



AECOM
100 Corporate Parkway
Suite 341
Amherst, NY 14226
www.aecom.com

716 836 4506 tel
716 834 8785 fax

September 21, 2012

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
August 2012
Mineral Springs Road MGP Site**

Dear Mr. Szymanski:

This report provides the results of a groundwater and surface water sampling event completed by AECOM Technical Services, Inc. (AECOM) on August 7 and 8, 2012, at the Mineral Springs Road former manufactured gas plant (MGP) site in West Seneca (Buffalo), New York.

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 Edison, NJ (ELAP ID 11452). 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, four onsite (MW-7, MW-10, MW-11A, and MW-19), two downgradient onsite (MW-13 and MW-23), and one upgradient (MW-17) 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 NYSDEC¹ standard or guidance values in three of the onsite groundwater samples (MW-07, MW-11A, and MW-19) and one of the downgradient onsite groundwater samples (MW-13).

¹ Reference for NYSDEC groundwater and surface water standards: NYSDEC Technical Operational and Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

One upgradient (MW-17), two onsite (MW-12 and MW-16), four downgradient onsite (MW-13, -14, -22, and -23), and two downgradient offsite (MW-20 and MW-21) monitoring wells were sampled for total and free cyanide analyses. Total cyanide concentrations exceeded the NYSDEC Groundwater Standard of 200 micrograms per liter ($\mu\text{g/L}$) in eight of nine groundwater samples. Free cyanide was detected in five groundwater samples at concentrations ranging from 6 to 37 $\mu\text{g/L}$. There is no NYSDEC Groundwater Standard for free cyanide.

Two onsite surface water samples (SW-01 and SW-02) were collected for BTEX, PAH, and total and free cyanide analyses. PAH compounds were detected in one surface water (SW-02) sample below the NYSDEC Class D surface water standard. Total cyanide was detected in both surface water samples at a maximum concentration of 96 $\mu\text{g/L}$, below the NYSDEC Class D surface water standard of 9,000 $\mu\text{g/L}$. Free cyanide was detected in one sample at a concentration of 21 $\mu\text{g/L}$, below the NYSDEC Class D Surface Water Standard of 22 $\mu\text{g/L}$.

A total of 15 depth-to-water measurements were taken (including one surface water measurement and 14 groundwater measurements). Table 2 summarizes groundwater elevation data and Figure 1 shows groundwater elevation contours for this sampling event.

On August 7, 2012, 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 14 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. 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-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 or PAH compounds were detected. Total cyanide was detected at a concentration of 81 µg/L, below 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. Additionally, groundwater samples from wells MW-13 and MW-23 was analyzed for BTEX and PAH compounds.

All six wells had total cyanide concentrations above the NYSDEC Groundwater Standard of 200 µg/L. Detected concentrations ranged from 280 µg/L at MW-20 to 870 µg/L at MW-22. Free cyanide was detected in three wells at concentrations ranging from 6 to 26 µg/L. These analytical results are consistent with the range of concentrations measured in past years.

No PAHs were identified above method detection limits in monitoring wells MW-13 or MW-23. Benzene was detected at a concentration of 1.6 µg/L in well MW-13, above the groundwater standard of 1 µg/L.

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 µg/L. Total cyanide concentrations were reported as 480 µg/L at MW-12 and 750 µg/L at MW-16. Free cyanide was detected in MW-12 at 23 µg/L and in MW-16 at 37 µg/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 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 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 not detected in either surface water sample. Four PAH compounds were detected at concentrations below NYSDEC Groundwater Standards in surface water sample SW-02.

Total cyanide was detected in SW-01 at a concentration of 96 µg/L and in SW-02 at a concentration of 14 µg/L, below the NYSDEC Class D Stream Standard of 9,000 µg/L.

Free cyanide was detected in SW-01 at a concentration of 21 µg/L below the NYSDEC Class D Stream Standard of 22 µg/L. In SW-02, free cyanide was not detected,

Quality Assurance / Quality Control (QA/QC) samples

Quality assurance/quality control samples were collected during the sampling event to meet the requirements of the Final Engineering Report – Volume II – Operations and Maintenance Plan (May 2002).

Sample bottles were provided by TestAmerica Laboratories of Pittsburgh, Pennsylvania. Some sample bottles contained chemical preservatives to stabilize the sample, depending on the analysis being performed. These preservatives raise or lower the pH. All samples were received at the laboratory within the acceptable pH range and within the optimal temperature range of 4° C (degrees Celsius) ± 2° C.

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.

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.

A blind field duplicate sample was collected at MW-23 and labeled "MW-73." The field duplicate sample was submitted for BTEX, PAH, and total and free cyanide analyses. All duplicate sample results were within the acceptance limits as defined by the QAP. Field sampling/laboratory precision and sample homogeneity were acceptable.

Free cyanide was detected in the laboratory method blank at a concentration of 0.972 µg/L. The free cyanide concentration in the associated method blank was greater than that detected in the equipment (rinsate) blank (0.61 µg/L). For this reason, the method blank results were used to evaluate all associated samples to determine the effects of the contamination. The source of the positive results was suspected to be either laboratory contamination or instrument related (e.g., elevated spectrophotometer baseline). The laboratory appended a "B" flag to indicate the affected results.

Given this information, the positive free cyanide results for samples SW-2 080712, RINSE BLANK 080812, MW-14 080812, MW-17 080712, MW-21 080712, MW-23 080712, and MW-73 080712 were estimated below the reporting limit and must be considered as undetected (i.e., qualified "U") at the reporting limit, because of laboratory contamination. All other positive free cyanide results were greater than five times the blank level and did not require qualification.

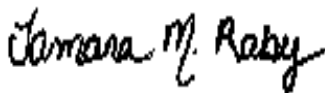
An equipment malfunction at the laboratory caused the semivolatile organic extraction of samples RINSE BLANK 080812, MW-13 080812, and SW-1 080812 to be performed one day beyond the USEPA seven-day holding time. The PAH results for samples RINSE BLANK, 080812, MW-13 080812, and SW-1080812 were non-detect and must be considered as estimates (i.e., qualified "UJ"), possibly biased low because the holding time was exceeded.

DNAPL recovery test well (RTW-1)

On August 7, 2012, the Recovery System at RTW-1 was operated to assess whether DNAPL had accumulated since the April 2012 sampling event. Approximately two liters of water were pumped out. The water contained only trace NAPL in the form of "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 (716) 836-4506 ext. 14.

Sincerely yours,



Tamara Raby
Geologist
Project Manager



Thomas P. Clark, P.E.
Project Engineer

Encl: Groundwater Elevation 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 – Hodgson Russ LLP
T. Clark, AECOM

TABLES

Table 1
Water Sampling Summary Table
Mineral Springs Road MGP Site, August 2012

Location	Cyanide, Total USEPA SW846 9012A	Cyanide, Free ASTM D4282-02	BTEX USEPA SW846 8260B	PAHs USEPA SW846 8270C	Water Elevation	Benchmark Elevation (top of PVC casing)
Upgradient Site Perimeter						
MW-17	X	X	X	X	X	587.28
Downgradient Site Perimeter						
MW-13	X	X	annually	annually	X	591.85
MW-14	X	X			X	589.81
MW-15					X	590.93
MW-20	X	X			X	587.30
MW-21	X	X			X	587.88
MW-22	X	X			X	592.50
MW-23	X	X	annually	annually	X	589.28
Onsite Purifier Residuals Impacted Areas						
MW-12	X	X			X	591.40
MW-16	X	X			X	588.99
Onsite Hydrocarbon Impacted Areas						
MW-07			X	X	X	587.26
MW-10			X	X	X	587.61
MW-11			X	X	X	590.03
MW-19			X	X	X	589.83
Onsite Surface Water						
SW-01	X	X	X	X	X	top of headwall = 587.0
SW-02	X	X	X	X		
QA/QC Samples (frequency)						
Trip Blank			X			(one per shipment)
Field Duplicate	X	X	X	X		(one per event)
Equipment Blank	X	X	X	X		(one per event)
DNAPL Recovery						
RTW-1						(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, HCl (x2)	1 L glass amber, NP (x2)		

Table 2
Groundwater and Surface Water Monitoring Results
Mineral Springs Road MGP Site
August 2012

PARAMETER	GROUNDWATER															SURFACE WATER			Quality Assurance / Quality 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	TB	RINSE BLANK	MW-23 Dup
	Sample Date :	Standard ⁽¹⁾	08/07/12	08/07/12	08/07/12	08/07/12	08/08/12	08/08/12	08/07/12	08/08/12	08/07/12	08/07/12	08/07/12	08/07/12	08/07/12	08/07/12	08/07/12	Standard ⁽²⁾	08/08/12	08/07/12	08/07/12	08/08/12
<u>BTEX (µg/L)</u>																						
Benzene	1	420	1.0 U	85	---	1.6	---	---	---	1.0 U	4300	---	---	---	1.0 U	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	6.9 J	1.0 U	1.4	---	1.0 U	---	---	---	1.0 U	250 U	---	---	---	1.0 U	6000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	470	1.0 U	34	---	1.0 U	---	---	---	1.0 U	130 J	---	---	---	1.0 U	150 *	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (sum of isomers)	5 (each)	270	3.0 U	15	---	3.0 U	---	---	---	3.0 U	750 U	---	---	---	3.0 U	590 *	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
BTEX total	---	1166.9	nd	135.4	---	1.6	---	---	---	nd	4430	---	---	---	nd	---	nd	nd	nd	nd	nd	nd
<u>PAHs (µg/L)</u>																						
Naphthalene	10 *	870	2.0 U	0.81 J	---	1.9 UJ	---	---	---	2.1 U	2900	---	---	---	1.9 U	110 *	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Acenaphthylene	NL *	1.9 U	2.0 U	2.2 J	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Acenaphthene	20 *	49	2.0 U	3.8	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	48 *	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Fluorene	50 *	11	2.0 U	0.91 J	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	4.8 *	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Phenanthrene	50 *	9.1	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	45 *	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Anthracene	50 *	1.3 J	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	35 *	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Fluoranthene	50 *	1.9 U	2.0 U	0.40 J	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	0.50 J	---	2.0 UJ	1.9 U	1.9 U
Pyrene	50 *	0.17 J	2.0 U	0.51 J	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	42 *	2.0 UJ	0.33 J	---	2.0 UJ	1.9 U	1.9 U
Benzo(a)anthracene	0.002 *	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	0.23 *	2.0 UJ	0.26 J	---	2.0 UJ	1.9 U	1.9 U
Chrysene	0.002 *	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	0.30 J	---	2.0 UJ	1.9 U	1.9 U
Benzo(b)fluoranthene	0.002 *	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Benzo(k)fluoranthene	0.002 *	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Benzo(a)pyrene	NL	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	0.0012 *	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Indeno(1,2,3-cd)pyrene	0.002 *	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Dibenz(a,h)anthracene	NL	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
Benzo(g,h,i)perylene	NL	1.9 U	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	2.1 U	---	---	---	1.9 U	NL	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
2-Methylnaphthalene	NL	66	2.0 U	2.3 U	---	1.9 UJ	---	---	---	2.1 U	11	---	---	---	1.9 U	NL	2.0 UJ	2.2 U	---	2.0 UJ	1.9 U	1.9 U
PAHs total	---	1006.57	nd	8.63	---	nd	---	---	---	nd	2942.5	---	---	---	nd	---	nd	nd	---	nd	nd	nd
<u>CYANIDE (µg/L)</u>																						
Cyanide, total	200	---	---	---	480	670	610	---	750	81	---	280	420	870	330	9,000	96	14	---	10 U	340	340
Cyanide, free	NL	---	---	---	23	21	5.0 U	---	37	5.0 U	---	6.0	5.0 U	26	5.0 U	22	21	5.0 U	---	5.0 U	5.0 U	5.0 U
Water Elevation (feet)	NL	578.61	579.85	579.02	578.49	577.19	576.63	---	576.28	578.92	578.62	574.20	575.89	578.26	576.78	NL	580.6	---	---	---	---	---

