit
Acenaphthene	200	124	ug/L		62	39 - 106	0	32
Acenaphthylene	200	126	ug/L		63	40 - 113	1	33
Anthracene	200	130	ug/L		65	37 - 108	3	40
Benzo[a]anthracene	200	115	ug/L		58	40 - 103	10	33
Benzo[a]pyrene	200	129	ug/L		64	37 - 105	4	35
Benzo[b]fluoranthene	200	125	ug/L		63	35 - 100	6	44
Benzo[g,h,i]perylene	200	142	ug/L		71	31 - 118	1	45
Benzo[k]fluoranthene	200	121	ug/L		60	37 - 108	10	42
Chrysene	200	123	ug/L		62	39 - 103	7	38
Dibenz(a,h)anthracene	200	130	ug/L		65	32 _ 117	3	43
Fluoranthene	200	120	ug/L		60	35 - 111	7	43
Fluorene	200	128	ug/L		64	39 - 107	0	33
Indeno[1,2,3-cd]pyrene	200	122	ug/L		61	32 - 116	2	45
Naphthalene	200	95.2	ug/L		48	35 - 98	3	39
Phenanthrene	200	126	ug/L		63	34 - 107	6	34
Pyrene	200	126	ug/L		63	36 - 115	3	38

LCSD LCSD

Surrogate	% Recovery Qualifier	r Limits
Nitrobenzene-d5	46	37 - 104
2-Fluorobiphenyl	54	35 - 108
Terphenyl-d14	68	25 _ 130
2,4,6-Tribromophenol	77	33 - 122
2-Fluorophenol	48	26 - 100
Phenol-d5	59	30 - 102

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 220-54954/4-A

Matrix: Water

Cyanide, Total

Analysis Batch: 54997

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54954

мв мв

Analyte Result Qualifier

RL 6.22 J 10 MDL Unit 2.9 ug/L

09/20/11 09:55

Analyzed 09/21/11 11:34

TestAmerica Job ID: 180-3868-1 Project/Site: AECOM, Mineral Springs

Method: 335.4 - Cyanide, Total (Continued)

Lab Sample ID: 180-3868-1 MS Client Sample ID: EB 091211

Matrix: Water

Analysis Batch: 54997

Prep Type: Total/NA Analysis Batch: 54997 Prep Batch: 54954

MS MS Spike % Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D % Rec Limits 40.0 Cyanide, Total ND 39.1 ug/L 98 75 - 125

Lab Sample ID: 180-3868-1 DU Client Sample ID: EB 091211

Matrix: Water

Prep Type: Total/NA

Prep Batch: 54954

Prep Type: Total/NA

Prep Type: Total/NA

DU DU RPD Sample Sample Qualifier Limit Analyte Result Qualifier Result Unit Cyanide, Total ND ND ug/L 20

Method: D4282_02 - Cyanide, Free

Lab Sample ID: MB 220-54928/11-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Matrix: Water

Analysis Batch: 54931 Prep Batch: 54928 MR MR

Analyte MDL Unit Result Qualifier Prepared Analyzed Dil Fac 10 09/19/11 11:00 Cyanide, Free ND 3.4 ug/L 09/19/11 16:36

Lab Sample ID: MB 220-54928/35-A Client Sample ID: Method Blank

Analysis Batch: 54931

Prep Batch: 54928 MB MB

Analyte RL MDL Result Unit Dil Fac Qualifier D Prepared Analyzed 10 09/19/11 11:00 Cyanide, Free ND 3.4 ug/L 09/19/11 17:21

Lab Sample ID: MSB 220-54928/12-A MSB Client Sample ID: Lab Control Sample

Matrix: Water

Analysis Batch: 54931 Prep Batch: 54928

% Rec.

MSB MSB Spike Analyte Result Qualifier Added Unit D % Rec Limits Cyanide, Free 50.0 50.0 ug/L 100 90 - 110

Lab Sample ID: MSB 220-54928/36-A MSB Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA Analysis Batch: 54931 Prep Batch: 54928

MSB Spike MSB % Rec.

