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

716 836 4506 tel
716 834 8785 fax

August 17, 2011

Mr. Charles Burke
National Fuel Gas Distribution Corporation
Building 8
365 Mineral Springs Road
Buffalo, NY 14210

Subject: Groundwater and Surface Water Monitoring Results
April 2011
Mineral Springs Road MGP Site

Dear Mr. Burke,

This report provides the results of a groundwater and surface water sampling event completed by AECOM Environment (AECOM) on April 26-27, 2011, at the Mineral Springs Road former manufactured gas plant (MGP) site in West Seneca (Buffalo), New York.

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

Summary

A total of 13 groundwater samples and two surface water samples were collected and analyzed this period as specified in the O&M Plan. Sampling locations are shown on the attached figure. The collected samples were analyzed by TestAmerica Laboratories, Inc. (TestAmerica) of Pittsburgh, Pennsylvania, except for free cyanide analyses which were performed by TestAmerica of Shelton, Connecticut. 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 and one upgradient monitoring wells were sampled for benzene, ethylbenzene, toluene, and xylene (BTEX) and polycyclic aromatic hydrocarbon (PAH) compounds during this event. Concentrations of BTEX and/or PAH compounds exceeded NYSDEC standard or guidance values in the four onsite groundwater samples.

Seven onsite and two downgradient offsite monitoring wells were sampled for total and free cyanide analyses only. Total cyanide concentrations exceeded the NYSDEC Groundwater Standard of 200 µg/L in eight of the nine groundwater samples analyzed. Free cyanide was detected in seven of the nine groundwater samples at concentrations ranging from 4 J µg/L to 9 J µg/L.

Two onsite surface water samples were collected for BTEX, PAH, and total and free cyanide analyses. BTEX and PAH compounds were not detected in either surface water sample. Total cyanide was detected in one sample (30.3 µg/L), below the NYSDEC Class D surface water standard (9,000 µg/L).

Free cyanide was detected in each surface water sample at a concentration of 6 J µg/L, below the NYSDEC Class D surface water standard of 22 µg/L.

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

AECOM also attempted to pump NAPL from the DNAPL recovery test well with minimal results.

Groundwater elevations

Depth-to-water measurements were collected at 14 monitoring wells and converted to elevations using reference point elevation data. The data have been used to construct the groundwater contours shown in the attached figure. A review of similar information from recent years shows that the groundwater flow direction during this event remained similar to previous sampling events. The data indicate groundwater flowed onto the site from the east-southeast and continued from there to flow west-northwest towards Calais Street and Mineral Springs Road. Groundwater elevations measured during this event were the highest measured since measurements started being made in 1998. This is consistent with observations during the field event, when flooding was observed over portions of the site.

Sampling and analysis

A total of 13 monitoring wells were purged and sampled by an AECOM sampling team this event; sampling locations are shown on the attached figure.

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

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

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

Analytical results and conclusions

The results of the laboratory analyses are summarized in Table 2. The laboratory reports and the chain-of-custody forms are attached, as well. 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.

Upgradient site perimeter

Well MW-17 is located in the southeast corner of the site to monitor upgradient groundwater quality. A groundwater sample was collected from MW-17 and 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 297 µg/L, above the NYSDEC Groundwater Standard value of 200 µg/L[1]. Free cyanide was detected at a concentration of 4.0 J µg/L[2]. These results are consistent with historic data from this well.

Downgradient site perimeter

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 "sentinel" 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 groundwater concentrations above the NYSDEC Groundwater Standard of 200 µg/L. Detected concentrations ranged from 307 µg/L at MW-23 to 1,030 µg/L at MW-22; well MW-13 had no total cyanide detected. Four of the six wells (MW-20, MW-21, MW-22, and MW-23) had free cyanide concentrations of 6.0 J µg/L or 7.0 J µg/L; two wells (MW-13 and MW-14) had no free cyanide detected. These analytical results are consistent with the range of concentrations measured in past years.

On-site purifier residuals impacted areas

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

Both of the wells had a total cyanide groundwater concentration above the NYSDEC Groundwater Standard of 200 µg/L. Total cyanide concentrations were reported as 837 µg/L at MW-12 and 617 µg/L at MW-16. Free cyanide was detected in MW-12 at 7.0 J µg/L and 9.0 J µg/L at MW-16.

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

On-site hydrocarbon NAPL impacted areas

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

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

PAH compounds were detected above NYSDEC Groundwater Standards in MW-07, MW-10, and MW-19. PAHs were detected in MW-11A at concentrations below the 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 Class D Stream running along the south side of the site. These surface sampling locations monitor the effectiveness of the Eastern Drainage Ditch Cap and also monitor the concentrations of COC in surface water downgradient of the Mineral Springs site. The collected samples were analyzed for BTEX, PAH, and total and free cyanide.

No BTEX or PAH compounds were detected in either sample.

Total cyanide was detected in SW-01 at a concentration of 30.3 µg/L, below the NYSDEC Class D Stream Standard of 9,000 µg/L. Sample SW-02 was non-detect for total cyanide.

Free cyanide was detected in each of the two samples at a concentration of 6.0 J µg/L, below the NYSDEC Class D Stream Standard of 22 µg/L.