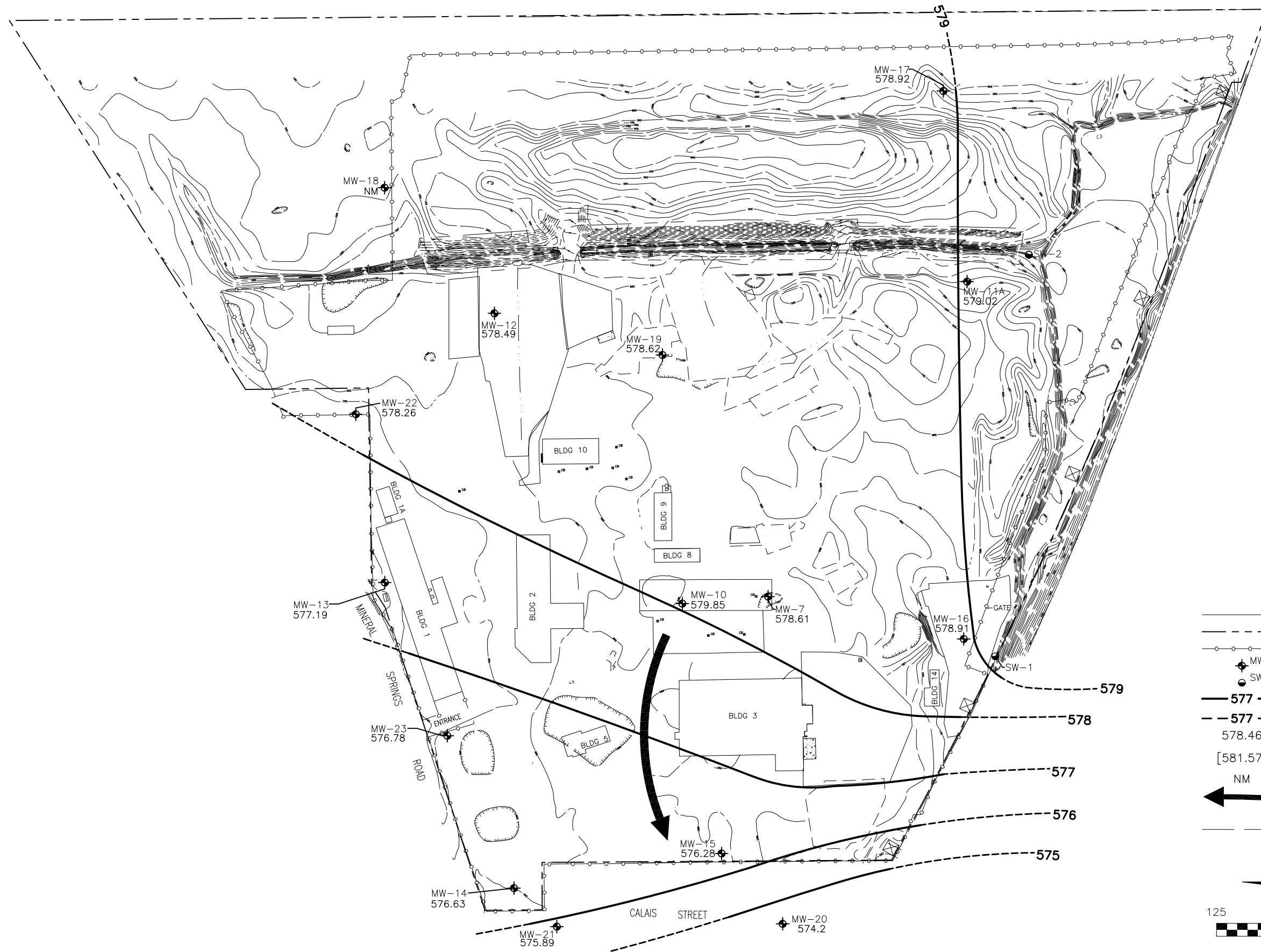
Notes:

- NL Not listed
nd Not detected above method detection limit
--- Not analyzed
TB Trip Blank
EB Equipment Blank
J Indicates laboratory estimated value
U Analyte was not detected above the reporting limit.

- (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

FIGURE

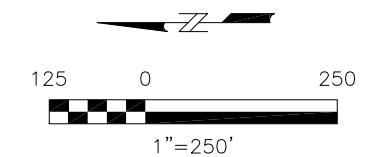
File: J:\Codfiles\CADD\60137322\GW-2012-8.dwg Layout: GW-2012-08 User: vershorb Plotted: Sep 17, 2012 - 5:10pm Xref's:



NOTE:
GROUNDWATER ELEVATION FOR
MONITORING WELL MW-10 WAS
NOT USED IN THE GENERATION
OF GROUNDWATER CONTOURS.

LEGEND

- CURRENT SITE FEATURE
- - - PROPERTY BOUNDARY
- - - FENCELINE
- ⊕ MW-16 MONITORING WELLS
- SW-01 SURFACE WATER SAMPLE LOCATION
- 577 — GROUNDWATER ELEVATION CONTOUR (ft. MSL) (DASHED WHERE INFERRED)
- - - 577 - - GROUNDWATER ELEVATION (ft. MSL) NOT USED TO CONTOUR
- [581.57] GROUNDWATER ELEVATION (ft. MSL) NOT USED TO CONTOUR
- NM NOT MEASURED
- ← GENERALIZED DIRECTION GROUNDWATER FLOW
- GROUND SURFACE ELEVATION CONTOUR INTERVAL: 1'



NATIONAL FUEL GAS
MINERAL SPRINGS ROAD MGP SITE
60137322-300

DATE: 9/2012

DRWN: BcV/W-MA

GROUNDWATER ELEVATION CONTOURS
AUGUST 2012

FIGURE 1

LABORATORY ANALYTICAL RESULTS

TestAmerica

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: 180-13262-1

Client Project/Site: AECOM, Mineral Springs

Revision: 1

For:

AECOM, Inc.

1001 West Seneca Street

Suite 204

Ithaca, New York 14850

Attn: Tamara Raby



Authorized for release by:

9/4/2012 8:06:44 AM

Jill Colussy

Project Manager I

jill.colussy@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions	4
Certification Summary	5
Sample Summary	6
Method Summary	7
Client Sample Results	8
QC Sample Results	19
QC Association	25
Chain of Custody	29
Receipt Checklists	31

Case Narrative

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

TestAmerica Job ID: 180-13262-1

Job ID: 180-13262-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-13262-1

Receipt

The samples were received on 8/9/2012 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.1° C, 3.6° C, 4.3° C and 4.7° C.

GC/MS VOA

Due to the concentration of target compounds detected, samples MW-07 080712 (180-13262-11), MW-19 080712 (180-13262-9), and MW-11A 080712 (180-13262-5) were analyzed at a dilution . Elevated reporting limits (RLs) are provided.

GC/MS Semi VOA

Samples SW-1 080812 (180-13262-2), RINSE BLANK 080812 (180-13262-3), and MW-13 080812 (180-13262-12) were extracted 1-day outside of the holding time due to equipment malfunction.

Due to the concentration of target compounds detected, samples MW-07 080712 (180-13262-11) and MW-19 080712 (180-13262-9) were analyzed at a dilution . Elevated reporting limits (RLs) are provided.

General Chemistry

Samples: MW-22 080712 (180-13262-10), MW-13 080812 (180-13262-12), MW-14 080812 (180-13262-13), and MW-16 080812 (180-13262-7) were analyzed a dilution for total cyanide. Elevated reporting limits (RLs) are provided.

Definitions/Glossary

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

TestAmerica Job ID: 180-13262-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time

General Chemistry

Qualifier	Qualifier Description
B	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.
☼	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
EDL	Estimated Detection Limit
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
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

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

TestAmerica Job ID: 180-13262-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAC	9	4224CA	03-31-13
Connecticut	State Program	1	PH-0688	09-30-12
Florida	NELAC	4	E871008	06-30-13
Illinois	NELAC	5	002602	06-30-13
Kansas	NELAC	7	E-10350	01-31-13
L-A-B	DoD ELAP		L2314	02-24-13
Louisiana	NELAC	6	04041	06-30-13
New Hampshire	NELAC	1	203011	04-04-13
New Jersey	NELAC	2	PA005	06-30-13
New York	NELAC	2	11182	04-01-13
North Carolina DENR	State Program	4	434	12-31-12
Pennsylvania	NELAC	3	02-00416	04-30-13
South Carolina	State Program	4	89014	04-30-13
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	04-28-13
Utah	NELAC	8	STLP	04-30-13
Virginia	NELAC	3	460189	09-14-12
West Virginia DEP	State Program	3	142	01-31-13

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-12
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	04-30-13
New Jersey	NELAC	2	12028	06-30-13
New York	NELAC	2	11452	04-01-13
Pennsylvania	NELAC	3	68-00522	02-28-13
Rhode Island	State Program	1	LAO00132	12-30-12
USDA	Federal		NJCA-003-08	03-11-14

