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August 8, 2013

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
April 2013
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 April 23 and 24, 2013, 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 (Figure 1). 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) 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 NYSDEC standard or guidance values in three of the onsite groundwater samples (MW-7, MW-11A, and MW-19).

One upgradient (MW-17), two onsite (MW-12 and MW-16), four downgradient onsite (MW-13, MW-14, MW-22, and MW-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 Standard¹ of 200 micrograms per liter ($\mu\text{g}/\text{L}$) in seven of nine groundwater samples. Free cyanide was detected in six of the nine groundwater samples at concentrations ranging from 0.74 J to 32 J $\mu\text{g}/\text{L}$. 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. BTEX and PAH compounds were not detected in the surface water samples. Total cyanide was detected in both surface water samples at a maximum concentration of 95 $\mu\text{g}/\text{L}$, below the NYSDEC Class D surface water standard of 9,000 $\mu\text{g}/\text{L}$. Free cyanide was detected in the sample collected from location SW-02 at a concentration of 26 J $\mu\text{g}/\text{L}$, above the NYSDEC Class D Surface Water Standard of 22 $\mu\text{g}/\text{L}$. The surface water sample collected from location SW-01, at the downstream site boundary, had a free cyanide concentration of 2.5 $\mu\text{g}/\text{L}$, below the surface water standard.

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 April 23, 2013, 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 one surface water location. Measurements were converted to elevations using reference point elevation data. The data have been used to construct the groundwater contours shown in Figure 1. 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 during the April 2013 event; sampling locations are shown on the attached Figure 1. The samples were analyzed using the following methods:

BTEX	Method SW846 8260B
PAHs	Method SW846 8270C
Cyanide (total)	Method SW846 9012A
Cyanide (free)	Method SW846 9016 ²

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.

² The analytical method for free cyanide analysis for samples collected at the Mineral Springs Road MGP Site was changed from ASTM Method D4282 to USEPA Method SW846 Method 9016. NYSDEC was notified of this change in a letter from AECOM dated April 15, 2013.

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 using a disposable 1.5 micron filter 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 (QA/QC) 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 160 µg/L, below the NYSDEC Groundwater Standard value of 200 µg/L. Free cyanide was detected at a concentration of 1.2 J µg/L. There is no NYSDEC Groundwater Standard for free cyanide. 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.

Five of the six wells had total cyanide concentrations above the NYSDEC Groundwater Standard of 200 µg/L. Detected concentrations ranged from 490 µg/L at MW-21 to 1,100 µg/L at MW-22. Free cyanide was detected in three wells at concentrations ranging from 0.74 J to 9.2 µg/L. There is no NYSDEC Groundwater Standard for free cyanide. 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 wells had a total cyanide groundwater concentration above the NYSDEC Groundwater Standard of 200 µg/L. Total cyanide concentrations were reported as 530 µg/L at MW-12 and 880 µg/L at MW-16.

Free cyanide was detected in MW-12 at 10 µg/L and in MW-16 at 32 J µg/L. There is no NYSDEC Groundwater Standard for free cyanide.

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-7, 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-7 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 and PAH compounds were not detected in either surface water sample.

Total cyanide was detected in SW-01 at a concentration of 14 µg/L and in SW-02 at a concentration of 95 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 2.5 J µg/L, below the NYSDEC Class D Stream Standard of 22 µg/L. Free cyanide was detected in SW-02 at a concentration of 26 J µg/L, above the NYSDEC Class D Stream Standard of 22 µg/L.

Quality Assurance / Quality Control (QA/QC) samples

QA/QC 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.

AECOM Environment
University Corporate Centre
100 Corporate Parkway
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Amherst, NY 14226

Letter of Transmittal

Attention:	David Szymanski Project Manager NYSDEC Division of Environmental Remediation 11 th Floor 625 Broadway Albany, NY 12233-7011	Date:	August 8, 2013
Project reference:	<u>Mineral Springs</u>	Project number:	<u>60250836 - 100</u>

We are sending you the following:

Number of originals:	Number of copies:	Description:
	1	<u>Mineral Springs Groundwater and Surface Water Monitoring Results April 2013 Letter Report</u>

Mr. Szymanski:

Please find enclosed a hard copy of the Groundwater and Surface Water Monitoring Results April 2013 Letter Report for the Mineral Springs Former MGP Site. Please call me if you have any questions at 716.836.4506 ext. 14.

Tamara Raby
Tamara Raby

An equipment (rinsate) 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. No target compounds or analytes were detected in the equipment blank.

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.

No analytes or compounds were detected in the associated laboratory method blanks. All laboratory control sample (i.e., blank spike) recoveries were within the statistically calculated quality control limits.

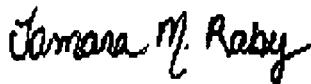
Blind field duplicate samples were collected from MW-7 and MW-16. The duplicate sample from MW-7 was submitted for BTEX and PAH analyses. The duplicate sample from MW-16 was submitted for total and free cyanide analyses. All duplicate sample results were within the acceptance limits as defined by the QAP except for free cyanide analyses for samples MW-16/MW-16 where the relative percent difference (RPD) was greater than the limit of 20%, at 46%. All free cyanide results must be considered as estimates (i.e., qualified "J/UJ") because of imprecision attributable to matrix effects.

DNAPL recovery test well (RTW-1)

On April 23, 2013, the Recovery System at RTW-1 was operated to assess whether DNAPL had accumulated since the August 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: B. Walker – NFG
T. Alexander – NFG
S. McLaughlin – NYSDOH
R. Kennedy – Hogdson Russ LLP
T. Clark, AECOM

TABLES

Table 1
Water Sampling Summary Table
Mineral Springs Road MGP Site, April 2013

Location	Cyanide, Total	Cyanide, Free	BTEX	PAHs	Water Elevation	Benchmark Elevation
USEPA SW846 9012A	USEPA SW846 9016	USEPA SW846 8260B	USEPA SW846 8270C			(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

April 2013

PARAMETER	GROUNDWATER															SURFACE WATER				Quality Assurance / Quality Control					
	Sample ID :	Groundwater		MW-7	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-7 Dup	MW-16 Dup	
		Standard ⁽¹⁾	Sample Date :	Standard ⁽¹⁾	04/23/13	04/23/13	04/23/13	04/23/13	04/24/13	04/24/13	04/23/13	04/23/13	04/24/13	04/23/13	04/24/13	04/23/13	04/24/13	Standard ⁽¹⁾	04/23/13	04/23/13	04/23/13	04/23/13	04/23/13	04/23/13	
BTEX (µg/L)																									
Benzene	1	660		1.0 U	20			—	—	—	—	1.0 U	4,000		—	—	—	10	1.0 U	1.0 U	1.0 U	1.0 U	710	—	
Toluene	5	210		1.0 U	1.0 U		—	—	—	—	—	1.0 U	250 U		—	—	—	6000	1.0 U	1.0 U	1.0 U	1.0 U	220	—	
Ethylbenzene	5	1000		1.0 U	7.3		—	—	—	—	—	1.0 U	210 J		—	—	—	150	1.0 U	1.0 U	1.0 U	1.0 U	1100	—	
Xylene (sum of isomers)	5 (each)	680		3.0 U	5.4		—	—	—	—	—	3.0 U	750 U		—	—	—	590	3.0 U	3.0 U	3.0 U	3.0 U	770	—	
BTEX total	—	2550		nd	32.7		—	—	—	—	—	nd	4210		—	—	—	—	nd	nd	nd	nd	nd	2800	—
PAHs (µg/L)																									
Acenaphthene	20	64		2.1 U	2.9		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	48	1.9 U	2.0 U	—	2.0 U	78	—	
Acenaphthylene	NL	2.0	U	2.1 U	1.4 J		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	1.3 J	—	
Anthracene	50	1.6 J		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	35	1.9 U	2.0 U	—	2.0 U	1.7 J	—	
Benzo(a)anthracene	0.002	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	0.23	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Benzo(a)pyrene	NL	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	0.0012	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Benzo(b)fluoranthene	0.002	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Benzo(g,h,i)perylene	NL	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Benzo(k)fluoranthene	0.002	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Chrysene	0.002	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Dibenz(a,h)anthracene	NL	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Fluoranthene	50	2.0 U		2.1 U	0.36 J		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Fluorene	50	13		2.1 U	0.52 J		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	4.8	1.9 U	2.0 U	—	2.0 U	16	—	
Indeno(1,2,3-cd)pyrene	0.002	2.0 U		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
Naphthalene	10	1,700		2.1 U	0.29 J		—	—	—	—	—	2.0 U	2,600	—	—	—	—	110	1.9 U	2.0 U	—	2.0 U	2000	—	
Phenanthrene	50	12		2.1 U	2.2 U		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	45	1.9 U	2.0 U	—	2.0 U	13	—	
Pyrene	50	2.0 U		2.1 U	0.58 J		—	—	—	—	—	2.0 U	2.2 U	—	—	—	—	42	1.9 U	2.0 U	—	2.0 U	2.0 U	—	
2-Methylnaphthalene	NL	130		2.1 U	2.2 U		—	—	—	—	—	2.0 U	9.5	—	—	—	—	NL	1.9 U	2.0 U	—	2.0 U	160	—	
PAHs total	—	1,922.6		nd	6.05		—	—	—	—	—	nd	2,609.5		—	—	—	—	nd	nd	—	nd	2,254.0	—	
CYANIDE (µg/L)																									
Cyanide, total	200	—		—	—	530	10 U	630		—	880	160	—	730	490	1,100	570	9,000	14	95	—	10 U	—	920	
Cyanide, free	NL	—		—	—	10 J	5.0 UJ	5.0 UJ	—	32 J	1.2 J	—	4.9 J	5.0 UJ	9.2 J	0.74 J	22	2.5 J	26 J	—	5.0 UJ	—	20 J		
Water Elevation (feet)	NL	582.22		581.63	582.78	581.40	579.74	578.43	580.93	582.59	582.68	581.47	579.25	577.59	581.17	578.59	NL	581.95	—	—	—	—	—		

Notes:

NL Not listed
 nd Not detected above method detection limit

— Not analyzed

TB Trip Blank

EB Equipment Blank

J Indicates laboratory estimated value

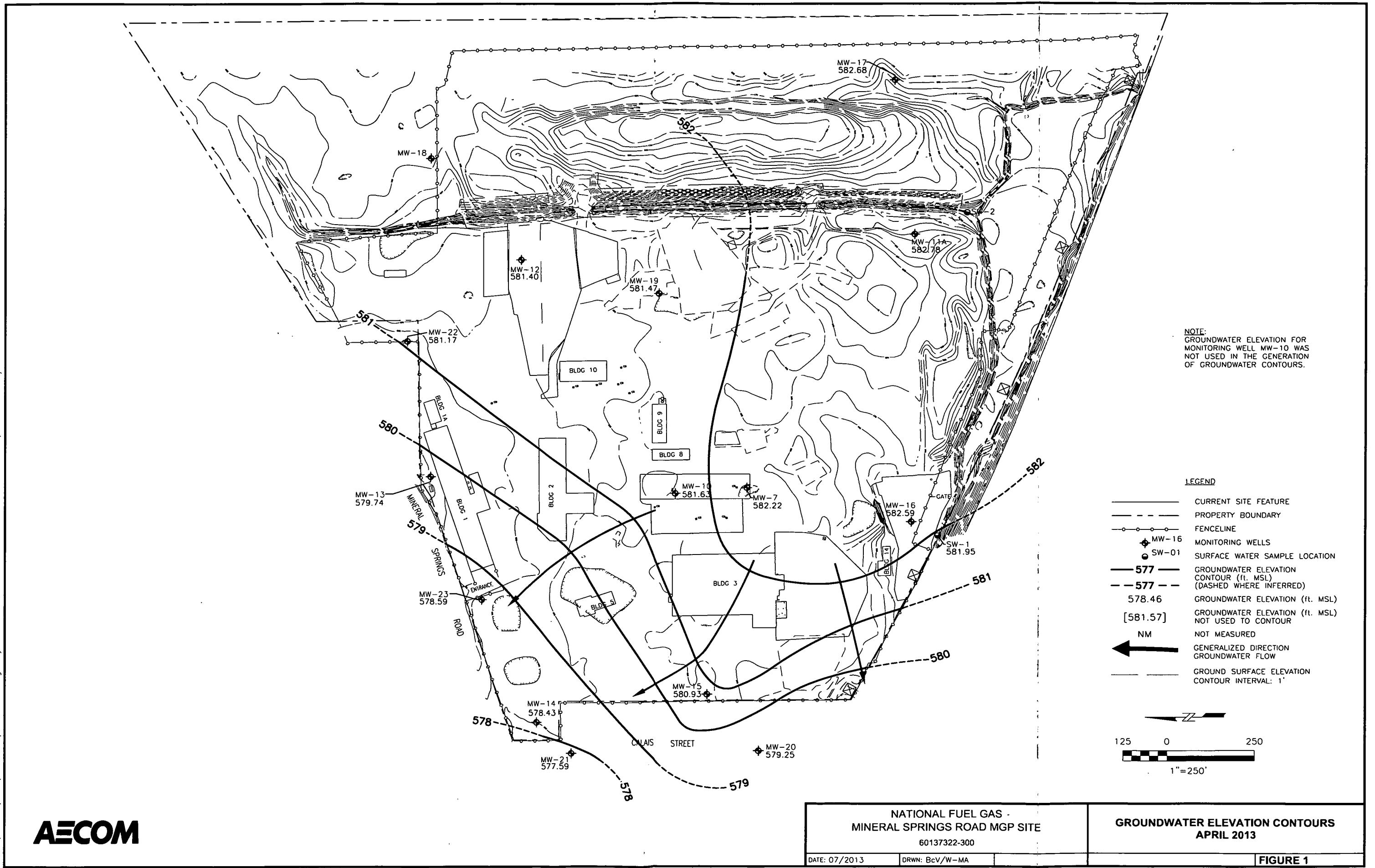
U Analyte was not detected above the reporting limit.

(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



LABORATORY ANALYTICAL RESULTS

1

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: 180-20653-1

Client Project/Site: AECOM, Mineral Springs

For:

AECOM, Inc.

1001 West Seneca Street

Suite 204

Ithaca, New York 14850

Attn: Tamara Raby



Authorized for release by:

5/20/2013 3:29:15 PM

David Dunlap, Laboratory Technical Director

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Designee for

Jill Colussy, Project Manager I

jill.colussy@testamericainc.com

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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.

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Case Narrative

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

TestAmerica Job ID: 180-20653-1

Job ID: 180-20653-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative and Certification Discussion 180-20653-1

Comments

TestAmerica Edison was not NELAP certified for free cyanide by Method 9016. This was discussed with the client prior to the sampling event.

Receipt

The samples were received on 4/25/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.9° C, 3.7° C and 4.2° C.

GC/MS VOA

Due to the concentration of target compounds detected, samples MW-7 042313 (180-20653-1), MW-19 042313 (180-20653-9), and MW-57 042313 (180-20653-18) were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

GC/MS Semi VOA

Due to the concentration of target compounds detected, samples MW-7 042313 (180-20653-1), MW-19 042313 (180-20653-9), and MW-57 042313 (180-20653-18) were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

General Chemistry

Samples MW-12 042313 (180-20653-4), MW-14 042413 (180-20653-6), MW-16 042313 (180-20653-7), MW-20 042413 (180-20653-10), MW-22 042313 (180-20653-12), MW-23 042413 (180-20653-13), and MW-116 042313 (180-20653-19) were analyzed at a dilution for total cyanide. Elevated reporting limits (RLs) are provided.

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Definitions/Glossary

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

TestAmerica Job ID: 180-20653-1

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.

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.

General Chemistry

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.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: 180-20653-1

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	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-13
Illinois	NELAP	5	002602	06-30-13
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-24-13
Louisiana	NELAP	6	04041	06-30-13
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-13
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	04-28-13 *
Utah	NELAP	8	STLP	04-30-13 *
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13

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	09-30-13
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	04-30-14
New Jersey	NELAP	2	12028	06-30-13
New York	NELAP	2	11452	04-01-14
Pennsylvania	NELAP	3	68-00522	02-28-14
Rhode Island	State Program	1	LAO00132	12-30-13
USDA	Federal		NJCA-003-08	03-11-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

Sample Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-20653-1	MW-7 042313	Water	04/23/13 14:25	04/25/13 09:00
180-20653-2	MW-10 042313	Water	04/23/13 12:25	04/25/13 09:00
180-20653-3	MW-11A 042313	Water	04/23/13 15:00	04/25/13 09:00
180-20653-4	MW-12 042313	Water	04/23/13 17:40	04/25/13 09:00
180-20653-5	MW-13 042313	Water	04/23/13 17:00	04/25/13 09:00
180-20653-6	MW-14 042413	Water	04/24/13 09:05	04/25/13 09:00
180-20653-7	MW-16 042313	Water	04/23/13 13:10	04/25/13 09:00
180-20653-8	MW-17 042313	Water	04/23/13 16:10	04/25/13 09:00
180-20653-9	MW-19 042313	Water	04/23/13 17:00	04/25/13 09:00
180-20653-10	MW-20 042413	Water	04/24/13 08:30	04/25/13 09:00
180-20653-11	MW-21 042413	Water	04/24/13 09:10	04/25/13 09:00
180-20653-12	MW-22 042313	Water	04/23/13 16:20	04/25/13 09:00
180-20653-13	MW-23 042413	Water	04/24/13 08:10	04/25/13 09:00
180-20653-14	SW-01 042313	Water	04/23/13 12:30	04/25/13 09:00
180-20653-15	SW-02 042313	Water	04/23/13 15:00	04/25/13 09:00
180-20653-16	TRIP BLANK 042313	Water	04/23/13 00:00	04/25/13 09:00
180-20653-17	RINSE BLANK 042313	Water	04/23/13 13:00	04/25/13 09:00
180-20653-18	MW-57 042313	Water	04/23/13 14:00	04/25/13 09:00
180-20653-19	MW-116 042313	Water	04/23/13 13:40	04/25/13 09:00

TestAmerica Pittsburgh

Method Summary

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

TestAmerica Job ID: 180-20653-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
9014	Cyanide	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

Lab Chronicle

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

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-7 042313
Lab Sample ID: 180-20653-1

Date Collected: 04/23/13 14:25

Matrix: Water

Date Received: 04/25/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	5 mL	5 mL	70692	05/02/13 18:02	DF	TAL PIT
Instrument ID: HP5										
Total/NA	Prep	3520C			1000 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C		1			71685	05/13/13 19:10	VP	TAL PIT
Instrument ID: 733										
Total/NA	Prep	3520C	DL		1000 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C	DL	10			71822	05/14/13 10:40	VP	TAL PIT
Instrument ID: 733										

Client Sample ID: MW-10 042313
Lab Sample ID: 180-20653-2

Date Collected: 04/23/13 12:25

Matrix: Water

Date Received: 04/25/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	70609	05/02/13 10:10	MZ	TAL PIT
Instrument ID: HP6										
Total/NA	Prep	3520C			950 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C		1			71685	05/13/13 19:37	VP	TAL PIT
Instrument ID: 733										

Client Sample ID: MW-11A 042313
Lab Sample ID: 180-20653-3

Date Collected: 04/23/13 15:00

Matrix: Water

Date Received: 04/25/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	70692	05/02/13 18:50	DF	TAL PIT
Instrument ID: HP5										
Total/NA	Prep	3520C			910 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C		1			71685	05/13/13 20:05	VP	TAL PIT
Instrument ID: 733										

Client Sample ID: MW-12 042313
Lab Sample ID: 180-20653-4

Date Collected: 04/23/13 17:40

Matrix: Water

Date Received: 04/25/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		10			70584	05/01/13 13:38	PJ	TAL PIT
Instrument ID: KONELAB1										
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
Instrument ID: Wet9016										

TestAmerica Pittsburgh

Lab Chronicle

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

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-13 042313

Date Collected: 04/23/13 17:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		1			70584	05/01/13 13:09	PJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
		Instrument ID: Wet9016								

Client Sample ID: MW-14 042413

Date Collected: 04/24/13 09:05

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70774	05/03/13 09:50	PJ	TAL PIT
Total/NA	Analysis	9014		10			70810	05/03/13 13:12	PJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
		Instrument ID: Wet9016								