Analyte Added Result Qualifier Unit Limits % Rec Cyanide, Free 50.0 48.0 ug/L 96 90 - 110

Lab Sample ID: 180-3868-3 MS Client Sample ID: MW-23 091211

Matrix: Water Prep Type: Total/NA Analysis Batch: 54931 Prep Batch: 54928

MS MS Sample Sample Spike % Rec.

Analyte Result Qualifier Added Result Qualifier Unit % Rec Limits Cyanide, Free 4.0 J 50.0 50.0 ug/L 75 - 125

QC Sample Results

Client: AECOM, Inc.

TestAmerica Job ID: 180-3868-1

Project/Site: AECOM, Mineral Springs

Lab Sample ID: 180-3868-3 MSD

Method: D4282_02 - Cyanide, Free (Continued)

Matrix: Water

Analysis Batch: 54931

Analyte Limit Result Qualifier Added Result Qualifier Unit % Rec Limits RPD Cyanide, Free 4.0 J 50.0 96 75 - 125 4 52.0 ug/L

1

5

Client Sample ID: MW-23 091211

7

4.0

11

QC Association Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

GC/MS VOA

Analysis Batch: 14506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-1	EB 091211	Total/NA	Water	8260B	_
180-3868-3	MW-23 091211	Total/NA	Water	8260B	
180-3868-4	MW-73 091211	Total/NA	Water	8260B	
180-3868-7	MW-13 091211	Total/NA	Water	8260B	
180-3868-9	MW-10 091211	Total/NA	Water	8260B	
180-3868-14	MW-17 091211	Total/NA	Water	8260B	
180-3868-18	TRIP BLANK	Total/NA	Water	8260B	
LCS 180-14506/10	Lab Control Sample	Total/NA	Water	8260B	
MB 180-14506/3	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 14703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-2	MW-7 091211	Total/NA	Water	8260B	
180-3868-10	MW-11A 091211	Total/NA	Water	8260B	
180-3868-15	MW-19 091211	Total/NA	Water	8260B	
180-3868-16	SW-02 091211	Total/NA	Water	8260B	
180-3868-17	SW-01 091311	Total/NA	Water	8260B	
LCS 180-14703/12	Lab Control Sample	Total/NA	Water	8260B	
MB 180-14703/3	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 14090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
180-3868-1	EB 091211	Total/NA	Water	3520C	-
180-3868-2	MW-7 091211	Total/NA	Water	3520C	
180-3868-2 - DL	MW-7 091211	Total/NA	Water	3520C	
180-3868-3	MW-23 091211	Total/NA	Water	3520C	
180-3868-4	MW-73 091211	Total/NA	Water	3520C	
180-3868-7	MW-13 091211	Total/NA	Water	3520C	
180-3868-9	MW-10 091211	Total/NA	Water	3520C	
180-3868-10	MW-11A 091211	Total/NA	Water	3520C	
180-3868-14	MW-17 091211	Total/NA	Water	3520C	
180-3868-15	MW-19 091211	Total/NA	Water	3520C	
180-3868-15 - DL	MW-19 091211	Total/NA	Water	3520C	
180-3868-16	SW-02 091211	Total/NA	Water	3520C	
180-3868-17	SW-01 091311	Total/NA	Water	3520C	
LCS 180-14090/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-14090/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 180-14090/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 14386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-1	EB 091211	Total/NA	Water	8270C	14090
180-3868-2	MW-7 091211	Total/NA	Water	8270C	14090
180-3868-2 - DL	MW-7 091211	Total/NA	Water	8270C	14090
180-3868-3	MW-23 091211	Total/NA	Water	8270C	14090
180-3868-4	MW-73 091211	Total/NA	Water	8270C	14090
180-3868-7	MW-13 091211	Total/NA	Water	8270C	14090
180-3868-9	MW-10 091211	Total/NA	Water	8270C	14090
180-3868-10	MW-11A 091211	Total/NA	Water	8270C	14090
180-3868-14	MW-17 091211	Total/NA	Water	8270C	14090

TestAmerica Pittsburgh 10/24/2011

Page 26 of 34

QC Association Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

GC/MS Semi VOA (Continued)