Sample Summary

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

TestAmerica Job ID: 180-13262-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-13262-1	SW-2 080712	Water	08/07/12 12:00	08/09/12 09:00
180-13262-2	SW-1 080812	Water	08/08/12 09:20	08/09/12 09:00
180-13262-3	RINSE BLANK 080812	Water	08/08/12 10:30	08/09/12 09:00
180-13262-4	MW-10 080712	Water	08/07/12 11:15	08/09/12 09:00
180-13262-5	MW-11A 080712	Water	08/07/12 12:20	08/09/12 09:00
180-13262-6	MW-12 080712	Water	08/07/12 15:10	08/09/12 09:00
180-13262-7	MW-16 080812	Water	08/08/12 09:30	08/09/12 09:00
180-13262-8	MW-17 080712	Water	08/07/12 13:30	08/09/12 09:00
180-13262-9	MW-19 080712	Water	08/07/12 14:10	08/09/12 09:00
180-13262-10	MW-22 080712	Water	08/07/12 15:45	08/09/12 09:00
180-13262-11	MW-07 080712	Water	08/07/12 11:25	08/09/12 09:00
180-13262-12	MW-13 080812	Water	08/08/12 09:30	08/09/12 09:00
180-13262-13	MW-14 080812	Water	08/08/12 10:20	08/09/12 09:00
180-13262-14	MW-20 080712	Water	08/07/12 14:35	08/09/12 09:00
180-13262-15	MW-21 080712	Water	08/07/12 15:15	08/09/12 09:00
180-13262-16	MW-23 080712	Water	08/07/12 12:25	08/09/12 09:00
180-13262-17	MW-73 080712	Water	08/07/12 08:00	08/09/12 09:00
180-13262-18	TRIP BLANK 080712	Water	08/07/12 00:00	08/09/12 09:00

Method Summary

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

TestAmerica Job ID: 180-13262-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
9012A	Cyanide, Total and/or Amenable	SW846	TAL PIT
9016	Cyanide, Free	SW846	TAL EDI

Protocol References:

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

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

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

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: SW-2 080712

Date Collected: 08/07/12 12:00

Date Received: 08/09/12 09:00

Lab Sample ID: 180-13262-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/13/12 07:08	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/13/12 07:08	1
Toluene	ND		1.0	0.15	ug/L			08/13/12 07:08	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/13/12 07:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 135		08/13/12 07:08	1
Toluene-d8 (Surr)	99		71 - 118		08/13/12 07:08	1
4-Bromofluorobenzene (Surr)	102		70 - 118		08/13/12 07:08	1
Dibromofluoromethane (Surr)	114		70 - 128		08/13/12 07:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.2	0.15	ug/L		08/11/12 13:59	08/14/12 17:36	1
Acenaphthylene	ND		2.2	0.16	ug/L		08/11/12 13:59	08/14/12 17:36	1
Anthracene	ND		2.2	0.17	ug/L		08/11/12 13:59	08/14/12 17:36	1
Benzo[a]anthracene	0.26	J	2.2	0.16	ug/L		08/11/12 13:59	08/14/12 17:36	1
Benzo[a]pyrene	ND		2.2	0.14	ug/L		08/11/12 13:59	08/14/12 17:36	1
Benzo[b]fluoranthene	ND		2.2	0.17	ug/L		08/11/12 13:59	08/14/12 17:36	1
Benzo[g,h,i]perylene	ND		2.2	0.16	ug/L		08/11/12 13:59	08/14/12 17:36	1
Benzo[k]fluoranthene	ND		2.2	0.59	ug/L		08/11/12 13:59	08/14/12 17:36	1
Chrysene	0.30	J	2.2	0.15	ug/L		08/11/12 13:59	08/14/12 17:36	1
Dibenz[a,h]anthracene	ND		2.2	0.17	ug/L		08/11/12 13:59	08/14/12 17:36	1
Fluoranthene	0.50	J	2.2	0.17	ug/L		08/11/12 13:59	08/14/12 17:36	1
Fluorene	ND		2.2	0.23	ug/L		08/11/12 13:59	08/14/12 17:36	1
Indeno[1,2,3-cd]pyrene	ND		2.2	0.21	ug/L		08/11/12 13:59	08/14/12 17:36	1
Naphthalene	ND		2.2	0.15	ug/L		08/11/12 13:59	08/14/12 17:36	1
Phenanthrene	ND		2.2	0.46	ug/L		08/11/12 13:59	08/14/12 17:36	1
Pyrene	0.33	J	2.2	0.17	ug/L		08/11/12 13:59	08/14/12 17:36	1
2-Methylnaphthalene	ND		2.2	0.13	ug/L		08/11/12 13:59	08/14/12 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	14		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:11	1
Cyanide, Free	2.3	J B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: SW-1 080812

Date Collected: 08/08/12 09:20

Date Received: 08/09/12 09:00

Lab Sample ID: 180-13262-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/15/12 00:30	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/15/12 00:30	1
Toluene	ND		1.0	0.15	ug/L			08/15/12 00:30	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/15/12 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 135		08/15/12 00:30	1
Toluene-d8 (Surr)	105		71 - 118		08/15/12 00:30	1
4-Bromofluorobenzene (Surr)	98		70 - 118		08/15/12 00:30	1
Dibromofluoromethane (Surr)	106		70 - 128		08/15/12 00:30	1

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: SW-1 080812

Lab Sample ID: 180-13262-2

Date Collected: 08/08/12 09:20

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:23	1
Acenaphthylene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:23	1
Anthracene	ND	H	2.0	0.16	ug/L		08/16/12 12:53	08/17/12 19:23	1
Benzo[a]anthracene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:23	1
Benzo[a]pyrene	ND	H	2.0	0.14	ug/L		08/16/12 12:53	08/17/12 19:23	1
Benzo[b]fluoranthene	ND	H	2.0	0.16	ug/L		08/16/12 12:53	08/17/12 19:23	1
Benzo[g,h,i]perylene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:23	1
Benzo[k]fluoranthene	ND	H	2.0	0.55	ug/L		08/16/12 12:53	08/17/12 19:23	1
Chrysene	ND	H	2.0	0.14	ug/L		08/16/12 12:53	08/17/12 19:23	1
Dibenz(a,h)anthracene	ND	H	2.0	0.16	ug/L		08/16/12 12:53	08/17/12 19:23	1
Fluoranthene	ND	H	2.0	0.16	ug/L		08/16/12 12:53	08/17/12 19:23	1
Fluorene	ND	H	2.0	0.22	ug/L		08/16/12 12:53	08/17/12 19:23	1
Indeno[1,2,3-cd]pyrene	ND	H	2.0	0.20	ug/L		08/16/12 12:53	08/17/12 19:23	1
Naphthalene	ND	H	2.0	0.14	ug/L		08/16/12 12:53	08/17/12 19:23	1
Phenanthrene	ND	H	2.0	0.43	ug/L		08/16/12 12:53	08/17/12 19:23	1
Pyrene	ND	H	2.0	0.16	ug/L		08/16/12 12:53	08/17/12 19:23	1
2-Methylnaphthalene	ND	H	2.0	0.12	ug/L		08/16/12 12:53	08/17/12 19:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	96		10	1.5	ug/L		08/21/12 10:10	08/21/12 12:36	1
Cyanide, Free	21	B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: RINSE BLANK 080812

Lab Sample ID: 180-13262-3

Date Collected: 08/08/12 10:30

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/15/12 00:54	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/15/12 00:54	1
Toluene	ND		1.0	0.15	ug/L			08/15/12 00:54	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/15/12 00:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 135		08/15/12 00:54	1
Toluene-d8 (Surr)	100		71 - 118		08/15/12 00:54	1
4-Bromofluorobenzene (Surr)	91		70 - 118		08/15/12 00:54	1
Dibromofluoromethane (Surr)	109		70 - 128		08/15/12 00:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	2.0	0.14	ug/L		08/16/12 12:53	08/17/12 19:43	1
Acenaphthylene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:43	1
Anthracene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:43	1
Benzo[a]anthracene	ND	H	2.0	0.14	ug/L		08/16/12 12:53	08/17/12 19:43	1
Benzo[a]pyrene	ND	H	2.0	0.13	ug/L		08/16/12 12:53	08/17/12 19:43	1
Benzo[b]fluoranthene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:43	1
Benzo[g,h,i]perylene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:43	1
Benzo[k]fluoranthene	ND	H	2.0	0.54	ug/L		08/16/12 12:53	08/17/12 19:43	1
Chrysene	ND	H	2.0	0.14	ug/L		08/16/12 12:53	08/17/12 19:43	1
Dibenz(a,h)anthracene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:43	1

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: RINSE BLANK 080812

Lab Sample ID: 180-13262-3

Date Collected: 08/08/12 10:30

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND	H	2.0	0.16	ug/L		08/16/12 12:53	08/17/12 19:43	1
Fluorene	ND	H	2.0	0.21	ug/L		08/16/12 12:53	08/17/12 19:43	1
Indeno[1,2,3-cd]pyrene	ND	H	2.0	0.20	ug/L		08/16/12 12:53	08/17/12 19:43	1
Naphthalene	ND	H	2.0	0.14	ug/L		08/16/12 12:53	08/17/12 19:43	1
Phenanthrene	ND	H	2.0	0.42	ug/L		08/16/12 12:53	08/17/12 19:43	1
Pyrene	ND	H	2.0	0.15	ug/L		08/16/12 12:53	08/17/12 19:43	1
2-Methylnaphthalene	ND	H	2.0	0.12	ug/L		08/16/12 12:53	08/17/12 19:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	1.5	ug/L		08/21/12 10:10	08/21/12 12:36	1
Cyanide, Free	0.61	J B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-10 080712

Lab Sample ID: 180-13262-4

Date Collected: 08/07/12 11:15

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/13/12 07:31	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/13/12 07:31	1
Toluene	ND		1.0	0.15	ug/L			08/13/12 07:31	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/13/12 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 135		08/13/12 07:31	1
Toluene-d8 (Surr)	100		71 - 118		08/13/12 07:31	1
4-Bromofluorobenzene (Surr)	97		70 - 118		08/13/12 07:31	1
Dibromofluoromethane (Surr)	111		70 - 128		08/13/12 07:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.15	ug/L		08/11/12 13:59	08/14/12 18:00	1
Acenaphthylene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 18:00	1
Anthracene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 18:00	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		08/11/12 13:59	08/14/12 18:00	1
Benzo[a]pyrene	ND		2.0	0.14	ug/L		08/11/12 13:59	08/14/12 18:00	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 18:00	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		08/11/12 13:59	08/14/12 18:00	1
Benzo[k]fluoranthene	ND		2.0	0.56	ug/L		08/11/12 13:59	08/14/12 18:00	1
Chrysene	ND		2.0	0.14	ug/L		08/11/12 13:59	08/14/12 18:00	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 18:00	1
Fluoranthene	ND		2.0	0.17	ug/L		08/11/12 13:59	08/14/12 18:00	1
Fluorene	ND		2.0	0.22	ug/L		08/11/12 13:59	08/14/12 18:00	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		08/11/12 13:59	08/14/12 18:00	1
Naphthalene	ND		2.0	0.14	ug/L		08/11/12 13:59	08/14/12 18:00	1
Phenanthrene	ND		2.0	0.44	ug/L		08/11/12 13:59	08/14/12 18:00	1
Pyrene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 18:00	1
2-Methylnaphthalene	ND		2.0	0.12	ug/L		08/11/12 13:59	08/14/12 18:00	1