Client Sample ID: MW-16 042313

Date Collected: 04/23/13 13:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		10			70584	05/01/13 13:38	PJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
		Instrument ID: Wet9016								

Client Sample ID: MW-17 042313

Date Collected: 04/23/13 16:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	70609	05/02/13 11:23	MZ	TAL PIT
		Instrument ID: HP6								
Total/NA	Prep	3520C			1020 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C		1			71822	05/14/13 11:06	VP	TAL PIT
		Instrument ID: 733								
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		1			70584	05/01/13 13:09	PJ	TAL PIT
		Instrument ID: KONELAB1								

TestAmerica Pittsburgh

Lab Chronicle

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-17 042313

Date Collected: 04/23/13 16:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016			1		158055	04/29/13 13:00	JAK	TAL EDI
Instrument ID: Wet9016										

Client Sample ID: MW-19 042313

Date Collected: 04/23/13 17:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	5 mL	5 mL	70609	05/02/13 11:47	MZ	TAL PIT
Instrument ID: HP6										
Total/NA	Prep	3520C			930 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C			1		71685	05/13/13 20:59	VP	TAL PIT
Instrument ID: 733										
Total/NA	Prep	3520C	DL		930 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C	DL	20			71822	05/14/13 11:33	VP	TAL PIT
Instrument ID: 733										

Client Sample ID: MW-20 042413

Date Collected: 04/24/13 08:30

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70774	05/03/13 09:50	PJ	TAL PIT
Total/NA	Analysis	9014		10			70810	05/03/13 13:12	PJ	TAL PIT
Instrument ID: KONELAB1										
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016			1		158055	04/29/13 13:00	JAK	TAL EDI
Instrument ID: Wet9016										

Client Sample ID: MW-21 042413

Date Collected: 04/24/13 09:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70774	05/03/13 09:50	PJ	TAL PIT
Total/NA	Analysis	9014		1			70810	05/03/13 12:54	PJ	TAL PIT
Instrument ID: KONELAB1										
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016			1		158055	04/29/13 13:00	JAK	TAL EDI
Instrument ID: Wet9016										

TestAmerica Pittsburgh

Lab Chronicle

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

TestAmerica Job ID: 180-20653-1

1

Client Sample ID: MW-22 042313

Date Collected: 04/23/13 16:20

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-12

Matrix: Water

4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		10			70584	05/01/13 13:38	PJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
		Instrument ID: Wet9016								

Client Sample ID: MW-23 042413

Date Collected: 04/24/13 08:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-13

Matrix: Water

5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		10			70584	05/01/13 14:31	PJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
		Instrument ID: Wet9016								

Client Sample ID: SW-01 042313

Date Collected: 04/23/13 12:30

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-14

Matrix: Water

6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	70609	05/02/13 12:14	MZ	TAL PIT
		Instrument ID: HP6								
Total/NA	Prep	3520C			1040 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C		1			71685	05/13/13 21:27	VP	TAL PIT
		Instrument ID: 733								
Total/NA	Prep	9010C			50 mL	50 mL	70774	05/03/13 09:50	PJ	TAL PIT
Total/NA	Analysis	9014		1			70810	05/03/13 12:54	PJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
		Instrument ID: Wet9016								

Client Sample ID: SW-02 042313

Date Collected: 04/23/13 15:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-15

Matrix: Water

7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	70609	05/02/13 12:38	MZ	TAL PIT
		Instrument ID: HP6								
Total/NA	Prep	3520C			1010 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT

TestAmerica Pittsburgh

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Lab Chronicle

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Client Sample ID: SW-02 042313

Date Collected: 04/23/13 15:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1			71685	05/13/13 21:54	VP	TAL PIT
Instrument ID: 733										
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		1			70584	05/01/13 13:16	PJ	TAL PIT
Instrument ID: KONELAB1										
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
Instrument ID: Wet9016										

Client Sample ID: TRIP BLANK 042313

Date Collected: 04/23/13 00:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	70609	05/02/13 13:04	MZ	TAL PIT
Instrument ID: HP6										

Client Sample ID: RINSE BLANK 042313

Date Collected: 04/23/13 13:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	70609	05/02/13 13:28	MZ	TAL PIT
Instrument ID: HP6										
Total/NA	Prep	3520C			990 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C		1			71685	05/13/13 22:22	VP	TAL PIT
Instrument ID: 733										
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		1			70584	05/01/13 13:16	PJ	TAL PIT
Instrument ID: KONELAB1										
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
Instrument ID: Wet9016										

Client Sample ID: MW-57 042313

Date Collected: 04/23/13 14:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	5 mL	5 mL	70692	05/02/13 18:26	DF	TAL PIT
Instrument ID: HP5										
Total/NA	Prep	3520C			980 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT

TestAmerica Pittsburgh

Lab Chronicle

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

TestAmerica Job ID: 180-20653-1

1

Client Sample ID: MW-57 042313

Date Collected: 04/23/13 14:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-18

Matrix: Water

4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1			71685	05/13/13 22:49	VP	TAL PIT
		Instrument ID: 733								
Total/NA	Prep	3520C	DL		980 mL	10.0 mL	70302	04/29/13 12:56	JM	TAL PIT
Total/NA	Analysis	8270C	DL	20			71822	05/14/13 12:00	VP	TAL PIT
		Instrument ID: 733								

5

Client Sample ID: MW-116 042313

Date Collected: 04/23/13 13:40

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-19

Matrix: Water

6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9010C			50 mL	50 mL	70537	05/01/13 10:15	PJ	TAL PIT
Total/NA	Analysis	9014		10			70584	05/01/13 14:31	PJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9016			3 mL	1.3 mL	158053	04/29/13 07:00	JAK	TAL EDI
Total/NA	Analysis	9016		1			158055	04/29/13 13:00	JAK	TAL EDI
		Instrument ID: Wet9016								

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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

Analyst References:

Lab: TAL EDI

Batch Type: Prep

JAK = Joseph Kowalski

Batch Type: Analysis

JAK = Joseph Kowalski

Lab: TAL PIT

Batch Type: Prep

JM = Jeremy Merriman

PJ = Paul Johnson

Batch Type: Analysis

DF = Donald Ferguson

MZ = Mike Zukowski

PJ = Paul Johnson

VP = Vincent Piccolino

TestAmerica Pittsburgh

Client Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-7 042313

Lab Sample ID: 180-20653-1

Date Collected: 04/23/13 14:25

Matrix: Water

Date Received: 04/25/13 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	660		50	5.3	ug/L			05/02/13 18:02	50
Ethylbenzene	1000		50	11	ug/L			05/02/13 18:02	50
Toluene	210		50	7.5	ug/L			05/02/13 18:02	50
Xylenes, Total	680		150	24	ug/L			05/02/13 18:02	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 135					05/02/13 18:02	50
Toluene-d8 (Surr)	115		71 - 118					05/02/13 18:02	50
4-Bromofluorobenzene (Surr)	99		70 - 118					05/02/13 18:02	50
Dibromofluoromethane (Surr)	105		70 - 128					05/02/13 18:02	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	64		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 19:10	1
Acenaphthylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 19:10	1
Anthracene	1.6 J		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 19:10	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 19:10	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		04/29/13 12:56	05/13/13 19:10	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 19:10	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 19:10	1
Benzo[k]fluoranthene	ND		2.0	0.55	ug/L		04/29/13 12:56	05/13/13 19:10	1
Chrysene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 19:10	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 19:10	1
Fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 19:10	1
Fluorene	13		2.0	0.22	ug/L		04/29/13 12:56	05/13/13 19:10	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		04/29/13 12:56	05/13/13 19:10	1
Naphthalene	950 E		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 19:10	1
Phenanthrene	12		2.0	0.43	ug/L		04/29/13 12:56	05/13/13 19:10	1
Pyrene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 19:10	1
2-Methylnaphthalene	130		2.0	0.12	ug/L		04/29/13 12:56	05/13/13 19:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	63		20	1.4	ug/L		04/29/13 12:56	05/14/13 10:40	10
Acenaphthylene	ND		20	1.5	ug/L		04/29/13 12:56	05/14/13 10:40	10
Anthracene	1.5 J		20	1.5	ug/L		04/29/13 12:56	05/14/13 10:40	10
Benzo[a]anthracene	ND		20	1.5	ug/L		04/29/13 12:56	05/14/13 10:40	10
Benzo[a]pyrene	ND		20	1.3	ug/L		04/29/13 12:56	05/14/13 10:40	10
Benzo[b]fluoranthene	ND		20	1.6	ug/L		04/29/13 12:56	05/14/13 10:40	10
Benzo[g,h,i]perylene	ND		20	1.5	ug/L		04/29/13 12:56	05/14/13 10:40	10
Benzo[k]fluoranthene	ND		20	5.5	ug/L		04/29/13 12:56	05/14/13 10:40	10
Chrysene	ND		20	1.4	ug/L		04/29/13 12:56	05/14/13 10:40	10
Dibenz(a,h)anthracene	ND		20	1.6	ug/L		04/29/13 12:56	05/14/13 10:40	10
Fluoranthene	ND		20	1.6	ug/L		04/29/13 12:56	05/14/13 10:40	10
Fluorene	12 J		20	2.2	ug/L		04/29/13 12:56	05/14/13 10:40	10
Indeno[1,2,3-cd]pyrene	ND		20	2.0	ug/L		04/29/13 12:56	05/14/13 10:40	10
Naphthalene	1700		20	1.4	ug/L		04/29/13 12:56	05/14/13 10:40	10
Phenanthrene	12 J		20	4.3	ug/L		04/29/13 12:56	05/14/13 10:40	10
Pyrene	ND		20	1.6	ug/L		04/29/13 12:56	05/14/13 10:40	10
2-Methylnaphthalene	130		20	1.2	ug/L		04/29/13 12:56	05/14/13 10:40	10