Analysis Batch: 14386 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-15	MW-19 091211	Total/NA	Water	8270C	14090
180-3868-16	SW-02 091211	Total/NA	Water	8270C	14090
180-3868-17	SW-01 091311	Total/NA	Water	8270C	14090
LCS 180-14090/2-A	Lab Control Sample	Total/NA	Water	8270C	14090
LCSD 180-14090/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	14090
MB 180-14090/1-A	Method Blank	Total/NA	Water	8270C	14090

Analysis Batch: 14453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-15 - DL	MW-19 091211	Total/NA	Water	8270C	14090

General Chemistry

Prep Batch: 54928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
180-3868-1	EB 091211	Total/NA	Water	D4282_02	
180-3868-3	MW-23 091211	Total/NA	Water	D4282_02	
180-3868-3 MS	MW-23 091211	Total/NA	Water	D4282_02	
180-3868-3 MSD	MW-23 091211	Total/NA	Water	D4282_02	
180-3868-4	MW-73 091211	Total/NA	Water	D4282_02	
180-3868-5	MW-20 091211	Total/NA	Water	D4282_02	
180-3868-6	MW-21 091211	Total/NA	Water	D4282_02	
180-3868-7	MW-13 091211	Total/NA	Water	D4282_02	
180-3868-8	MW-22 091211	Total/NA	Water	D4282_02	
180-3868-11	MW-12 091211	Total/NA	Water	D4282_02	
180-3868-12	MW-14 091311	Total/NA	Water	D4282_02	
180-3868-13	MW-16 091311	Total/NA	Water	D4282_02	
180-3868-14	MW-17 091211	Total/NA	Water	D4282_02	
180-3868-16	SW-02 091211	Total/NA	Water	D4282_02	
180-3868-17	SW-01 091311	Total/NA	Water	D4282_02	
MB 220-54928/11-A	Method Blank	Total/NA	Water	D4282_02	
MB 220-54928/35-A	Method Blank	Total/NA	Water	D4282_02	
MSB 220-54928/12-A MSB	Lab Control Sample	Total/NA	Water	D4282_02	
MSB 220-54928/36-A MSB	Lab Control Sample	Total/NA	Water	D4282 02	

Analysis Batch: 54931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-1	EB 091211	Total/NA	Water	D4282_02	54928
180-3868-3	MW-23 091211	Total/NA	Water	D4282_02	54928
180-3868-3 MS	MW-23 091211	Total/NA	Water	D4282_02	54928
180-3868-3 MSD	MW-23 091211	Total/NA	Water	D4282_02	54928
180-3868-4	MW-73 091211	Total/NA	Water	D4282_02	54928
180-3868-5	MW-20 091211	Total/NA	Water	D4282_02	54928
180-3868-6	MW-21 091211	Total/NA	Water	D4282_02	54928
180-3868-7	MW-13 091211	Total/NA	Water	D4282_02	54928
180-3868-8	MW-22 091211	Total/NA	Water	D4282_02	54928
180-3868-11	MW-12 091211	Total/NA	Water	D4282_02	54928
180-3868-12	MW-14 091311	Total/NA	Water	D4282_02	54928
180-3868-13	MW-16 091311	Total/NA	Water	D4282_02	54928
180-3868-14	MW-17 091211	Total/NA	Water	D4282_02	54928
180-3868-16	SW-02 091211	Total/NA	Water	D4282_02	54928
180-3868-17	SW-01 091311	Total/NA	Water	D4282_02	54928

QC Association Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-3868-1

General Chemistry (Continued)

Analysis Batch: 54931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 220-54928/11-A	Method Blank	Total/NA	Water	D4282_02	54928
MB 220-54928/35-A	Method Blank	Total/NA	Water	D4282_02	54928
MSB 220-54928/12-A MSB	Lab Control Sample	Total/NA	Water	D4282_02	54928
MSB 220-54928/36-A MSB	Lab Control Sample	Total/NA	Water	D4282_02	54928