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: MW-11A 080712

Lab Sample ID: 180-13262-5

Date Collected: 08/07/12 12:20

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	110	E	1.0	0.11	ug/L			08/13/12 07:56	1
Ethylbenzene	34		1.0	0.23	ug/L			08/13/12 07:56	1
Toluene	1.4		1.0	0.15	ug/L			08/13/12 07:56	1
Xylenes, Total	15		3.0	0.49	ug/L			08/13/12 07:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 135		08/13/12 07:56	1
Toluene-d8 (Surr)	95		71 - 118		08/13/12 07:56	1
4-Bromofluorobenzene (Surr)	113		70 - 118		08/13/12 07:56	1
Dibromofluoromethane (Surr)	105		70 - 128		08/13/12 07:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	85		5.0	0.53	ug/L			08/15/12 00:06	5
Ethylbenzene	26		5.0	1.1	ug/L			08/15/12 00:06	5
Toluene	1.3	J	5.0	0.75	ug/L			08/15/12 00:06	5
Xylenes, Total	11	J	15	2.4	ug/L			08/15/12 00:06	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		64 - 135		08/15/12 00:06	5
Toluene-d8 (Surr)	101		71 - 118		08/15/12 00:06	5
4-Bromofluorobenzene (Surr)	102		70 - 118		08/15/12 00:06	5
Dibromofluoromethane (Surr)	104		70 - 128		08/15/12 00:06	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.8		2.3	0.16	ug/L		08/11/12 13:59	08/14/12 18:23	1
Acenaphthylene	2.2	J	2.3	0.17	ug/L		08/11/12 13:59	08/14/12 18:23	1
Anthracene	ND		2.3	0.18	ug/L		08/11/12 13:59	08/14/12 18:23	1
Benzo[a]anthracene	ND		2.3	0.17	ug/L		08/11/12 13:59	08/14/12 18:23	1
Benzo[a]pyrene	ND		2.3	0.15	ug/L		08/11/12 13:59	08/14/12 18:23	1
Benzo[b]fluoranthene	ND		2.3	0.18	ug/L		08/11/12 13:59	08/14/12 18:23	1
Benzo[g,h,i]perylene	ND		2.3	0.17	ug/L		08/11/12 13:59	08/14/12 18:23	1
Benzo[k]fluoranthene	ND		2.3	0.62	ug/L		08/11/12 13:59	08/14/12 18:23	1
Chrysene	ND		2.3	0.16	ug/L		08/11/12 13:59	08/14/12 18:23	1
Dibenz(a,h)anthracene	ND		2.3	0.18	ug/L		08/11/12 13:59	08/14/12 18:23	1
Fluoranthene	0.40	J	2.3	0.18	ug/L		08/11/12 13:59	08/14/12 18:23	1
Fluorene	0.91	J	2.3	0.25	ug/L		08/11/12 13:59	08/14/12 18:23	1
Indeno[1,2,3-cd]pyrene	ND		2.3	0.23	ug/L		08/11/12 13:59	08/14/12 18:23	1
Naphthalene	0.81	J	2.3	0.16	ug/L		08/11/12 13:59	08/14/12 18:23	1
Phenanthrene	ND		2.3	0.49	ug/L		08/11/12 13:59	08/14/12 18:23	1
Pyrene	0.51	J	2.3	0.18	ug/L		08/11/12 13:59	08/14/12 18:23	1
2-Methylnaphthalene	ND		2.3	0.14	ug/L		08/11/12 13:59	08/14/12 18:23	1

Client Sample ID: MW-12 080712

Lab Sample ID: 180-13262-6

Date Collected: 08/07/12 15:10

Matrix: Water

Date Received: 08/09/12 09:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	480		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:11	1
Cyanide, Free	23	B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: MW-16 080812

Lab Sample ID: 180-13262-7

Date Collected: 08/08/12 09:30

Matrix: Water

Date Received: 08/09/12 09:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	750		100	15	ug/L		08/21/12 10:10	08/21/12 13:14	10
Cyanide, Free	37	B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-17 080712

Lab Sample ID: 180-13262-8

Date Collected: 08/07/12 13:30

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/13/12 08:19	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/13/12 08:19	1
Toluene	ND		1.0	0.15	ug/L			08/13/12 08:19	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/13/12 08:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 135		08/13/12 08:19	1
Toluene-d8 (Surr)	97		71 - 118		08/13/12 08:19	1
4-Bromofluorobenzene (Surr)	98		70 - 118		08/13/12 08:19	1
Dibromofluoromethane (Surr)	110		70 - 128		08/13/12 08:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.1	0.15	ug/L		08/11/12 13:59	08/14/12 18:47	1
Acenaphthylene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 18:47	1
Anthracene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 18:47	1
Benzo[a]anthracene	ND		2.1	0.15	ug/L		08/11/12 13:59	08/14/12 18:47	1
Benzo[a]pyrene	ND		2.1	0.14	ug/L		08/11/12 13:59	08/14/12 18:47	1
Benzo[b]fluoranthene	ND		2.1	0.17	ug/L		08/11/12 13:59	08/14/12 18:47	1
Benzo[g,h,i]perylene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 18:47	1
Benzo[k]fluoranthene	ND		2.1	0.58	ug/L		08/11/12 13:59	08/14/12 18:47	1
Chrysene	ND		2.1	0.15	ug/L		08/11/12 13:59	08/14/12 18:47	1
Dibenz(a,h)anthracene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 18:47	1
Fluoranthene	ND		2.1	0.17	ug/L		08/11/12 13:59	08/14/12 18:47	1
Fluorene	ND		2.1	0.23	ug/L		08/11/12 13:59	08/14/12 18:47	1
Indeno[1,2,3-cd]pyrene	ND		2.1	0.21	ug/L		08/11/12 13:59	08/14/12 18:47	1
Naphthalene	ND		2.1	0.15	ug/L		08/11/12 13:59	08/14/12 18:47	1
Phenanthrene	ND		2.1	0.45	ug/L		08/11/12 13:59	08/14/12 18:47	1
Pyrene	ND		2.1	0.17	ug/L		08/11/12 13:59	08/14/12 18:47	1
2-Methylnaphthalene	ND		2.1	0.13	ug/L		08/11/12 13:59	08/14/12 18:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	81		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:11	1
Cyanide, Free	0.97	J B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-19 080712

Lab Sample ID: 180-13262-9

Date Collected: 08/07/12 14:10

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4300		250	26	ug/L			08/13/12 08:44	250

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: MW-19 080712

Lab Sample ID: 180-13262-9

Date Collected: 08/07/12 14:10

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	130	J	250	57	ug/L			08/13/12 08:44	250
Toluene	ND		250	38	ug/L			08/13/12 08:44	250
Xylenes, Total	ND		750	120	ug/L			08/13/12 08:44	250
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 135					08/13/12 08:44	250
Toluene-d8 (Surr)	95		71 - 118					08/13/12 08:44	250
4-Bromofluorobenzene (Surr)	94		70 - 118					08/13/12 08:44	250
Dibromofluoromethane (Surr)	102		70 - 128					08/13/12 08:44	250

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.1	0.15	ug/L		08/11/12 13:59	08/14/12 19:11	1
Acenaphthylene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 19:11	1
Anthracene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 19:11	1
Benzo[a]anthracene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 19:11	1
Benzo[a]pyrene	ND		2.1	0.14	ug/L		08/11/12 13:59	08/14/12 19:11	1
Benzo[b]fluoranthene	ND		2.1	0.17	ug/L		08/11/12 13:59	08/14/12 19:11	1
Benzo[g,h,i]perylene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 19:11	1
Benzo[k]fluoranthene	ND		2.1	0.58	ug/L		08/11/12 13:59	08/14/12 19:11	1
Chrysene	ND		2.1	0.15	ug/L		08/11/12 13:59	08/14/12 19:11	1
Dibenz(a,h)anthracene	ND		2.1	0.16	ug/L		08/11/12 13:59	08/14/12 19:11	1
Fluoranthene	ND		2.1	0.17	ug/L		08/11/12 13:59	08/14/12 19:11	1
Fluorene	ND		2.1	0.23	ug/L		08/11/12 13:59	08/14/12 19:11	1
Indeno[1,2,3-cd]pyrene	ND		2.1	0.21	ug/L		08/11/12 13:59	08/14/12 19:11	1
Naphthalene	1000	E	2.1	0.15	ug/L		08/11/12 13:59	08/14/12 19:11	1
Phenanthrene	ND		2.1	0.45	ug/L		08/11/12 13:59	08/14/12 19:11	1
Pyrene	ND		2.1	0.17	ug/L		08/11/12 13:59	08/14/12 19:11	1
2-Methylnaphthalene	11		2.1	0.13	ug/L		08/11/12 13:59	08/14/12 19:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		21	1.5	ug/L		08/11/12 13:59	08/15/12 16:22	10
Acenaphthylene	ND		21	1.6	ug/L		08/11/12 13:59	08/15/12 16:22	10
Anthracene	ND		21	1.6	ug/L		08/11/12 13:59	08/15/12 16:22	10
Benzo[a]anthracene	ND		21	1.6	ug/L		08/11/12 13:59	08/15/12 16:22	10
Benzo[a]pyrene	ND		21	1.4	ug/L		08/11/12 13:59	08/15/12 16:22	10
Benzo[b]fluoranthene	ND		21	1.7	ug/L		08/11/12 13:59	08/15/12 16:22	10
Benzo[g,h,i]perylene	ND		21	1.6	ug/L		08/11/12 13:59	08/15/12 16:22	10
Benzo[k]fluoranthene	ND		21	5.8	ug/L		08/11/12 13:59	08/15/12 16:22	10
Chrysene	ND		21	1.5	ug/L		08/11/12 13:59	08/15/12 16:22	10
Dibenz(a,h)anthracene	ND		21	1.6	ug/L		08/11/12 13:59	08/15/12 16:22	10
Fluoranthene	ND		21	1.7	ug/L		08/11/12 13:59	08/15/12 16:22	10
Fluorene	ND		21	2.3	ug/L		08/11/12 13:59	08/15/12 16:22	10
Indeno[1,2,3-cd]pyrene	ND		21	2.1	ug/L		08/11/12 13:59	08/15/12 16:22	10
Naphthalene	2900		21	1.5	ug/L		08/11/12 13:59	08/15/12 16:22	10
Phenanthrene	ND		21	4.5	ug/L		08/11/12 13:59	08/15/12 16:22	10
Pyrene	ND		21	1.7	ug/L		08/11/12 13:59	08/15/12 16:22	10
2-Methylnaphthalene	9.6	J	21	1.3	ug/L		08/11/12 13:59	08/15/12 16:22	10