TestAmerica Pittsburgh

Client Sample Results

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

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-10 042313

Date Collected: 04/23/13 12:25

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-2

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		05/02/13 10:10		1
Ethylbenzene	ND		1.0	0.23	ug/L		05/02/13 10:10		1
Toluene	ND		1.0	0.15	ug/L		05/02/13 10:10		1
Xylenes, Total	ND		3.0	0.49	ug/L		05/02/13 10:10		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		64 - 135				05/02/13 10:10		1
Toluene-d8 (Surr)	99		71 - 118				05/02/13 10:10		1
4-Bromofluorobenzene (Surr)	80		70 - 118				05/02/13 10:10		1
Dibromofluoromethane (Surr)	120		70 - 128				05/02/13 10:10		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		04/29/13 12:56	05/13/13 19:37	1
Acenaphthylene	ND		2.1	0.16	ug/L		04/29/13 12:56	05/13/13 19:37	1
Anthracene	ND		2.1	0.16	ug/L		04/29/13 12:56	05/13/13 19:37	1
Benzo[a]anthracene	ND		2.1	0.15	ug/L		04/29/13 12:56	05/13/13 19:37	1
Benzo[a]pyrene	ND		2.1	0.14	ug/L		04/29/13 12:56	05/13/13 19:37	1
Benzo[b]fluoranthene	ND		2.1	0.17	ug/L		04/29/13 12:56	05/13/13 19:37	1
Benzo[g,h,i]perylene	ND		2.1	0.16	ug/L		04/29/13 12:56	05/13/13 19:37	1
Benzo[k]fluoranthene	ND		2.1	0.58	ug/L		04/29/13 12:56	05/13/13 19:37	1
Chrysene	ND		2.1	0.15	ug/L		04/29/13 12:56	05/13/13 19:37	1
Dibenz(a,h)anthracene	ND		2.1	0.16	ug/L		04/29/13 12:56	05/13/13 19:37	1
Fluoranthene	ND		2.1	0.17	ug/L		04/29/13 12:56	05/13/13 19:37	1
Fluorene	ND		2.1	0.23	ug/L		04/29/13 12:56	05/13/13 19:37	1
Indeno[1,2,3-cd]pyrene	ND		2.1	0.21	ug/L		04/29/13 12:56	05/13/13 19:37	1
Naphthalene	ND		2.1	0.15	ug/L		04/29/13 12:56	05/13/13 19:37	1
Phenanthrene	ND		2.1	0.45	ug/L		04/29/13 12:56	05/13/13 19:37	1
Pyrene	ND		2.1	0.17	ug/L		04/29/13 12:56	05/13/13 19:37	1
2-Methylnaphthalene	ND		2.1	0.13	ug/L		04/29/13 12:56	05/13/13 19:37	1

Client Sample ID: MW-11A 042313

Date Collected: 04/23/13 15:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	20		1.0	0.11	ug/L		05/02/13 18:50		1
Ethylbenzene	7.3		1.0	0.23	ug/L		05/02/13 18:50		1
Toluene	ND		1.0	0.15	ug/L		05/02/13 18:50		1
Xylenes, Total	5.4		3.0	0.49	ug/L		05/02/13 18:50		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 135				05/02/13 18:50		1
Toluene-d8 (Surr)	113		71 - 118				05/02/13 18:50		1
4-Bromofluorobenzene (Surr)	94		70 - 118				05/02/13 18:50		1
Dibromofluoromethane (Surr)	102		70 - 128				05/02/13 18:50		1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.9		2.2	0.16	ug/L		04/29/13 12:56	05/13/13 20:05	1

TestAmerica Pittsburgh

Client Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-11A 042313

Date Collected: 04/23/13 15:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	1.4	J	2.2	0.17	ug/L		04/29/13 12:56	05/13/13 20:05	1
Anthracene	ND		2.2	0.17	ug/L		04/29/13 12:56	05/13/13 20:05	1
Benzo[a]anthracene	ND		2.2	0.16	ug/L		04/29/13 12:56	05/13/13 20:05	1
Benzo[a]pyrene	ND		2.2	0.15	ug/L		04/29/13 12:56	05/13/13 20:05	1
Benzo[b]fluoranthene	ND		2.2	0.17	ug/L		04/29/13 12:56	05/13/13 20:05	1
Benzo[g,h,i]perylene	ND		2.2	0.17	ug/L		04/29/13 12:56	05/13/13 20:05	1
Benzo[k]fluoranthene	ND		2.2	0.60	ug/L		04/29/13 12:56	05/13/13 20:05	1
Chrysene	ND		2.2	0.15	ug/L		04/29/13 12:56	05/13/13 20:05	1
Dibenz(a,h)anthracene	ND		2.2	0.17	ug/L		04/29/13 12:56	05/13/13 20:05	1
Fluoranthene	0.36	J	2.2	0.18	ug/L		04/29/13 12:56	05/13/13 20:05	1
Fluorene	0.52	J	2.2	0.24	ug/L		04/29/13 12:56	05/13/13 20:05	1
Indeno[1,2,3-cd]pyrene	ND		2.2	0.22	ug/L		04/29/13 12:56	05/13/13 20:05	1
Naphthalene	0.29	J	2.2	0.15	ug/L		04/29/13 12:56	05/13/13 20:05	1
Phenanthrene	ND		2.2	0.47	ug/L		04/29/13 12:56	05/13/13 20:05	1
Pyrene	0.58	J	2.2	0.17	ug/L		04/29/13 12:56	05/13/13 20:05	1
2-Methylnaphthalene	ND		2.2	0.13	ug/L		04/29/13 12:56	05/13/13 20:05	1

Client Sample ID: MW-12 042313

Date Collected: 04/23/13 17:40

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-4

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	530		100	100	ug/L		05/01/13 10:15	05/01/13 13:38	10
Cyanide, Free	10		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: MW-13 042313

Date Collected: 04/23/13 17:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-5

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	10	ug/L		05/01/13 10:15	05/01/13 13:09	1
Cyanide, Free	ND		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: MW-14 042413

Date Collected: 04/24/13 09:05

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-6

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	630		100	100	ug/L		05/03/13 09:50	05/03/13 13:12	10
Cyanide, Free	ND		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

TestAmerica Pittsburgh

Client Sample Results

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

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-16 042313

Date Collected: 04/23/13 13:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-7

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	880		100	100	ug/L		05/01/13 10:15	05/01/13 13:38	10
Cyanide, Free	32		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: MW-17 042313

Date Collected: 04/23/13 16:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-8

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		05/02/13 11:23	05/02/13 11:23	1
Ethylbenzene	ND		1.0	0.23	ug/L		05/02/13 11:23	05/02/13 11:23	1
Toluene	ND		1.0	0.15	ug/L		05/02/13 11:23	05/02/13 11:23	1
Xylenes, Total	ND		3.0	0.49	ug/L		05/02/13 11:23	05/02/13 11:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Sur)	127		64 - 135				05/02/13 11:23	05/02/13 11:23	1
Toluene-d8 (Sur)	99		71 - 118				05/02/13 11:23	05/02/13 11:23	1
4-Bromofluorobenzene (Sur)	77		70 - 118				05/02/13 11:23	05/02/13 11:23	1
Dibromofluoromethane (Sur)	123		70 - 128				05/02/13 11:23	05/02/13 11:23	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		04/29/13 12:56	05/14/13 11:06	1
Acenaphthylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/14/13 11:06	1
Anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/14/13 11:06	1
Benzo[a]anthracene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/14/13 11:06	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		04/29/13 12:56	05/14/13 11:06	1
Benzo[b]fluoranthene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/14/13 11:06	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/14/13 11:06	1
Benzo[k]fluoranthene	ND		2.0	0.54	ug/L		04/29/13 12:56	05/14/13 11:06	1
Chrysene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/14/13 11:06	1
Dibenz(a,h)anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/14/13 11:06	1
Fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/14/13 11:06	1
Fluorene	ND		2.0	0.21	ug/L		04/29/13 12:56	05/14/13 11:06	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		04/29/13 12:56	05/14/13 11:06	1
Naphthalene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/14/13 11:06	1
Phenanthrene	ND		2.0	0.42	ug/L		04/29/13 12:56	05/14/13 11:06	1
Pyrene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/14/13 11:06	1
2-Methylnaphthalene	ND		2.0	0.12	ug/L		04/29/13 12:56	05/14/13 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	160		10	10	ug/L		05/01/13 10:15	05/01/13 13:09	1
Cyanide, Free	1.2	J	5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

TestAmerica Pittsburgh

Client Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-19 042313

Lab Sample ID: 180-20653-9

Date Collected: 04/23/13 17:00

Matrix: Water

Date Received: 04/25/13 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4000		250	26	ug/L			05/02/13 11:47	250
Ethylbenzene	210	J	250	57	ug/L			05/02/13 11:47	250
Toluene	ND		250	38	ug/L			05/02/13 11:47	250
Xylenes, Total	ND		750	120	ug/L			05/02/13 11:47	250
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Sur)	116			64 - 135				05/02/13 11:47	250
Toluene-d8 (Sur)	100			71 - 118				05/02/13 11:47	250
4-Bromofluorobenzene (Sur)	82			70 - 118				05/02/13 11:47	250
Dibromofluoromethane (Sur)	116			70 - 128				05/02/13 11:47	250