Prep Batch: 54954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-1	EB 091211	Total/NA	Water	Distill/CN	_
180-3868-1 DU	EB 091211	Total/NA	Water	Distill/CN	
180-3868-1 MS	EB 091211	Total/NA	Water	Distill/CN	
180-3868-3	MW-23 091211	Total/NA	Water	Distill/CN	
180-3868-4	MW-73 091211	Total/NA	Water	Distill/CN	
180-3868-5	MW-20 091211	Total/NA	Water	Distill/CN	
180-3868-6	MW-21 091211	Total/NA	Water	Distill/CN	
180-3868-7	MW-13 091211	Total/NA	Water	Distill/CN	
180-3868-8	MW-22 091211	Total/NA	Water	Distill/CN	
180-3868-11	MW-12 091211	Total/NA	Water	Distill/CN	
180-3868-12	MW-14 091311	Total/NA	Water	Distill/CN	
180-3868-13	MW-16 091311	Total/NA	Water	Distill/CN	
180-3868-14	MW-17 091211	Total/NA	Water	Distill/CN	
180-3868-16	SW-02 091211	Total/NA	Water	Distill/CN	
180-3868-17	SW-01 091311	Total/NA	Water	Distill/CN	
MB 220-54954/4-A	Method Blank	Total/NA	Water	Distill/CN	

Analysis Batch: 54997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-3868-1	EB 091211	Total/NA	Water	335.4	54954
180-3868-1 DU	EB 091211	Total/NA	Water	335.4	54954
180-3868-1 MS	EB 091211	Total/NA	Water	335.4	54954
180-3868-3	MW-23 091211	Total/NA	Water	335.4	54954
180-3868-4	MW-73 091211	Total/NA	Water	335.4	54954
180-3868-5	MW-20 091211	Total/NA	Water	335.4	54954
180-3868-6	MW-21 091211	Total/NA	Water	335.4	54954
180-3868-7	MW-13 091211	Total/NA	Water	335.4	54954
180-3868-8	MW-22 091211	Total/NA	Water	335.4	54954
180-3868-11	MW-12 091211	Total/NA	Water	335.4	54954
180-3868-12	MW-14 091311	Total/NA	Water	335.4	54954
180-3868-13	MW-16 091311	Total/NA	Water	335.4	54954
180-3868-14	MW-17 091211	Total/NA	Water	335.4	54954
180-3868-16	SW-02 091211	Total/NA	Water	335.4	54954
180-3868-17	SW-01 091311	Total/NA	Water	335.4	54954
MB 220-54954/4-A	Method Blank	Total/NA	Water	335.4	54954

4

E

0

3

10

11

©2008. Test-America Laboratorios, (fic. VII ispits paseved. Test/America & Design ** ere traderjantes of Test/America Laboratories, Inc.	Relinquished by:	Relinquisted by:	ressure mazard decentrication Non-Hazard Flammable S	mw - 11A 091711	MW-10 091711	NS 00 21	mw-15 09 17 11	MW- 21 091211	mw- 20 091211	MW - 73 -091211	11210 Ex-M	11810 to-mm	EB 091311	Sample Identification	PO# None	1870-035-12	ACCOM Mineral Springs	(716) 836-450C	Anherst, NY, 14226	100 Corp - Plumy St 341	Pame:	Client Contact	Test	1 2 3 4 5 6 7
	Company: . D	Company: D	Skin İrritant Poison B	9-12-11 12:05 \	9-12-11 10:50 V		9-13-11 9:30	1 0h. 5/ 11-21-6	9-12-11 14:30	1-12-11 d:00 N	9-12-11 17:25 1	812-11 11:20 V	9-12-11 10:30	Sample Date Sample Time Air		Suppling/Tracking (vo.	Shimboff or other No.		Tamara. Raby @ 9800M. COM	(716) 836 - 4506	AECOM - TAMARA	regulatory program:	TestAmerica Laboratory location:	9 10 12
	Date/Time: Received in Laboratory by:	Date/Time: Receive by:	Sample Disposal (A fee may h		<	<	\ \ \ \	<	<u> </u>	\ \ \ \ \	< < <	< .	\ \ \	Sediment Solid Other: H2SO4 HNO3 HC1 NaOH ZnAc/ NaOH Unpres	Matrix Containers & Preservatives	2 days	2 weeks	TAT it different from below.		Felephone:	RABY TAMORA RABY	L DW NYDES L KCKA	hain of Custod	
	aboratory by: Company:	Company:	Disposal (A fee may be assessed it samples are retained longer than it month) Return to Client Disposal By ab Archive For			<u> </u>	\ \ \ \ \ \ \	<u> </u>		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\(\lambda \)	< <	\ \ \ \ \ \	Other: Rittered: Composit BTEY PAH's 5 Total	Samp loc loc elec	Grabi Led 6 M 9	G EL 8: 3270 6121		No Analyses		Lab Contact: Dave Doplop	Other		
TAL-0018 (1008)	Date/Time:	Date/Time:	Months											Sample Specific Notes / Special Instructions:	- 1	Job/SUG NO:	Lab sampling	Walk-in client	For lab use only	of 2 cocs	COC No:	TestAmerica Laboratories, Inc.	TestAmerica	