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: MW-22 080712

Lab Sample ID: 180-13262-10

Date Collected: 08/07/12 15:45

Matrix: Water

Date Received: 08/09/12 09:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	870		100	15	ug/L		08/20/12 10:35	08/20/12 12:36	10
Cyanide, Free	26	B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-07 080712

Lab Sample ID: 180-13262-11

Date Collected: 08/07/12 11:25

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	420		25	2.6	ug/L			08/13/12 09:08	25
Ethylbenzene	470		25	5.7	ug/L			08/13/12 09:08	25
Toluene	6.9	J	25	3.8	ug/L			08/13/12 09:08	25
Xylenes, Total	270		75	12	ug/L			08/13/12 09:08	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		64 - 135		08/13/12 09:08	25
Toluene-d8 (Surr)	97		71 - 118		08/13/12 09:08	25
4-Bromofluorobenzene (Surr)	108		70 - 118		08/13/12 09:08	25
Dibromofluoromethane (Surr)	111		70 - 128		08/13/12 09:08	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	49		1.9	0.14	ug/L		08/11/12 14:03	08/14/12 19:35	1
Acenaphthylene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:35	1
Anthracene	1.3	J	1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:35	1
Benzo[a]anthracene	ND		1.9	0.14	ug/L		08/11/12 14:03	08/14/12 19:35	1
Benzo[a]pyrene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 19:35	1
Benzo[b]fluoranthene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:35	1
Benzo[g,h,i]perylene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:35	1
Benzo[k]fluoranthene	ND		1.9	0.53	ug/L		08/11/12 14:03	08/14/12 19:35	1
Chrysene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 19:35	1
Dibenz(a,h)anthracene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:35	1
Fluoranthene	ND		1.9	0.16	ug/L		08/11/12 14:03	08/14/12 19:35	1
Fluorene	11		1.9	0.21	ug/L		08/11/12 14:03	08/14/12 19:35	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.19	ug/L		08/11/12 14:03	08/14/12 19:35	1
Naphthalene	590	E	1.9	0.13	ug/L		08/11/12 14:03	08/14/12 19:35	1
Phenanthrene	9.1		1.9	0.41	ug/L		08/11/12 14:03	08/14/12 19:35	1
Pyrene	0.17	J	1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:35	1
2-Methylnaphthalene	66		1.9	0.12	ug/L		08/11/12 14:03	08/14/12 19:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	53		9.6	0.69	ug/L		08/11/12 14:03	08/15/12 16:46	5
Acenaphthylene	ND		9.6	0.73	ug/L		08/11/12 14:03	08/15/12 16:46	5
Anthracene	1.5	J	9.6	0.74	ug/L		08/11/12 14:03	08/15/12 16:46	5
Benzo[a]anthracene	ND		9.6	0.71	ug/L		08/11/12 14:03	08/15/12 16:46	5
Benzo[a]pyrene	ND		9.6	0.64	ug/L		08/11/12 14:03	08/15/12 16:46	5
Benzo[b]fluoranthene	ND		9.6	0.75	ug/L		08/11/12 14:03	08/15/12 16:46	5
Benzo[g,h,i]perylene	ND		9.6	0.73	ug/L		08/11/12 14:03	08/15/12 16:46	5
Benzo[k]fluoranthene	ND		9.6	2.6	ug/L		08/11/12 14:03	08/15/12 16:46	5
Chrysene	ND		9.6	0.67	ug/L		08/11/12 14:03	08/15/12 16:46	5
Dibenz(a,h)anthracene	ND		9.6	0.75	ug/L		08/11/12 14:03	08/15/12 16:46	5

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: MW-07 080712

Lab Sample ID: 180-13262-11

Date Collected: 08/07/12 11:25

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		9.6	0.78	ug/L		08/11/12 14:03	08/15/12 16:46	5
Fluorene	10		9.6	1.0	ug/L		08/11/12 14:03	08/15/12 16:46	5
Indeno[1,2,3-cd]pyrene	ND		9.6	0.96	ug/L		08/11/12 14:03	08/15/12 16:46	5
Naphthalene	870		9.6	0.67	ug/L		08/11/12 14:03	08/15/12 16:46	5
Phenanthrene	9.7		9.6	2.1	ug/L		08/11/12 14:03	08/15/12 16:46	5
Pyrene	ND		9.6	0.75	ug/L		08/11/12 14:03	08/15/12 16:46	5
2-Methylnaphthalene	67		9.6	0.59	ug/L		08/11/12 14:03	08/15/12 16:46	5

Client Sample ID: MW-13 080812

Lab Sample ID: 180-13262-12

Date Collected: 08/08/12 09:30

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.6		1.0	0.11	ug/L			08/15/12 01:19	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/15/12 01:19	1
Toluene	ND		1.0	0.15	ug/L			08/15/12 01:19	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/15/12 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 135		08/15/12 01:19	1
Toluene-d8 (Surr)	105		71 - 118		08/15/12 01:19	1
4-Bromofluorobenzene (Surr)	96		70 - 118		08/15/12 01:19	1
Dibromofluoromethane (Surr)	111		70 - 128		08/15/12 01:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	1.9	0.14	ug/L		08/16/12 12:53	08/17/12 20:04	1
Acenaphthylene	ND	H	1.9	0.15	ug/L		08/16/12 12:53	08/17/12 20:04	1
Anthracene	ND	H	1.9	0.15	ug/L		08/16/12 12:53	08/17/12 20:04	1
Benzo[a]anthracene	ND	H	1.9	0.14	ug/L		08/16/12 12:53	08/17/12 20:04	1
Benzo[a]pyrene	ND	H	1.9	0.13	ug/L		08/16/12 12:53	08/17/12 20:04	1
Benzo[b]fluoranthene	ND	H	1.9	0.15	ug/L		08/16/12 12:53	08/17/12 20:04	1
Benzo[g,h,i]perylene	ND	H	1.9	0.15	ug/L		08/16/12 12:53	08/17/12 20:04	1
Benzo[k]fluoranthene	ND	H	1.9	0.53	ug/L		08/16/12 12:53	08/17/12 20:04	1
Chrysene	ND	H	1.9	0.14	ug/L		08/16/12 12:53	08/17/12 20:04	1
Dibenz(a,h)anthracene	ND	H	1.9	0.15	ug/L		08/16/12 12:53	08/17/12 20:04	1
Fluoranthene	ND	H	1.9	0.16	ug/L		08/16/12 12:53	08/17/12 20:04	1
Fluorene	ND	H	1.9	0.21	ug/L		08/16/12 12:53	08/17/12 20:04	1
Indeno[1,2,3-cd]pyrene	ND	H	1.9	0.19	ug/L		08/16/12 12:53	08/17/12 20:04	1
Naphthalene	ND	H	1.9	0.14	ug/L		08/16/12 12:53	08/17/12 20:04	1
Phenanthrene	ND	H	1.9	0.41	ug/L		08/16/12 12:53	08/17/12 20:04	1
Pyrene	ND	H	1.9	0.15	ug/L		08/16/12 12:53	08/17/12 20:04	1
2-Methylnaphthalene	ND	H	1.9	0.12	ug/L		08/16/12 12:53	08/17/12 20:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	670		100	15	ug/L		08/21/12 10:10	08/21/12 13:14	10
Cyanide, Free	21	B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: MW-14 080812

Date Collected: 08/08/12 10:20

Date Received: 08/09/12 09:00

Lab Sample ID: 180-13262-13

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	610		100	15	ug/L		08/21/12 10:10	08/21/12 13:14	10
Cyanide, Free	2.7	J B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-20 080712

Date Collected: 08/07/12 14:35

Date Received: 08/09/12 09:00

Lab Sample ID: 180-13262-14

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	280		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:18	1
Cyanide, Free	6.0	B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-21 080712

Date Collected: 08/07/12 15:15

Date Received: 08/09/12 09:00

Lab Sample ID: 180-13262-15

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	420		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:18	1
Cyanide, Free	2.3	J B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-23 080712

Date Collected: 08/07/12 12:25

Date Received: 08/09/12 09:00

Lab Sample ID: 180-13262-16

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/13/12 09:32	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/13/12 09:32	1
Toluene	ND		1.0	0.15	ug/L			08/13/12 09:32	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/13/12 09:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		64 - 135		08/13/12 09:32	1
Toluene-d8 (Surr)	97		71 - 118		08/13/12 09:32	1
4-Bromofluorobenzene (Surr)	97		70 - 118		08/13/12 09:32	1
Dibromofluoromethane (Surr)	105		70 - 128		08/13/12 09:32	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		08/11/12 14:03	08/14/12 19:59	1
Acenaphthylene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:59	1
Anthracene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:59	1
Benzo[a]anthracene	ND		1.9	0.14	ug/L		08/11/12 14:03	08/14/12 19:59	1
Benzo[a]pyrene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 19:59	1
Benzo[b]fluoranthene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:59	1
Benzo[g,h,i]perylene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:59	1
Benzo[k]fluoranthene	ND		1.9	0.53	ug/L		08/11/12 14:03	08/14/12 19:59	1
Chrysene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 19:59	1
Dibenz(a,h)anthracene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:59	1
Fluoranthene	ND		1.9	0.16	ug/L		08/11/12 14:03	08/14/12 19:59	1
Fluorene	ND		1.9	0.21	ug/L		08/11/12 14:03	08/14/12 19:59	1

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: MW-23 080712

Lab Sample ID: 180-13262-16

Date Collected: 08/07/12 12:25

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		1.9	0.19	ug/L		08/11/12 14:03	08/14/12 19:59	1
Naphthalene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 19:59	1
Phenanthrene	ND		1.9	0.41	ug/L		08/11/12 14:03	08/14/12 19:59	1
Pyrene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 19:59	1
2-Methylnaphthalene	ND		1.9	0.12	ug/L		08/11/12 14:03	08/14/12 19:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	330		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:18	1
Cyanide, Free	4.6	J B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample ID: MW-73 080712