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			05/13/13 20:59	1
Acenaphthylene	ND		2.2	0.16	ug/L			05/13/13 20:59	1
Anthracene	ND		2.2	0.17	ug/L			05/13/13 20:59	1
Benzo[a]anthracene	ND		2.2	0.16	ug/L			05/13/13 20:59	1
Benzo[a]pyrene	ND		2.2	0.14	ug/L			05/13/13 20:59	1
Benzo[b]fluoranthene	ND		2.2	0.17	ug/L			05/13/13 20:59	1
Benzo[g,h,i]perylene	ND		2.2	0.16	ug/L			05/13/13 20:59	1
Benzo[k]fluoranthene	ND		2.2	0.59	ug/L			05/13/13 20:59	1
Chrysene	ND		2.2	0.15	ug/L			05/13/13 20:59	1
Dibenz(a,h)anthracene	ND		2.2	0.17	ug/L			05/13/13 20:59	1
Fluoranthene	ND		2.2	0.17	ug/L			05/13/13 20:59	1
Fluorene	ND		2.2	0.23	ug/L			05/13/13 20:59	1
Indeno[1,2,3-cd]pyrene	ND		2.2	0.21	ug/L			05/13/13 20:59	1
Naphthalene	1200	E	2.2	0.15	ug/L			05/13/13 20:59	1
Phenanthrene	ND		2.2	0.46	ug/L			05/13/13 20:59	1
Pyrene	ND		2.2	0.17	ug/L			05/13/13 20:59	1
2-Methylnaphthalene	9.5		2.2	0.13	ug/L			05/13/13 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		43	3.1	ug/L			05/14/13 11:33	20
Acenaphthylene	ND		43	3.3	ug/L			05/14/13 11:33	20
Anthracene	ND		43	3.3	ug/L			05/14/13 11:33	20
Benzo[a]anthracene	ND		43	3.2	ug/L			05/14/13 11:33	20
Benzo[a]pyrene	ND		43	2.9	ug/L			05/14/13 11:33	20
Benzo[b]fluoranthene	ND		43	3.4	ug/L			05/14/13 11:33	20
Benzo[g,h,i]perylene	ND		43	3.2	ug/L			05/14/13 11:33	20
Benzo[k]fluoranthene	ND		43	12	ug/L			05/14/13 11:33	20
Chrysene	ND		43	3.0	ug/L			05/14/13 11:33	20
Dibenz(a,h)anthracene	ND		43	3.3	ug/L			05/14/13 11:33	20
Fluoranthene	ND		43	3.5	ug/L			05/14/13 11:33	20
Fluorene	ND		43	4.6	ug/L			05/14/13 11:33	20
Indeno[1,2,3-cd]pyrene	ND		43	4.3	ug/L			05/14/13 11:33	20
Naphthalene	2600		43	3.0	ug/L			05/14/13 11:33	20
Phenanthrene	ND		43	9.2	ug/L			05/14/13 11:33	20
Pyrene	ND		43	3.4	ug/L			05/14/13 11:33	20
2-Methylnaphthalene	9.0	J	43	2.6	ug/L			05/14/13 11:33	20

TestAmerica Pittsburgh

Client Sample Results

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

TestAmerica Job ID: 180-20653-1

1

Client Sample ID: MW-20 042413

Date Collected: 04/24/13 08:30

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-10

Matrix: Water

4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	730		100	100	ug/L		05/03/13 09:50	05/03/13 13:12	10
Cyanide, Free	4.9 J		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: MW-21 042413

Date Collected: 04/24/13 09:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-11

Matrix: Water

5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	490		10	10	ug/L		05/03/13 09:50	05/03/13 12:54	1
Cyanide, Free	ND		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: MW-22 042313

Date Collected: 04/23/13 16:20

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-12

Matrix: Water

6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1100		100	100	ug/L		05/01/13 10:15	05/01/13 13:38	10
Cyanide, Free	9.2		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: MW-23 042413

Date Collected: 04/24/13 08:10

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-13

Matrix: Water

7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	570		100	100	ug/L		05/01/13 10:15	05/01/13 14:31	10
Cyanide, Free	0.74 J		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: SW-01 042313

Date Collected: 04/23/13 12:30

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-14

Matrix: Water

8

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		05/02/13 12:14		1
Ethylbenzene	ND		1.0	0.23	ug/L		05/02/13 12:14		1
Toluene	ND		1.0	0.15	ug/L		05/02/13 12:14		1
Xylenes, Total	ND		3.0	0.49	ug/L		05/02/13 12:14		1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Sur)	124		64 - 135		05/02/13 12:14	1
Toluene-d8 (Sur)	98		71 - 118		05/02/13 12:14	1
4-Bromofluorobenzene (Sur)	82		70 - 118		05/02/13 12:14	1
Dibromofluoromethane (Sur)	121		70 - 128		05/02/13 12:14	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		04/29/13 12:56	05/13/13 21:27	1
Acenaphthylene	ND		1.9	0.15	ug/L		04/29/13 12:56	05/13/13 21:27	1

TestAmerica Pittsburgh

Client Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Client Sample ID: SW-01 042313

Date Collected: 04/23/13 12:30

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		1.9	0.15	ug/L		04/29/13 12:56	05/13/13 21:27	1
Benzo[a]anthracene	ND		1.9	0.14	ug/L		04/29/13 12:56	05/13/13 21:27	1
Benzo[a]pyrene	ND		1.9	0.13	ug/L		04/29/13 12:56	05/13/13 21:27	1
Benzo[b]fluoranthene	ND		1.9	0.15	ug/L		04/29/13 12:56	05/13/13 21:27	1
Benzo[g,h,i]perylene	ND		1.9	0.15	ug/L		04/29/13 12:56	05/13/13 21:27	1
Benzo[k]fluoranthene	ND		1.9	0.53	ug/L		04/29/13 12:56	05/13/13 21:27	1
Chrysene	ND		1.9	0.13	ug/L		04/29/13 12:56	05/13/13 21:27	1
Dibenz(a,h)anthracene	ND		1.9	0.15	ug/L		04/29/13 12:56	05/13/13 21:27	1
Fluoranthene	ND		1.9	0.16	ug/L		04/29/13 12:56	05/13/13 21:27	1
Fluorene	ND		1.9	0.21	ug/L		04/29/13 12:56	05/13/13 21:27	1
Indeno[1,2,3-cd]pyrene	ND		1.9	0.19	ug/L		04/29/13 12:56	05/13/13 21:27	1
Naphthalene	ND		1.9	0.13	ug/L		04/29/13 12:56	05/13/13 21:27	1
Phenanthrene	ND		1.9	0.41	ug/L		04/29/13 12:56	05/13/13 21:27	1
Pyrene	ND		1.9	0.15	ug/L		04/29/13 12:56	05/13/13 21:27	1
2-Methylnaphthalene	ND		1.9	0.12	ug/L		04/29/13 12:56	05/13/13 21:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	14		10	10	ug/L		05/03/13 09:50	05/03/13 12:54	1
Cyanide, Free	2.5	J	5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: SW-02 042313

Date Collected: 04/23/13 15:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-15

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			05/02/13 12:38	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/02/13 12:38	1
Toluene	ND		1.0	0.15	ug/L			05/02/13 12:38	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/02/13 12:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Sum)	122		64 - 135		05/02/13 12:38	1
Toluene-d8 (Surr)	103		71 - 118		05/02/13 12:38	1
4-Bromofluorobenzene (Surr)	79		70 - 118		05/02/13 12:38	1
Dibromofluoromethane (Surr)	119		70 - 128		05/02/13 12:38	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		04/29/13 12:56	05/13/13 21:54	1
Acenaphthylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 21:54	1
Anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 21:54	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 21:54	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		04/29/13 12:56	05/13/13 21:54	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 21:54	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 21:54	1
Benzo[k]fluoranthene	ND		2.0	0.54	ug/L		04/29/13 12:56	05/13/13 21:54	1
Chrysene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 21:54	1
Dibenz(a,h)anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 21:54	1

TestAmerica Pittsburgh

Client Sample Results

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

TestAmerica Job ID: 180-20653-1

Client Sample ID: SW-02 042313

Date Collected: 04/23/13 15:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 21:54	1
Fluorene	ND		2.0	0.21	ug/L		04/29/13 12:56	05/13/13 21:54	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		04/29/13 12:56	05/13/13 21:54	1
Naphthalene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 21:54	1
Phenanthrene	ND		2.0	0.42	ug/L		04/29/13 12:56	05/13/13 21:54	1
Pyrene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 21:54	1
2-Methylnaphthalene	ND		2.0	0.12	ug/L		04/29/13 12:56	05/13/13 21:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	95		10	10	ug/L		05/01/13 10:15	05/01/13 13:16	1
Cyanide, Free	26		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: TRIP BLANK 042313

Date Collected: 04/23/13 00:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-16

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			05/02/13 13:04	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/02/13 13:04	1
Toluene	ND		1.0	0.15	ug/L			05/02/13 13:04	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/02/13 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		64 - 135		05/02/13 13:04	1
Toluene-d8 (Surr)	100		71 - 118		05/02/13 13:04	1
4-Bromofluorobenzene (Surr)	90		70 - 118		05/02/13 13:04	1
Dibromofluoromethane (Surr)	127		70 - 128		05/02/13 13:04	1

Client Sample ID: RINSE BLANK 042313

Date Collected: 04/23/13 13:00

Date Received: 04/25/13 09:00

Lab Sample ID: 180-20653-17

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			05/02/13 13:28	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/02/13 13:28	1
Toluene	ND		1.0	0.15	ug/L			05/02/13 13:28	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/02/13 13:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		64 - 135		05/02/13 13:28	1
Toluene-d8 (Surr)	97		71 - 118		05/02/13 13:28	1
4-Bromofluorobenzene (Surr)	79		70 - 118		05/02/13 13:28	1
Dibromofluoromethane (Surr)	124		70 - 128		05/02/13 13:28	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		04/29/13 12:56	05/13/13 22:22	1
Acenaphthylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 22:22	1

TestAmerica Pittsburgh

Client Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Client Sample ID: RINSE BLANK 042313

Lab Sample ID: 180-20653-17

Matrix: Water

Date Collected: 04/23/13 13:00

Date Received: 04/25/13 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:22	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 22:22	1
Benzo[a]pyrene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 22:22	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:22	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 22:22	1
Benzo[k]fluoranthene	ND		2.0	0.55	ug/L		04/29/13 12:56	05/13/13 22:22	1
Chrysene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 22:22	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:22	1
Fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:22	1
Fluorene	ND		2.0	0.22	ug/L		04/29/13 12:56	05/13/13 22:22	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		04/29/13 12:56	05/13/13 22:22	1
Naphthalene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 22:22	1
Phenanthrene	ND		2.0	0.43	ug/L		04/29/13 12:56	05/13/13 22:22	1
Pyrene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:22	1
2-Methylnaphthalene	ND		2.0	0.12	ug/L		04/29/13 12:56	05/13/13 22:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	10	ug/L		05/01/13 10:15	05/01/13 13:16	1
Cyanide, Free	ND		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Client Sample ID: MW-57 042313

Lab Sample ID: 180-20653-18

Matrix: Water

Date Collected: 04/23/13 14:00

Date Received: 04/25/13 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	710		50	5.3	ug/L			05/02/13 18:26	50
Ethylbenzene	1100		50	11	ug/L			05/02/13 18:26	50
Toluene	220		50	7.5	ug/L			05/02/13 18:26	50
Xylenes, Total	770		150	24	ug/L			05/02/13 18:26	50