Page 30 of 34

10/24/2011

2

4

į

6

8

10

1

2 Your Internal Billing Reference ᅙ Recipient's Name 致。**NEW** Package Express US Airbill 1501 Ú, Con The Worker からいかがた 1. 1. 1. 1. Sender's FedEx: Account Number 8769 0316 Q888 Property States John oral FedEx Tracking Number 1-156 C- 66 8769 Phone (C) 31/2-565 975 HOLD Saturday
Facts location address
REDURED. Available DNLY for
Facts: Prainty Overnight and I
Facts: 2Day to solect locations HOLD Weekday
FedEx location address
REQUIRED, NOT available for j. 0888 O1 FedEx Priority Overnight
Nox business morning, Friday shipments
delivered on Monday unless SATRIDAY D
is selected. O6 FedEx First Overnight **06** FedEx Envelope* 03 SATURDAY DELIVERY FedEx Standard Overnight
Nox business afternoon.*
Saturday Defivery NOT available. 5 Packaging Doctor Rov. Date 11/10 . Part /163136 . @1994 2010 FedEx . PRINTED IN U.S.A. SRY 7 - Payment .Bill to: Dangarous goods (including dry ice) can fet be shipped or placed in a Fed Ex Express Drop Box. Total Packages No 04 Yes As per attached Shipper's Declaration Does this shipment contain dange Special Handling and Delivery Signature Options Express Package Service Monday unless SATURDAY Delo One box must be checked 02 FedEx Pak* res Shipper's Declaration O6 Dry Ice tot required: FedEx packaging * To most ocations. alue. See the current FedEx Service Guide for details. O3 FedEx 2D ay
Second business afternoon,* Thursday shipmonts
will be adkward on Monday unless SATURDAY
Delivery is solected. 20 FedEx Express Saver Third husiness day. Saturday Delivery NOT available. 49 Second business morning.
Saturday Defivery NOT evailable. 03 ☐ FedEx Box 2 or 3 Business Days. FedEx Retrieval Copy 04 Tube Credit Card 5 Cash/Check Cargo Aircraft Only Packages up to 150 lbs. Fer packages over 150 lbs., use the new FedEx Express Freight US Airbill. 근고 Acct. No. O1X Other

Login Sample Receipt Checklist

Client: AECOM, Inc. Job Number: 180-3868-1

Login Number: 3868 List Source: TestAmerica Pittsburgh

List Number: 1 Creator: Gamber, Tom

Creator: Gamber, 10m		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3

6

8

10

11

Login Sample Receipt Checklist

Client: AECOM, Inc. Job Number: 180-3868-1

List Source: TestAmerica Connecticut
List Number: 1
List Creation: 09/17/11 11:57 AM

Creator: Puccino, Tracy

2

4

6

8

4 4

40

Login Sample Receipt Checklist

Client: AECOM, Inc. Job Number: 180-3868-1

Login Number: 3868 List Source: TestAmerica Connecticut List Number: 2

List Creation: 09/20/11 08:09 AM

Creator: Natoli, Richard A

Question Answer Comment

Radioactivity either was not measured or, if measured, is at or below background

The cooler's custody seal, if present, is intact.

The cooler or samples do not appear to have been compromised or

tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the sample IDs on the containers and

the COC.

Samples are received within Holding Time.

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified

There is sufficient vol. for all requested analyses, incl. any requested

MS/MSDs

VOA sample vials do not have headspace or bubble is <6mm (1/4") in

diameter.

If necessary, staff have been informed of any short hold time or quick TAT

needs

Multiphasic samples are not present.

Samples do not require splitting or compositing.