Lab Sample ID: 180-13262-17

Date Collected: 08/07/12 08:00

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/13/12 09:56	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/13/12 09:56	1
Toluene	ND		1.0	0.15	ug/L			08/13/12 09:56	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/13/12 09:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		64 - 135		08/13/12 09:56	1
Toluene-d8 (Surr)	100		71 - 118		08/13/12 09:56	1
4-Bromofluorobenzene (Surr)	100		70 - 118		08/13/12 09:56	1
Dibromofluoromethane (Surr)	112		70 - 128		08/13/12 09:56	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		08/11/12 14:03	08/14/12 20:23	1
Acenaphthylene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 20:23	1
Anthracene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 20:23	1
Benzo[a]anthracene	ND		1.9	0.14	ug/L		08/11/12 14:03	08/14/12 20:23	1
Benzo[a]pyrene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 20:23	1
Benzo[b]fluoranthene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 20:23	1
Benzo[g,h,i]perylene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 20:23	1
Benzo[k]fluoranthene	ND		1.9	0.53	ug/L		08/11/12 14:03	08/14/12 20:23	1
Chrysene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 20:23	1
Dibenz(a,h)anthracene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 20:23	1
Fluoranthene	ND		1.9	0.16	ug/L		08/11/12 14:03	08/14/12 20:23	1
Fluorene	ND		1.9	0.21	ug/L		08/11/12 14:03	08/14/12 20:23	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.19	ug/L		08/11/12 14:03	08/14/12 20:23	1
Naphthalene	ND		1.9	0.13	ug/L		08/11/12 14:03	08/14/12 20:23	1
Phenanthrene	ND		1.9	0.41	ug/L		08/11/12 14:03	08/14/12 20:23	1
Pyrene	ND		1.9	0.15	ug/L		08/11/12 14:03	08/14/12 20:23	1
2-Methylnaphthalene	ND		1.9	0.12	ug/L		08/11/12 14:03	08/14/12 20:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	340		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:18	1
Cyanide, Free	4.0	J B	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Client Sample Results

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

TestAmerica Job ID: 180-13262-1

Client Sample ID: TRIP BLANK 080712

Lab Sample ID: 180-13262-18

Date Collected: 08/07/12 00:00

Matrix: Water

Date Received: 08/09/12 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/13/12 06:44	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/13/12 06:44	1
Toluene	ND		1.0	0.15	ug/L			08/13/12 06:44	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/13/12 06:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		64 - 135		08/13/12 06:44	1
Toluene-d8 (Surr)	100		71 - 118		08/13/12 06:44	1
4-Bromofluorobenzene (Surr)	100		70 - 118		08/13/12 06:44	1
Dibromofluoromethane (Surr)	113		70 - 128		08/13/12 06:44	1

QC Sample Results

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

TestAmerica Job ID: 180-13262-1

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

Lab Sample ID: MB 180-44718/4

Matrix: Water

Analysis Batch: 44718

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/13/12 03:55	1
Ethylbenzene	ND		1.0	0.23	ug/L			08/13/12 03:55	1
Toluene	ND		1.0	0.15	ug/L			08/13/12 03:55	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/13/12 03:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		64 - 135		08/13/12 03:55	1
Toluene-d8 (Surr)	95		71 - 118		08/13/12 03:55	1
4-Bromofluorobenzene (Surr)	92		70 - 118		08/13/12 03:55	1
Dibromofluoromethane (Surr)	104		70 - 128		08/13/12 03:55	1

Lab Sample ID: LCS 180-44718/6

Matrix: Water

Analysis Batch: 44718

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.4		ug/L		104	80 - 120
Ethylbenzene	10.0	11.0		ug/L		110	72 - 126
Toluene	10.0	10.9		ug/L		109	80 - 123
Xylenes, Total	30.0	32.6		ug/L		109	76 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
Toluene-d8 (Surr)	109		71 - 118
4-Bromofluorobenzene (Surr)	99		70 - 118
Dibromofluoromethane (Surr)	107		70 - 128

Lab Sample ID: LCSD 180-44718/7

Matrix: Water

Analysis Batch: 44718

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	10.0	10.1		ug/L		101	80 - 120	3	32
Ethylbenzene	10.0	10.9		ug/L		109	72 - 126	1	33
Toluene	10.0	10.7		ug/L		107	80 - 123	2	35
Xylenes, Total	30.0	32.1		ug/L		107	76 - 128	1	32

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		64 - 135
Toluene-d8 (Surr)	104		71 - 118
4-Bromofluorobenzene (Surr)	93		70 - 118
Dibromofluoromethane (Surr)	97		70 - 128

Lab Sample ID: MB 180-45013/4

Matrix: Water

Analysis Batch: 45013

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.11	ug/L			08/14/12 19:33	1

QC Sample Results

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

TestAmerica Job ID: 180-13262-1

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

Lab Sample ID: MB 180-45013/4

Matrix: Water

Analysis Batch: 45013

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.23	ug/L			08/14/12 19:33	1
Toluene	ND		1.0	0.15	ug/L			08/14/12 19:33	1
Xylenes, Total	ND		3.0	0.49	ug/L			08/14/12 19:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 135		08/14/12 19:33	1
Toluene-d8 (Surr)	101		71 - 118		08/14/12 19:33	1
4-Bromofluorobenzene (Surr)	93		70 - 118		08/14/12 19:33	1
Dibromofluoromethane (Surr)	107		70 - 128		08/14/12 19:33	1

Lab Sample ID: LCS 180-45013/6

Matrix: Water

Analysis Batch: 45013

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.66		ug/L		97	80 - 120
Ethylbenzene	10.0	9.86		ug/L		99	72 - 126
Toluene	10.0	9.83		ug/L		98	80 - 123
Xylenes, Total	30.0	30.5		ug/L		102	76 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		64 - 135
Toluene-d8 (Surr)	101		71 - 118
4-Bromofluorobenzene (Surr)	96		70 - 118
Dibromofluoromethane (Surr)	96		70 - 128

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

Lab Sample ID: MB 180-44683/1-A

Matrix: Water

Analysis Batch: 45032

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.14	ug/L		08/11/12 13:59	08/14/12 11:51	1
Acenaphthylene	ND		2.0	0.15	ug/L		08/11/12 13:59	08/14/12 11:51	1
Anthracene	ND		2.0	0.15	ug/L		08/11/12 13:59	08/14/12 11:51	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		08/11/12 13:59	08/14/12 11:51	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		08/11/12 13:59	08/14/12 11:51	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 11:51	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		08/11/12 13:59	08/14/12 11:51	1
Benzo[k]fluoranthene	ND		2.0	0.55	ug/L		08/11/12 13:59	08/14/12 11:51	1
Chrysene	ND		2.0	0.14	ug/L		08/11/12 13:59	08/14/12 11:51	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 11:51	1
Fluoranthene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 11:51	1
Fluorene	ND		2.0	0.22	ug/L		08/11/12 13:59	08/14/12 11:51	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		08/11/12 13:59	08/14/12 11:51	1
Naphthalene	ND		2.0	0.14	ug/L		08/11/12 13:59	08/14/12 11:51	1
Phenanthrene	ND		2.0	0.43	ug/L		08/11/12 13:59	08/14/12 11:51	1
Pyrene	ND		2.0	0.16	ug/L		08/11/12 13:59	08/14/12 11:51	1

QC Sample Results

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

TestAmerica Job ID: 180-13262-1

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

Lab Sample ID: MB 180-44683/1-A

Matrix: Water

Analysis Batch: 45032

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 44683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		2.0	0.12	ug/L		08/11/12 13:59	08/14/12 11:51	1

Lab Sample ID: LCS 180-44683/2-A

Matrix: Water

Analysis Batch: 45032

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 44683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	200	152		ug/L		76	39 - 106
Acenaphthylene	200	165		ug/L		83	40 - 113
Anthracene	200	163		ug/L		82	37 - 108
Benzo[a]anthracene	200	160		ug/L		80	40 - 103
Benzo[a]pyrene	200	171		ug/L		85	37 - 105
Benzo[b]fluoranthene	200	157		ug/L		78	35 - 100
Benzo[g,h,i]perylene	200	168		ug/L		84	31 - 118
Benzo[k]fluoranthene	200	155		ug/L		77	37 - 108
Chrysene	200	157		ug/L		78	39 - 103
Dibenz(a,h)anthracene	200	147		ug/L		73	32 - 117
Fluoranthene	200	184		ug/L		92	35 - 111
Fluorene	200	161		ug/L		81	39 - 107
Indeno[1,2,3-cd]pyrene	200	161		ug/L		80	32 - 116
Naphthalene	200	144		ug/L		72	35 - 98
Phenanthrene	200	157		ug/L		79	34 - 107
Pyrene	200	142		ug/L		71	36 - 115
2-Methylnaphthalene	200	148		ug/L		74	36 - 101

Lab Sample ID: LCSD 180-44683/3-A

Matrix: Water

Analysis Batch: 45032

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 44683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	200	157		ug/L		79	39 - 106	3	32
Acenaphthylene	200	172		ug/L		86	40 - 113	4	33
Anthracene	200	170		ug/L		85	37 - 108	4	40
Benzo[a]anthracene	200	164		ug/L		82	40 - 103	2	33
Benzo[a]pyrene	200	177		ug/L		89	37 - 105	4	35
Benzo[b]fluoranthene	200	166		ug/L		83	35 - 100	6	44
Benzo[g,h,i]perylene	200	178		ug/L		89	31 - 118	6	45
Benzo[k]fluoranthene	200	161		ug/L		81	37 - 108	4	42
Chrysene	200	163		ug/L		81	39 - 103	4	38
Dibenz(a,h)anthracene	200	156		ug/L		78	32 - 117	6	43
Fluoranthene	200	189		ug/L		95	35 - 111	3	43
Fluorene	200	165		ug/L		82	39 - 107	2	33
Indeno[1,2,3-cd]pyrene	200	172		ug/L		86	32 - 116	7	45
Naphthalene	200	145		ug/L		73	35 - 98	1	39
Phenanthrene	200	164		ug/L		82	34 - 107	4	34
Pyrene	200	147		ug/L		73	36 - 115	4	38
2-Methylnaphthalene	200	152		ug/L		76	36 - 101	3	35