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Sur)	99		64 - 135		05/02/13 18:26	50
Toluene-d8 (Sur)	112		71 - 118		05/02/13 18:26	50
4-Bromofluorobenzene (Sur)	99		70 - 118		05/02/13 18:26	50
Dibromofluoromethane (Sur)	103		70 - 128		05/02/13 18:26	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	78		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 22:49	1
Acenaphthylene	1.3 J		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:49	1
Anthracene	1.7 J		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:49	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 22:49	1
Benzo[a]pyrene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 22:49	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:49	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 22:49	1
Benzo[k]fluoranthene	ND		2.0	0.56	ug/L		04/29/13 12:56	05/13/13 22:49	1
Chrysene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 22:49	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:49	1

TestAmerica Pittsburgh

Client Sample Results

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

TestAmerica Job ID: 180-20653-1

Client Sample ID: MW-57 042313

Lab Sample ID: 180-20653-18

Date Collected: 04/23/13 14:00

Matrix: Water

Date Received: 04/25/13 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		2.0	0.17	ug/L		04/29/13 12:56	05/13/13 22:49	1
Fluorene	16		2.0	0.22	ug/L		04/29/13 12:56	05/13/13 22:49	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		04/29/13 12:56	05/13/13 22:49	1
Naphthalene	1100	E	2.0	0.14	ug/L		04/29/13 12:56	05/13/13 22:49	1
Phenanthrene	13		2.0	0.44	ug/L		04/29/13 12:56	05/13/13 22:49	1
Pyrene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 22:49	1
2-Methylnaphthalene	160		2.0	0.12	ug/L		04/29/13 12:56	05/13/13 22:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	77		41	2.9	ug/L		04/29/13 12:56	05/14/13 12:00	20
Acenaphthylene	ND		41	3.1	ug/L		04/29/13 12:56	05/14/13 12:00	20
Anthracene	ND		41	3.1	ug/L		04/29/13 12:56	05/14/13 12:00	20
Benzo[a]anthracene	ND		41	3.0	ug/L		04/29/13 12:56	05/14/13 12:00	20
Benzo[a]pyrene	ND		41	2.7	ug/L		04/29/13 12:56	05/14/13 12:00	20
Benzo[b]fluoranthene	ND		41	3.2	ug/L		04/29/13 12:56	05/14/13 12:00	20
Benzo[g,h,i]perylene	ND		41	3.1	ug/L		04/29/13 12:56	05/14/13 12:00	20
Benzo[k]fluoranthene	ND		41	11	ug/L		04/29/13 12:56	05/14/13 12:00	20
Chrysene	ND		41	2.9	ug/L		04/29/13 12:56	05/14/13 12:00	20
Dibenz(a,h)anthracene	ND		41	3.2	ug/L		04/29/13 12:56	05/14/13 12:00	20
Fluoranthene	ND		41	3.3	ug/L		04/29/13 12:56	05/14/13 12:00	20
Fluorene	14	J	41	4.4	ug/L		04/29/13 12:56	05/14/13 12:00	20
Indeno[1,2,3-cd]pyrene	ND		41	4.1	ug/L		04/29/13 12:56	05/14/13 12:00	20
Naphthalene	2000		41	2.9	ug/L		04/29/13 12:56	05/14/13 12:00	20
Phenanthrene	14	J	41	8.7	ug/L		04/29/13 12:56	05/14/13 12:00	20
Pyrene	ND		41	3.2	ug/L		04/29/13 12:56	05/14/13 12:00	20
2-Methylnaphthalene	150		41	2.5	ug/L		04/29/13 12:56	05/14/13 12:00	20

Client Sample ID: MW-116 042313

Lab Sample ID: 180-20653-19

Date Collected: 04/23/13 13:40

Matrix: Water

Date Received: 04/25/13 09:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	920		100	100	ug/L		05/01/13 10:15	05/01/13 14:31	10
Cyanide, Free	20		5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

TestAmerica Pittsburgh

QC Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

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

Lab Sample ID: MB 180-70609/3

Matrix: Water

Analysis Batch: 70609

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			05/02/13 03:15	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/02/13 03:15	1
Toluene	ND		1.0	0.15	ug/L			05/02/13 03:15	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/02/13 03:15	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		64 - 135					05/02/13 03:15	1
Toluene-d8 (Surr)	103		71 - 118					05/02/13 03:15	1
4-Bromofluorobenzene (Surr)	82		70 - 118					05/02/13 03:15	1
Dibromofluoromethane (Surr)	116		70 - 128					05/02/13 03:15	1

Lab Sample ID: LCS 180-70609/6

Matrix: Water

Analysis Batch: 70609

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Benzene	10.0	9.84		ug/L		98	80 - 120
Ethylbenzene	10.0	10.1		ug/L		101	72 - 126
Toluene	10.0	10.5		ug/L		105	80 - 123
Xylenes, Total	30.0	31.5		ug/L		105	76 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 135				
Toluene-d8 (Surr)	94		71 - 118				
4-Bromofluorobenzene (Surr)	90		70 - 118				
Dibromofluoromethane (Surr)	96		70 - 128				

Lab Sample ID: MB 180-70692/3

Matrix: Water

Analysis Batch: 70692

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			05/02/13 11:55	1
Ethylbenzene	ND		1.0	0.23	ug/L			05/02/13 11:55	1
Toluene	ND		1.0	0.15	ug/L			05/02/13 11:55	1
Xylenes, Total	ND		3.0	0.49	ug/L			05/02/13 11:55	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 135					05/02/13 11:55	1
Toluene-d8 (Surr)	115		71 - 118					05/02/13 11:55	1
4-Bromofluorobenzene (Surr)	85		70 - 118					05/02/13 11:55	1
Dibromofluoromethane (Surr)	97		70 - 128					05/02/13 11:55	1

TestAmerica Pittsburgh

QC Sample Results

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

TestAmerica Job ID: 180-20653-1

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

Lab Sample ID: LCS 180-70692/6			Client Sample ID: Lab Control Sample					
Matrix: Water			Prep Type: Total/NA					
Analysis Batch: 70692								
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	10.0	8.96		ug/L		90	80 - 120	
Ethylbenzene	10.0	9.47		ug/L		95	72 - 126	
Toluene	10.0	10.8		ug/L		108	80 - 123	
Xylenes, Total	30.0	28.6		ug/L		95	76 - 128	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
1,2-Dichloroethane-d4 (Sur)	80		64 - 135					
Toluene-d8 (Sur)	108		71 - 118					
4-Bromofluorobenzene (Sur)	86		70 - 118					
Dibromofluoromethane (Sur)	89		70 - 128					

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

Lab Sample ID: MB 180-70302/1-A			Client Sample ID: Method Blank						
Matrix: Water			Prep Type: Total/NA						
Analysis Batch: 71685			Prep Batch: 70302						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 13:45	1
Acenaphthylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 13:45	1
Anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 13:45	1
Benzo[a]anthracene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 13:45	1
Benzo[a]pyrene	ND		2.0	0.13	ug/L		04/29/13 12:56	05/13/13 13:45	1
Benzo[b]fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 13:45	1
Benzo[g,h,i]perylene	ND		2.0	0.15	ug/L		04/29/13 12:56	05/13/13 13:45	1
Benzo[k]fluoranthene	ND		2.0	0.55	ug/L		04/29/13 12:56	05/13/13 13:45	1
Chrysene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 13:45	1
Dibenz(a,h)anthracene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 13:45	1
Fluoranthene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 13:45	1
Fluorene	ND		2.0	0.22	ug/L		04/29/13 12:56	05/13/13 13:45	1
Indeno[1,2,3-cd]pyrene	ND		2.0	0.20	ug/L		04/29/13 12:56	05/13/13 13:45	1
Naphthalene	ND		2.0	0.14	ug/L		04/29/13 12:56	05/13/13 13:45	1
Phenanthrene	ND		2.0	0.43	ug/L		04/29/13 12:56	05/13/13 13:45	1
Pyrene	ND		2.0	0.16	ug/L		04/29/13 12:56	05/13/13 13:45	1
2-Methylnaphthalene	ND		2.0	0.12	ug/L		04/29/13 12:56	05/13/13 13:45	1

Lab Sample ID: LCS 180-70302/2-A			Client Sample ID: Lab Control Sample					
Matrix: Water			Prep Type: Total/NA					
Analysis Batch: 71685			Prep Batch: 70302					
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Acenaphthene	200	150		ug/L		75	39 - 106	
Acenaphthylene	200	174		ug/L		87	40 - 113	
Anthracene	200	159		ug/L		80	37 - 108	
Benzo[a]anthracene	200	153		ug/L		77	40 - 103	
Benzo[a]pyrene	200	167		ug/L		84	37 - 105	
Benzo[b]fluoranthene	200	145		ug/L		72	35 - 100	
Benzo[g,h,i]perylene	200	152		ug/L		76	31 - 118	

TestAmerica Pittsburgh

QC Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

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

Lab Sample ID: LCS 180-70302/2-A							Client Sample ID: Lab Control Sample				
							Prep Type: Total/NA				
							Prep Batch: 70302				
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits				
Benz[k]fluoranthene	200	153		ug/L	77	37 - 108					
Chrysene	200	140		ug/L	70	39 - 103					
Dibenz(a,h)anthracene	200	106		ug/L	53	32 - 117					
Fluoranthene	200	161		ug/L	81	35 - 111					
Fluorene	200	152		ug/L	76	39 - 107					
Indeno[1,2,3-cd]pyrene	200	148		ug/L	74	32 - 116					
Naphthalene	200	147		ug/L	74	35 - 98					
Phenanthrene	200	148		ug/L	74	34 - 107					
Pyrene	200	152		ug/L	76	36 - 115					
2-Methylnaphthalene	200	149		ug/L	74	36 - 101					

Lab Sample ID: LCSD 180-70302/3-A

Lab Sample ID: LCSD 180-70302/3-A							Client Sample ID: Lab Control Sample Dup				
							Prep Type: Total/NA				
							Prep Batch: 70302				
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits				
Acenaphthene	200	141		ug/L	70	39 - 106					
Acenaphthylene	200	163		ug/L	81	40 - 113					
Anthracene	200	152		ug/L	76	37 - 108					
Benzo[a]anthracene	200	146		ug/L	73	40 - 103					
Benzo[a]pyrene	200	158		ug/L	79	37 - 105					
Benzo[b]fluoranthene	200	142		ug/L	71	35 - 100					
Benzo[g,h,i]perylene	200	142		ug/L	71	31 - 118					
Benzo[k]fluoranthene	200	135		ug/L	68	37 - 108					
Chrysene	200	133		ug/L	66	39 - 103					
Dibenz(a,h)anthracene	200	99.6		ug/L	50	32 - 117					
Fluoranthene	200	155		ug/L	78	35 - 111					
Fluorene	200	146		ug/L	73	39 - 107					
Indeno[1,2,3-cd]pyrene	200	138		ug/L	69	32 - 116					
Naphthalene	200	140		ug/L	70	35 - 98					
Phenanthrene	200	139		ug/L	70	34 - 107					
Pyrene	200	141		ug/L	71	36 - 115					
2-Methylnaphthalene	200	143		ug/L	71	36 - 101					

Method: 9014 - Cyanide

Lab Sample ID: MB 180-70537/4-A							Client Sample ID: Method Blank				
							Prep Type: Total/NA				
							Prep Batch: 70537				
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
Cyanide, Total	ND		10	10	ug/L		05/01/13 10:15	05/01/13 13:01			1

Lab Sample ID: HLCS 180-70537/2-A

Lab Sample ID: HLCS 180-70537/2-A							Client Sample ID: Lab Control Sample				
							Prep Type: Total/NA				
							Prep Batch: 70537				
Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits				
Cyanide, Total	250	237		ug/L	95	90 - 110					

TestAmerica Pittsburgh

QC Sample Results

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

TestAmerica Job ID: 180-20653-1

Method: 9014 - Cyanide (Continued)

Lab Sample ID: LCS 180-70537/3-A

Matrix: Water

Analysis Batch: 70584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70537

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit ug/L	D	%Rec	%Rec.
Cyanide, Total		200	194			97	85 - 115	

Lab Sample ID: LLCS 180-70537/1-A

Matrix: Water

Analysis Batch: 70584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70537

Analyte		Spike Added	LLCS Result	LLCS Qualifier	Unit ug/L	D	%Rec	%Rec.
Cyanide, Total		50.0	48.9			98	90 - 110	

Lab Sample ID: 180-20653-12 MS

Matrix: Water

Analysis Batch: 70584

Client Sample ID: MW-22 042313

Prep Type: Total/NA

Prep Batch: 70537

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit ug/L	D	%Rec	%Rec.
Cyanide, Total	1100		100	1030	4		-52	75 - 125	

Lab Sample ID: 180-20653-12 MSD

Matrix: Water

Analysis Batch: 70584

Client Sample ID: MW-22 042313

Prep Type: Total/NA

Prep Batch: 70537

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit ug/L	D	%Rec	%Rec.	RPD
Cyanide, Total	1100		100	994	4		-86	75 - 125	3	20

Lab Sample ID: MB 180-70774/4-A

Matrix: Water

Analysis Batch: 70810

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70774

Analyte	MB Result	MB Qualifier	RL	MDL	Unit ug/L	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10	10	ug/L		05/03/13 09:50	05/03/13 12:54	1

Lab Sample ID: HLCS 180-70774/2-A

Matrix: Water

Analysis Batch: 70810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70774

Analyte		Spike Added	HLCS Result	HLCS Qualifier	Unit ug/L	D	%Rec	%Rec.
Cyanide, Total		250	228			91	90 - 110	

Lab Sample ID: LCS 180-70774/3-A

Matrix: Water

Analysis Batch: 70810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70774

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit ug/L	D	%Rec	%Rec.
Cyanide, Total		200	190			95	85 - 115	

Lab Sample ID: LLCS 180-70774/1-A

Matrix: Water

Analysis Batch: 70810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70774

Analyte		Spike Added	LLCS Result	LLCS Qualifier	Unit ug/L	D	%Rec	%Rec.
Cyanide, Total		50.0	47.5			95	90 - 110	

TestAmerica Pittsburgh

QC Sample Results

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

Method: 9016 - Cyanide, Free

Lab Sample ID: MB 460-158053/1-A

Matrix: Water

Analysis Batch: 158055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 158053

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Cyanide, Free	ND				5.0	0.72	ug/L		04/29/13 07:00	04/29/13 13:00	1

Lab Sample ID: LCS 460-158053/2-A

Matrix: Water

Analysis Batch: 158055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 158053

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits	
	Added	Result	Qualifier							
Cyanide, Free	50.0	43.6		ug/L				87	70 . 130	

Lab Sample ID: 180-20653-4 MS

Matrix: Water

Analysis Batch: 158055

Client Sample ID: MW-12 042313

Prep Type: Total/NA

Prep Batch: 158053

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier						
Cyanide, Free	10		50.0	53.7		ug/L			87	70 . 130	

Lab Sample ID: 180-20653-4 MSD

Matrix: Water

Analysis Batch: 158055

Client Sample ID: MW-12 042313

Prep Type: Total/NA

Prep Batch: 158053

Analyte	Sample	Sample	Spike	MSD	MSD	Result	Qualifier	Unit	D	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier						
Cyanide, Free	10		50.0	54.0		ug/L			88	70 . 130	0 20

Lab Sample ID: DLCK 460-158055/10 DLCK

Matrix: Water

Analysis Batch: 158055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	DLCK	DLCK	Result	Qualifier	Unit	D	%Rec.	Limits
	Added	Result	Qualifier						
Cyanide, Free	2.00	1.72	J	ug/L				86	50 . 150

TestAmerica Pittsburgh

QC Association Summary

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

TestAmerica Job ID: 180-20653-1

GC/MS VOA

Analysis Batch: 70609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-2	MW-10 042313	Total/NA	Water	8260B	
180-20653-8	MW-17 042313	Total/NA	Water	8260B	
180-20653-9	MW-19 042313	Total/NA	Water	8260B	
180-20653-14	SW-01 042313	Total/NA	Water	8260B	
180-20653-15	SW-02 042313	Total/NA	Water	8260B	
180-20653-16	TRIP BLANK 042313	Total/NA	Water	8260B	
180-20653-17	RINSE BLANK 042313	Total/NA	Water	8260B	
LCS 180-70609/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-70609/3	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 70692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-1	MW-7 042313	Total/NA	Water	8260B	
180-20653-3	MW-11A 042313	Total/NA	Water	8260B	
180-20653-18	MW-57 042313	Total/NA	Water	8260B	
LCS 180-70692/6	Lab Control Sample	Total/NA	Water	8260B	
MB 180-70692/3	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 70302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-1	MW-7 042313	Total/NA	Water	3520C	
180-20653-1 - DL	MW-7 042313	Total/NA	Water	3520C	
180-20653-2	MW-10 042313	Total/NA	Water	3520C	
180-20653-3	MW-11A 042313	Total/NA	Water	3520C	
180-20653-8	MW-17 042313	Total/NA	Water	3520C	
180-20653-9	MW-19 042313	Total/NA	Water	3520C	
180-20653-9 - DL	MW-19 042313	Total/NA	Water	3520C	
180-20653-14	SW-01 042313	Total/NA	Water	3520C	
180-20653-15	SW-02 042313	Total/NA	Water	3520C	
180-20653-17	RINSE BLANK 042313	Total/NA	Water	3520C	
180-20653-18	MW-57 042313	Total/NA	Water	3520C	
180-20653-18 - DL	MW-57 042313	Total/NA	Water	3520C	
LCS 180-70302/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 180-70302/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 180-70302/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 71685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-1	MW-7 042313	Total/NA	Water	8270C	70302
180-20653-2	MW-10 042313	Total/NA	Water	8270C	70302
180-20653-3	MW-11A 042313	Total/NA	Water	8270C	70302
180-20653-9	MW-19 042313	Total/NA	Water	8270C	70302
180-20653-14	SW-01 042313	Total/NA	Water	8270C	70302
180-20653-15	SW-02 042313	Total/NA	Water	8270C	70302
180-20653-17	RINSE BLANK 042313	Total/NA	Water	8270C	70302
180-20653-18	MW-57 042313	Total/NA	Water	8270C	70302
LCS 180-70302/2-A	Lab Control Sample	Total/NA	Water	8270C	70302
LCSD 180-70302/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	70302

TestAmerica Pittsburgh

QC Association Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

GC/MS Semi VOA (Continued)

Analysis Batch: 71685 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-70302/1-A	Method Blank	Total/NA	Water	8270C	70302

Analysis Batch: 71822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-1 - DL	MW-7 042313	Total/NA	Water	8270C	70302
180-20653-8	MW-17 042313	Total/NA	Water	8270C	70302
180-20653-9 - DL	MW-19 042313	Total/NA	Water	8270C	70302
180-20653-18 - DL	MW-57 042313	Total/NA	Water	8270C	70302

General Chemistry

Prep Batch: 70537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-4	MW-12 042313	Total/NA	Water	9010C	
180-20653-5	MW-13 042313	Total/NA	Water	9010C	
180-20653-7	MW-16 042313	Total/NA	Water	9010C	
180-20653-8	MW-17 042313	Total/NA	Water	9010C	
180-20653-12	MW-22 042313	Total/NA	Water	9010C	
180-20653-12 MS	MW-22 042313	Total/NA	Water	9010C	
180-20653-12 MSD	MW-22 042313	Total/NA	Water	9010C	
180-20653-13	MW-23 042413	Total/NA	Water	9010C	
180-20653-15	SW-02 042313	Total/NA	Water	9010C	
180-20653-17	RINSE BLANK 042313	Total/NA	Water	9010C	
180-20653-19	MW-116 042313	Total/NA	Water	9010C	
HLCS 180-70537/2-A	Lab Control Sample	Total/NA	Water	9010C	
LCS 180-70537/3-A	Lab Control Sample	Total/NA	Water	9010C	
LLCS 180-70537/1-A	Lab Control Sample	Total/NA	Water	9010C	
MB 180-70537/4-A	Method Blank	Total/NA	Water	9010C	