QC Sample Results

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

TestAmerica Job ID: 180-13262-1

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

Lab Sample ID: MB 180-45246/1-A

Matrix: Water

Analysis Batch: 45461

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.14	ug/L		08/16/12 12:53	08/17/12 14:15	1
Acenaphthylene	ND		2.0	0.15	ug/L		08/16/12 12:53	08/17/12 14:15	1
Anthracene	ND		2.0	0.15	ug/L		08/16/12 12:53	08/17/12 14:15	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		08/16/12 12:53	08/17/12 14:15	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		08/16/12 12:53	08/17/12 14:15	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		08/16/12 12:53	08/17/12 14:15	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		08/16/12 12:53	08/17/12 14:15	1
Benzo[k]fluoranthene	ND		2.0	0.55	ug/L		08/16/12 12:53	08/17/12 14:15	1
Chrysene	ND		2.0	0.14	ug/L		08/16/12 12:53	08/17/12 14:15	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		08/16/12 12:53	08/17/12 14:15	1
Fluoranthene	ND		2.0	0.16	ug/L		08/16/12 12:53	08/17/12 14:15	1
Fluorene	ND		2.0	0.22	ug/L		08/16/12 12:53	08/17/12 14:15	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		08/16/12 12:53	08/17/12 14:15	1
Naphthalene	ND		2.0	0.14	ug/L		08/16/12 12:53	08/17/12 14:15	1
Phenanthrene	ND		2.0	0.43	ug/L		08/16/12 12:53	08/17/12 14:15	1
Pyrene	ND		2.0	0.16	ug/L		08/16/12 12:53	08/17/12 14:15	1
2-Methylnaphthalene	ND		2.0	0.12	ug/L		08/16/12 12:53	08/17/12 14:15	1

Lab Sample ID: LCS 180-45246/2-A

Matrix: Water

Analysis Batch: 45461

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	200	144		ug/L		72	39 - 106
Acenaphthylene	200	159		ug/L		80	40 - 113
Anthracene	200	153		ug/L		76	37 - 108
Benzo[a]anthracene	200	151		ug/L		76	40 - 103
Benzo[a]pyrene	200	160		ug/L		80	37 - 105
Benzo[b]fluoranthene	200	128		ug/L		64	35 - 100
Benzo[g,h,i]perylene	200	161		ug/L		81	31 - 118
Benzo[k]fluoranthene	200	157		ug/L		78	37 - 108
Chrysene	200	156		ug/L		78	39 - 103
Dibenz(a,h)anthracene	200	164		ug/L		82	32 - 117
Fluoranthene	200	147		ug/L		74	35 - 111
Fluorene	200	146		ug/L		73	39 - 107
Indeno[1,2,3-cd]pyrene	200	161		ug/L		81	32 - 116
Naphthalene	200	140		ug/L		70	35 - 98
Phenanthrene	200	142		ug/L		71	34 - 107
Pyrene	200	150		ug/L		75	36 - 115
2-Methylnaphthalene	200	140		ug/L		70	36 - 101

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 180-45564/5-A

Matrix: Water

Analysis Batch: 45615

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	1.5	ug/L		08/20/12 10:35	08/20/12 12:11	1

QC Sample Results

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

TestAmerica Job ID: 180-13262-1

Method: 9012A - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: HLCS 180-45564/2-A

Matrix: Water

Analysis Batch: 45615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45564

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	250	240		ug/L		96	90 - 110

Lab Sample ID: LCS 180-45564/3-A

Matrix: Water

Analysis Batch: 45615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	200	187		ug/L		93	85 - 115

Lab Sample ID: LCSD 180-45564/4-A

Matrix: Water

Analysis Batch: 45615

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45564

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	200	198		ug/L		99	85 - 115	6	20

Lab Sample ID: LLCS 180-45564/1-A

Matrix: Water

Analysis Batch: 45615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45564

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	50.0	45.3		ug/L		91	90 - 110

Lab Sample ID: MB 180-45720/5-A

Matrix: Water

Analysis Batch: 45810

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 45720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	1.5	ug/L		08/21/12 10:10	08/21/12 12:36	1

Lab Sample ID: HLCS 180-45720/2-A

Matrix: Water

Analysis Batch: 45810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45720

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	250	253		ug/L		101	90 - 110

Lab Sample ID: LCS 180-45720/3-A

Matrix: Water

Analysis Batch: 45810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	200	192		ug/L		96	85 - 115

Lab Sample ID: LCSD 180-45720/4-A

Matrix: Water

Analysis Batch: 45810

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 45720

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	200	193		ug/L		96	85 - 115	0	20

QC Sample Results

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

TestAmerica Job ID: 180-13262-1

Method: 9012A - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LLCS 180-45720/1-A

Matrix: Water

Analysis Batch: 45810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 45720

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	50.0	46.2		ug/L		92	90 - 110

Method: 9016 - Cyanide, Free

Lab Sample ID: MB 460-124299/1-A

Matrix: Water

Analysis Batch: 124301

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 124299

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	0.972	J	5.0	0.54	ug/L		08/15/12 09:00	08/15/12 15:00	1

Lab Sample ID: LCS 460-124299/2-A

Matrix: Water

Analysis Batch: 124301

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 124299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Free	50.0	42.1		ug/L		84	70 - 130

Lab Sample ID: 180-13262-1 MS

Matrix: Water

Analysis Batch: 124301

Client Sample ID: SW-2 080712

Prep Type: Total/NA

Prep Batch: 124299

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Free	2.3	J B	50.0	44.9		ug/L		85	70 - 130

Lab Sample ID: 180-13262-1 MSD

Matrix: Water

Analysis Batch: 124301

Client Sample ID: SW-2 080712

Prep Type: Total/NA

Prep Batch: 124299

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Free	2.3	J B	50.0	40.6		ug/L		77	70 - 130	10	20

Lab Sample ID: DLCK 460-124301/10 DLCK

Matrix: Water

Analysis Batch: 124301

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Free	2.00	1.97	J	ug/L		98	50 - 150

QC Association Summary

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

TestAmerica Job ID: 180-13262-1

GC/MS VOA

Analysis Batch: 44718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-1	SW-2 080712	Total/NA	Water	8260B	
180-13262-4	MW-10 080712	Total/NA	Water	8260B	
180-13262-5	MW-11A 080712	Total/NA	Water	8260B	
180-13262-8	MW-17 080712	Total/NA	Water	8260B	
180-13262-9	MW-19 080712	Total/NA	Water	8260B	
180-13262-11	MW-07 080712	Total/NA	Water	8260B	
180-13262-16	MW-23 080712	Total/NA	Water	8260B	
180-13262-17	MW-73 080712	Total/NA	Water	8260B	
180-13262-18	TRIP BLANK 080712	Total/NA	Water	8260B	
LCS 180-44718/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 180-44718/7	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 180-44718/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 45013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-2	SW-1 080812	Total/NA	Water	8260B	
180-13262-3	RINSE BLANK 080812	Total/NA	Water	8260B	
180-13262-5 - DL	MW-11A 080712	Total/NA	Water	8260B	
180-13262-12	MW-13 080812	Total/NA	Water	8260B	
LCS 180-45013/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-45013/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 44683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-1	SW-2 080712	Total/NA	Water	3520C	
180-13262-4	MW-10 080712	Total/NA	Water	3520C	
180-13262-5	MW-11A 080712	Total/NA	Water	3520C	
180-13262-8	MW-17 080712	Total/NA	Water	3520C	
180-13262-9	MW-19 080712	Total/NA	Water	3520C	
180-13262-9 - DL	MW-19 080712	Total/NA	Water	3520C	
180-13262-11	MW-07 080712	Total/NA	Water	3520C	
180-13262-11 - DL	MW-07 080712	Total/NA	Water	3520C	
180-13262-16	MW-23 080712	Total/NA	Water	3520C	
180-13262-17	MW-73 080712	Total/NA	Water	3520C	
LCS 180-44683/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-44683/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 180-44683/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 45032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-1	SW-2 080712	Total/NA	Water	8270C	44683
180-13262-4	MW-10 080712	Total/NA	Water	8270C	44683
180-13262-5	MW-11A 080712	Total/NA	Water	8270C	44683
180-13262-8	MW-17 080712	Total/NA	Water	8270C	44683
180-13262-9	MW-19 080712	Total/NA	Water	8270C	44683
180-13262-11	MW-07 080712	Total/NA	Water	8270C	44683
180-13262-16	MW-23 080712	Total/NA	Water	8270C	44683
180-13262-17	MW-73 080712	Total/NA	Water	8270C	44683
LCS 180-44683/2-A	Lab Control Sample	Total/NA	Water	8270C	44683
LCSD 180-44683/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	44683

QC Association Summary

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

TestAmerica Job ID: 180-13262-1

GC/MS Semi VOA (Continued)

Analysis Batch: 45032 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-44683/1-A	Method Blank	Total/NA	Water	8270C	44683

Analysis Batch: 45174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-9 - DL	MW-19 080712	Total/NA	Water	8270C	44683
180-13262-11 - DL	MW-07 080712	Total/NA	Water	8270C	44683

Prep Batch: 45246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-2	SW-1 080812	Total/NA	Water	3520C	
180-13262-3	RINSE BLANK 080812	Total/NA	Water	3520C	
180-13262-12	MW-13 080812	Total/NA	Water	3520C	
LCS 180-45246/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 180-45246/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 45461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-2	SW-1 080812	Total/NA	Water	8270C	45246
180-13262-3	RINSE BLANK 080812	Total/NA	Water	8270C	45246
180-13262-12	MW-13 080812	Total/NA	Water	8270C	45246
LCS 180-45246/2-A	Lab Control Sample	Total/NA	Water	8270C	45246
MB 180-45246/1-A	Method Blank	Total/NA	Water	8270C	45246

General Chemistry

Prep Batch: 45564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-1	SW-2 080712	Total/NA	Water	9012A	
180-13262-6	MW-12 080712	Total/NA	Water	9012A	
180-13262-8	MW-17 080712	Total/NA	Water	9012A	
180-13262-10	MW-22 080712	Total/NA	Water	9012A	
180-13262-14	MW-20 080712	Total/NA	Water	9012A	
180-13262-15	MW-21 080712	Total/NA	Water	9012A	
180-13262-16	MW-23 080712	Total/NA	Water	9012A	
180-13262-17	MW-73 080712	Total/NA	Water	9012A	
HLCS 180-45564/2-A	Lab Control Sample	Total/NA	Water	9012A	
LCS 180-45564/3-A	Lab Control Sample	Total/NA	Water	9012A	
LCSD 180-45564/4-A	Lab Control Sample Dup	Total/NA	Water	9012A	
LLCS 180-45564/1-A	Lab Control Sample	Total/NA	Water	9012A	
MB 180-45564/5-A	Method Blank	Total/NA	Water	9012A	

Analysis Batch: 45615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-1	SW-2 080712	Total/NA	Water	9012A	45564
180-13262-6	MW-12 080712	Total/NA	Water	9012A	45564
180-13262-8	MW-17 080712	Total/NA	Water	9012A	45564
180-13262-10	MW-22 080712	Total/NA	Water	9012A	45564
180-13262-14	MW-20 080712	Total/NA	Water	9012A	45564
180-13262-15	MW-21 080712	Total/NA	Water	9012A	45564
180-13262-16	MW-23 080712	Total/NA	Water	9012A	45564
180-13262-17	MW-73 080712	Total/NA	Water	9012A	45564
HLCS 180-45564/2-A	Lab Control Sample	Total/NA	Water	9012A	45564