Analysis Batch: 70584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-4	MW-12 042313	Total/NA	Water	9014	70537
180-20653-5	MW-13 042313	Total/NA	Water	9014	70537
180-20653-7	MW-16 042313	Total/NA	Water	9014	70537
180-20653-8	MW-17 042313	Total/NA	Water	9014	70537
180-20653-12	MW-22 042313	Total/NA	Water	9014	70537
180-20653-12 MS	MW-22 042313	Total/NA	Water	9014	70537
180-20653-12 MSD	MW-22 042313	Total/NA	Water	9014	70537
180-20653-13	MW-23 042413	Total/NA	Water	9014	70537
180-20653-15	SW-02 042313	Total/NA	Water	9014	70537
180-20653-17	RINSE BLANK 042313	Total/NA	Water	9014	70537
180-20653-19	MW-116 042313	Total/NA	Water	9014	70537
HLCS 180-70537/2-A	Lab Control Sample	Total/NA	Water	9014	70537
LCS 180-70537/3-A	Lab Control Sample	Total/NA	Water	9014	70537
LLCS 180-70537/1-A	Lab Control Sample	Total/NA	Water	9014	70537
MB 180-70537/4-A	Method Blank	Total/NA	Water	9014	70537

Prep Batch: 70774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-6	MW-14 042413	Total/NA	Water	9010C	

TestAmerica Pittsburgh

QC Association Summary

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

TestAmerica Job ID: 180-20653-1

General Chemistry (Continued)

Prep Batch: 70774 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-10	MW-20 042413	Total/NA	Water	9010C	
180-20653-11	MW-21 042413	Total/NA	Water	9010C	
180-20653-14	SW-01 042313	Total/NA	Water	9010C	
HLCS 180-70774/2-A	Lab Control Sample	Total/NA	Water	9010C	
LCS 180-70774/3-A	Lab Control Sample	Total/NA	Water	9010C	
LLCS 180-70774/1-A	Lab Control Sample	Total/NA	Water	9010C	
MB 180-70774/4-A	Method Blank	Total/NA	Water	9010C	

Analysis Batch: 70810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-6	MW-14 042413	Total/NA	Water	9014	70774
180-20653-10	MW-20 042413	Total/NA	Water	9014	70774
180-20653-11	MW-21 042413	Total/NA	Water	9014	70774
180-20653-14	SW-01 042313	Total/NA	Water	9014	70774
HLCS 180-70774/2-A	Lab Control Sample	Total/NA	Water	9014	70774
LCS 180-70774/3-A	Lab Control Sample	Total/NA	Water	9014	70774
LLCS 180-70774/1-A	Lab Control Sample	Total/NA	Water	9014	70774
MB 180-70774/4-A	Method Blank	Total/NA	Water	9014	70774

Prep Batch: 158053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-4	MW-12 042313	Total/NA	Water	9016	
180-20653-4 MS	MW-12 042313	Total/NA	Water	9016	
180-20653-4 MSD	MW-12 042313	Total/NA	Water	9016	
180-20653-5	MW-13 042313	Total/NA	Water	9016	
180-20653-6	MW-14 042413	Total/NA	Water	9016	
180-20653-7	MW-16 042313	Total/NA	Water	9016	
180-20653-8	MW-17 042313	Total/NA	Water	9016	
180-20653-10	MW-20 042413	Total/NA	Water	9016	
180-20653-11	MW-21 042413	Total/NA	Water	9016	
180-20653-12	MW-22 042313	Total/NA	Water	9016	
180-20653-13	MW-23 042413	Total/NA	Water	9016	
180-20653-14	SW-01 042313	Total/NA	Water	9016	
180-20653-15	SW-02 042313	Total/NA	Water	9016	
180-20653-17	RINSE BLANK 042313	Total/NA	Water	9016	
180-20653-19	MW-116 042313	Total/NA	Water	9016	
LCS 460-158053/2-A	Lab Control Sample	Total/NA	Water	9016	
MB 460-158053/1-A	Method Blank	Total/NA	Water	9016	

Analysis Batch: 158055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-4	MW-12 042313	Total/NA	Water	9016	158053
180-20653-4 MS	MW-12 042313	Total/NA	Water	9016	158053
180-20653-4 MSD	MW-12 042313	Total/NA	Water	9016	158053
180-20653-5	MW-13 042313	Total/NA	Water	9016	158053
180-20653-6	MW-14 042413	Total/NA	Water	9016	158053
180-20653-7	MW-16 042313	Total/NA	Water	9016	158053
180-20653-8	MW-17 042313	Total/NA	Water	9016	158053
180-20653-10	MW-20 042413	Total/NA	Water	9016	158053
180-20653-11	MW-21 042413	Total/NA	Water	9016	158053
180-20653-12	MW-22 042313	Total/NA	Water	9016	158053

TestAmerica Pittsburgh

QC Association Summary

Client: AECOM, Inc.

Project/Site: AECOM, Mineral Springs

TestAmerica Job ID: 180-20653-1

General Chemistry (Continued)

Analysis Batch: 158055 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-20653-13	MW-23 042413	Total/NA	Water	9016	158053
180-20653-14	SW 01 042313	Total/NA	Water	9016	158053
180-20653-15	SW-02 042313	Total/NA	Water	9016	158053
180-20653-17	RINSE BLANK 042313	Total/NA	Water	9016	158053
180-20653-19	MW-116 042313	Total/NA	Water	9016	158053
DLCK 460-158055/10 DLCK	Lab Control Sample	Total/NA	Water	9016	158053
LCS 460-158053/2-A	Lab Control Sample	Total/NA	Water	9016	158053
MB 460-158053/1-A	Method Blank	Total/NA	Water	9016	158053

TestAmerica Pittsburgh

Chain of Custody Record

3.7.29.9.2 #2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

COC No: 019976

1 of 2 COCs

Client Contact		Client Project Manager:		Site Contact:		Lab Contact:		Analyses	
Company Name: AECOM		AECOM TAMARA RABY		TAMARA RABY		JILL CALUSSI			
Address: 100 Corporate Pkwy St.341		Telephone: 716 836 4506		Telephone: 716 836 4506		Telephone: 412-963-7088			
City/State/Zip: Amherst NY 14226		Email: TAMARA.RABY@X1.COM		Analysis Turnaround Time: (0-30 days)					
Phone: 716-836-4506				TAT if different from below					
Project Name: Mineral Springs		Method of Shipment/Carrier:		<input type="checkbox"/> 3 weeks	<input type="checkbox"/> 2 weeks	<input type="checkbox"/> 1 week	<input type="checkbox"/> 2 days	<input type="checkbox"/> 1 day	
Project Number:		Shipping/Tracking No:							
P O #									
Sample Identification		Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other	Containers & Preservatives
mw-7	4/23/13	4/23/13	1425	✓					H2O
mw-10	4/23/13	4/23/13	1225	✓					HNO3
mw-11A	4/23/13	4/23/13	1500	✓					HCl
mw-12	4/23/13	4/23/13	1740	✓					ZnAc NaOH
mw-13	4/23/13	4/23/13	1700	✓					Unpres.
mw-14	4/24/13	4/24/13	9:05	✓					Others:
mw-16	4/23/13	4/23/13	13:10	✓					
mw-17	4/23/13	4/23/13	1610	✓					
mw-19	4/23/13	4/23/13	1700	✓					
mw-20	4/24/13	4/24/13	830	✓					
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return to Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months	
Special Instructions/QC Requirements & Comments:									
Relinquished by: <i>Tamara Raby</i>	Company: AECOM	Date/Time: 4/23/13 12:20	Received by: <i>L. Tully</i>	Company: TAD, Inc	Date/Time: 4-25-13 9:30				
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:				



180-20653 Chain of Custody

Chain of Custody Record

TestAmerica Laboratory location:

Regulatory program:

 DW NPDES RCRA Other _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

COC No: 019977

Z of Z SOCs

Client Contact		Site Analysis & Testing Details										Analyses				
Company Name: AECOM	Address: 100 Corporate Pkwy St.341	Client Project Manager: AECOM TAMARA RABY	Site Contact: TAMARA RABY	Lab Contact: JILL CALUSSI	COC No:											
City/State/Zip: Amherst, NY 14226	Telephone: 716 836 4506	Email: TAMARA.RABY@AECOM.COM	Telephone: 716 836 4506	Telephone: 412-963-7058												
Phone: 716 - 836 - 4506				TAT if different from below												
Project Name: Mineral SPRINGS	Method of Shipment/Carrier:			<input type="checkbox"/> 3 weeks	<input type="checkbox"/> 2 weeks	<input type="checkbox"/> 1 week	<input type="checkbox"/> 2 days	<input type="checkbox"/> 1 day								
Project Number:	Shipping/Tracking No:															
P O #	Sample Identification	Sample Date	Sample Time	Metric	Combinations of Preservatives								Sample Specific Notes / Special Instructions:			
				Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH		ZnAc	NaOH	Unpres.
MW-21 4/24/13	4/24/13	910	✓					1/2						✓ ✓		
MW-22 4/23/13	4/23/13	1620	✓					1/2						✓ ✓		
MW-23 4/24/13	4/24/13	810	✓					1/2						✓ ✓		
SW-01 4/23/13	4/23/13	1230	✓					1/3	1/2	1/2				✓ ✓ ✓ ✓		
SW-02 4/23/13	4/23/13	1500	✓					1/3	1/2	1/2				✓ ✓ ✓ ✓		
TRIP BLANK 4/23/13	4/23/13	—	✓					1/2						✓		
RINSE BLANK 4/23/13	4/23/13	1300	✓					1/3	1/2	1/2				✓ ✓ ✓ ✓		
MW-57 4/23/13	4/23/13	1400	✓					1/3	1/2					✓ ✓		
MW-116 4/23/13	4/23/13	1340	✓					1/2						✓ ✓		
Possible Hazard Identification				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For										Months	
Special Instructions/QC Requirements & Comments:																
Relinquished by: <i>Tamara Raby</i>	Company: AECOM	Date/Time: 4/24/13 12:20	Received by: <i>M. Raby</i>	Company: T.A.D.T.	Date/Time: 4-25-13 9⁰⁰											
Relinquished by: 	Company: 	Date/Time: 	Received by: 	Company: 	Date/Time: 											
Relinquished by: 	Company: 	Date/Time: 	Received in Laboratory by: 	Company: 	Date/Time: 											

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 180-20653-1

Login Number: 20653

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	