QC Association Summary

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

TestAmerica Job ID: 180-13262-1

General Chemistry (Continued)

Analysis Batch: 45615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-45564/3-A	Lab Control Sample	Total/NA	Water	9012A	45564
LCSD 180-45564/4-A	Lab Control Sample Dup	Total/NA	Water	9012A	45564
LLCS 180-45564/1-A	Lab Control Sample	Total/NA	Water	9012A	45564
MB 180-45564/5-A	Method Blank	Total/NA	Water	9012A	45564

Prep Batch: 45720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-2	SW-1 080812	Total/NA	Water	9012A	
180-13262-3	RINSE BLANK 080812	Total/NA	Water	9012A	
180-13262-7	MW-16 080812	Total/NA	Water	9012A	
180-13262-12	MW-13 080812	Total/NA	Water	9012A	
180-13262-13	MW-14 080812	Total/NA	Water	9012A	
HLCS 180-45720/2-A	Lab Control Sample	Total/NA	Water	9012A	
LCS 180-45720/3-A	Lab Control Sample	Total/NA	Water	9012A	
LCSD 180-45720/4-A	Lab Control Sample Dup	Total/NA	Water	9012A	
LLCS 180-45720/1-A	Lab Control Sample	Total/NA	Water	9012A	
MB 180-45720/5-A	Method Blank	Total/NA	Water	9012A	

Analysis Batch: 45810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-2	SW-1 080812	Total/NA	Water	9012A	45720
180-13262-3	RINSE BLANK 080812	Total/NA	Water	9012A	45720
180-13262-7	MW-16 080812	Total/NA	Water	9012A	45720
180-13262-12	MW-13 080812	Total/NA	Water	9012A	45720
180-13262-13	MW-14 080812	Total/NA	Water	9012A	45720
HLCS 180-45720/2-A	Lab Control Sample	Total/NA	Water	9012A	45720
LCS 180-45720/3-A	Lab Control Sample	Total/NA	Water	9012A	45720
LCSD 180-45720/4-A	Lab Control Sample Dup	Total/NA	Water	9012A	45720
LLCS 180-45720/1-A	Lab Control Sample	Total/NA	Water	9012A	45720
MB 180-45720/5-A	Method Blank	Total/NA	Water	9012A	45720

Prep Batch: 124299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-1	SW-2 080712	Total/NA	Water	9016	
180-13262-1 MS	SW-2 080712	Total/NA	Water	9016	
180-13262-1 MSD	SW-2 080712	Total/NA	Water	9016	
180-13262-2	SW-1 080812	Total/NA	Water	9016	
180-13262-3	RINSE BLANK 080812	Total/NA	Water	9016	
180-13262-6	MW-12 080712	Total/NA	Water	9016	
180-13262-7	MW-16 080812	Total/NA	Water	9016	
180-13262-8	MW-17 080712	Total/NA	Water	9016	
180-13262-10	MW-22 080712	Total/NA	Water	9016	
180-13262-12	MW-13 080812	Total/NA	Water	9016	
180-13262-13	MW-14 080812	Total/NA	Water	9016	
180-13262-14	MW-20 080712	Total/NA	Water	9016	
180-13262-15	MW-21 080712	Total/NA	Water	9016	
180-13262-16	MW-23 080712	Total/NA	Water	9016	
180-13262-17	MW-73 080712	Total/NA	Water	9016	
LCS 460-124299/2-A	Lab Control Sample	Total/NA	Water	9016	
MB 460-124299/1-A	Method Blank	Total/NA	Water	9016	

QC Association Summary

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

TestAmerica Job ID: 180-13262-1

General Chemistry (Continued)

Analysis Batch: 124301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-13262-1	SW-2 080712	Total/NA	Water	9016	124299
180-13262-1 MS	SW-2 080712	Total/NA	Water	9016	124299
180-13262-1 MSD	SW-2 080712	Total/NA	Water	9016	124299
180-13262-2	SW-1 080812	Total/NA	Water	9016	124299
180-13262-3	RINSE BLANK 080812	Total/NA	Water	9016	124299
180-13262-6	MW-12 080712	Total/NA	Water	9016	124299
180-13262-7	MW-16 080812	Total/NA	Water	9016	124299
180-13262-8	MW-17 080712	Total/NA	Water	9016	124299
180-13262-10	MW-22 080712	Total/NA	Water	9016	124299
180-13262-12	MW-13 080812	Total/NA	Water	9016	124299
180-13262-13	MW-14 080812	Total/NA	Water	9016	124299
180-13262-14	MW-20 080712	Total/NA	Water	9016	124299
180-13262-15	MW-21 080712	Total/NA	Water	9016	124299
180-13262-16	MW-23 080712	Total/NA	Water	9016	124299
180-13262-17	MW-73 080712	Total/NA	Water	9016	124299
DLCK 460-124301/10 DLCK	Lab Control Sample	Total/NA	Water	9016	
LCS 460-124299/2-A	Lab Control Sample	Total/NA	Water	9016	124299
MB 460-124299/1-A	Method Blank	Total/NA	Water	9016	124299

1
2
3
4
5
6
7
8
9
10
11
12

180-13262

Chain of Custody Record

4.3, 4.7, 3.6, 3.1 #2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location:

Regulatory program:

☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

COC No:

1 of 2 COCs

Client Contact

Company Name:

Address:

City/State/Zip:

Phone:

Project Name:

Project Number:

P.O. #

Client Project Manager:

Telephone:

Email:

Method of Shipment/Carrier:

Shipping/Tracking No:

Site Contact:

Telephone:

Analysis Turnaround Time:

TAI if different from below:

Standards per container:

3 weeks

2 weeks

1 week

2 days

1 day

Lab Contact:

Telephone:

Analyses

Filtered Sample (Y/N)

Composite: C/Grab-C

Containers & Preservatives

H2SO4

HNO3

HCl

NaOH

ZnAc/NaOH

Unpres

Other:

Sample Specific Notes / Special Instructions:

Sample Date

Sample Time

Air

Aqueous

Sediment

Solid

Other:

8/7/12

1200

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Company Name:	AECON	Client Project Manager:	Tamara Paby	Site Contact:	K. Stahl	Lab Contact:	Jill Colussy
Address:	100 Corporate Parkway S. 341	Telephone:	716-836-4506	Telephone:	607-342-4603	Telephone:	
City/State/Zip:	Amherst, NY 14226	Email:	Tamara.Paby@aecon.com	Analysis Turnaround Time:	TAI if different from below:	Standards per container:	
Phone:	716-836-4506	Method of Shipment/Carrier:		3 weeks			
Project Name:	Mural Springs	Shipping/Tracking No:		2 weeks			
Project Number:	18008372			1 week			
P.O. #				2 days			
				1 day			
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:
Sec-2 080712	8/7/12	1200	X				
Sec-1 080812	8/8/12	920	X				
Russ Black 080812	8/8/12	1020	X				
Mu-10 080712	8/7/12	115	X				
Mu-11A 080712	8/7/12	1220	X				
Mu-12 080712	8/7/12	1510	X				
Mu-16 080812	8/8/12	930	X				
Mu-17 080712	8/7/12	1330	X				
Mu-19 080712	8/7/12	1410	X				
Mu-22 080712	8/7/12	1545	X				
Possible Hazard Identification	Non-Hazard	Flammable	Skin Irritant	Poison B	Unknown	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	Return to Client
Special Instructions/OC Requirements & Comments:						Disposal By Lab	Archive For
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	Received in Laboratory by:	Company:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	Received in Laboratory by:	Company:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:	Received in Laboratory by:	Company:

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location:
Regulatory program:

☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.
COC No:

Client Contact Company Name: <u>AECOM</u> Address: <u>100 Corp Parkway Suite 341</u> City/State/Zip: <u>Amherst, NY 14226</u> Phone: <u>716-836-4506</u> Project Name: <u>Mural Springs</u> Project Number: <u>18008572</u> P.O. #:		Client Project Manager: Name: <u>Tamara Ruby</u> Telephone: <u>716-836-4506</u> Email: <u>Tamara.Ruby@AECOM.com</u>		Site Contact: Name: <u>K. Stahl</u> Telephone: <u>607-343-4603</u>		Lab Contact: Name: <u>Jill Colussy</u> Telephone:		COC No: <u>2 of 2</u> COCs	
Sample Identification Sample Date: <u>8/7/12</u> Sample Time: <u>11:25</u> Sample Date: <u>8/8/12</u> Sample Time: <u>9:30</u> Sample Date: <u>8/8/12</u> Sample Time: <u>10:20</u> Sample Date: <u>8/7/12</u> Sample Time: <u>14:35</u> Sample Date: <u>8/7/12</u> Sample Time: <u>15:15</u> Sample Date: <u>8/7/12</u> Sample Time: <u>12:25</u> Sample Date: <u>8/7/12</u> Sample Time: <u>8:00</u> Sample Date: <u>8/3/12</u> Sample Time: <u>—</u>		Matrix: ☐ Air ☐ Aqueous ☐ Sediment ☐ Solid ☐ Other:		Containers & Preservatives: ☐ H2SO4 ☐ HNO3 ☐ HCl ☐ NaOH ☐ ZnAc/NaOH ☐ Unpres ☐ Other:		Analysis Turnaround Time (in BUS days) ☐ 1 day ☐ 2 days ☐ 1 week ☐ 2 weeks ☐ 3 weeks		Filtered Sample (Y/N) ☐ Composite C / Grab G	
MW-07 080712 MW-13 080812 MW-14 080812 MW-20 080712 MW-21 080712 MW-23 080712 MW-23 080712 TRIP BLANK 080712		3 3 2 2 2 3 3 2		2 2 2 2 2 2 2 2		X X X X X X X X		no CN	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return to Client ☒ Dispose By Lab ☐ Archive For		Months		Requisitioned by: <u>[Signature]</u> Company: <u>AECOM</u> Date/Time: <u>8/8/12 11:45</u>		Received by: <u>[Signature]</u> Company: <u>TAAL</u> Date/Time: <u>8-9-12 / 1:00</u>	
Requisitioned by: <u>[Signature]</u> Company:		Received by: <u>[Signature]</u> Company:		Received in Laboratory by: Date/Time:		Company:		Date/Time:	

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 180-13262-1

Login Number: 13262

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
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.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 180-13262-1

Login Number: 13262

List Number: 1

Creator: Hall, Alonzo

List Source: TestAmerica Edison

List Creation: 08/11/12 02:16 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	False	
The cooler's custody seal, if present, is intact.	False	
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.	False	
Multiphasic samples are not present.	False	
Samples do not require splitting or compositing.	False	
Residual Chlorine Checked.	False	