Quality Assurance / Quality Control samples

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

An equipment blank was prepared using analyte free blank water supplied by the analytical laboratory. All downhole tubing used to collect groundwater samples is dedicated to, and stored within, each well. Therefore, the equipment blank was collected by running the blank water through the silicone and polyethylene pump tubing at the peristaltic pump head. Free cyanide was detected in the equipment blank at 6.0 J µg/L; all other compounds were non-detect. Free cyanide was also detected in seven of the nine wells where samples were analyzed for cyanide at concentrations similar to those measured in the blank and consistent with historical data. AECOM discussed the blank results with the laboratory, which reviewed the analytical documentation. No unusual circumstances were noted and free cyanide was not detected in the laboratory quality assurance samples. Cyanide is not a common laboratory contaminant.

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

Duplicate samples were collected from MW-07 and MW-16. The duplicate sample from MW-07 was submitted for BTEX and PAH analyses. During shipment from the field to the analytical laboratory, each of the two bottles from MW-07 that had been filled for PAH analysis (one primary and one backup) were broken during transit. In response, the lab was instructed to use the backup bottle from the actual MW-07 sample set and run it as the duplicate. Because the actual MW-07 sample set and the duplicate MW-07 sample set were collected concurrently, the duplicate analysis is considered representative. The duplicate sample from MW-16 was submitted for total and free cyanide analyses. All duplicate sample results were within acceptable ranges as defined by the QAP.

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

DNAPL recovery test well (RTW-1)

During this sampling event, the Recovery System at RTW-1 was operated to assess whether dense non-aqueous phase liquid (DNAPL) had accumulated since the August 2010 sampling event. Approximately two liters of water were pumped out. The water contained only trace amounts of NAPL blebs, visually estimated to be less than 1% of total volume.

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

Sincerely yours,

Tamara M. Raby

Tamara Raby
Geologist
Project Manager

Thomas P. Clark, P.E
Project Engineer

Encl: Groundwater Contours (figure)
Water Sampling Summary (Table 1)
Laboratory Results Summary (Table 2)
Laboratory Reports

cc: T. Alexander - NFG
R. Kennedy - Hodgson, Russ LLP
D. Szymanski - NYSDEC

TABLES

Table 1
Water Sampling Summary Table
Mineral Springs, 2001

Location	Cyanide, Total USEPA SW846 9012A	Cyanide, Free ASTM D4282-89	BTEX USEPA SW846 8260B	PAHs USEPA SW846 8270C	Water Elevation	Benchmark Elevation (top of PVC casing)
Upgradient Site Perimeter						
MW-17	x	x	x	X	x	587.28
Downgradient Site Perimeter						
MW-13	x	x	annually	annually	x	591.85
MW-14	x	x			x	589.81
MW-15					x	590.93
MW-20	x	x			x	587.30
MW-21	x	x			x	587.88
MW-22	x	x			x	592.50
MW-23	x	x	annually	annually	x	589.28
Onsite Purifier Residuals Impacted Areas						
MW-12	x	x			x	591.40
MW-16	x	x			x	588.99
Onsite Hydrocarbon Impacted Areas						
MW-07			x	X	x	587.26
MW-10			x	X	x	587.61
MW-11			x	X	x	590.03
MW-19			x	X	x	589.83
Onsite Surface Water						
SW-01	x	x	x	X	x	top of headwall = 587.0
SW-02	x	x	x	X		
QA/QC Samples (frequency)						
Trip Blank			x			(one per shipment)
Field Duplicate	x	x	x	X		(one per event)
Equipment Blank	x	x	x	X		(one per event)
DNAPL Recovery						
RTW-1						(purge well of accumulated DNAPL)
Total	13	13	10 or 12	9 or 11	15	
Container, Preservative	500 ml plastic, NaOH	1 L plastic amber, NaOH	40 mL VOA vial, HCl (x2)	1 L glass amber, NP (x2)		

Table 2
Groundwater and Surface Water Monitoring Results
Mineral Springs Road MGP Site
April 2011

PARAMETER	GROUNDWATER															SURFACE WATER			Quality Assurance / Quality Control			
Sample ID :	**MW-07**	**MW-10**	**MW-11A**	**MW-12**	**MW-13**	**MW-14**	**MW-15**	**MW-16**	**MW-17**	**MW-19**	**MW-20**	**MW-21**	**MW-22**	**MW-23**	***Groundwater***	**SW-01**	**SW-02**	***Class D Stream***	**TB**	**EB**	**MW-07 Dup**	**MW-16 Dup**
Sample Date :	04/26/11	04/27/11	04/26/11	04/27/11	04/27/11	04/27/11	---	04/27/11	04/27/11	04/27/11	04/26/11	04/26/11	04/27/11	04/27/11	***Standard*** [(1)]	04/26/11	04/26/11	***Standard*** [(1)]	04/26/11	04/26/11	04/26/11	04/27/11
BTEX (µg/L)																						
Benzene	690	nd	15	---	---	---	---	---	nd	4400	---	---	---	---	**1**	nd	nd	**10**	nd	nd	760	---
Toluene	210	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**5**	nd	nd	**6000**	nd	nd	230	---
Ethylbenzene	1200	nd	5.7	---	---	---	---	---	nd	280 J	---	---	---	---	**5**	nd	nd	**150** *	nd	nd	1200	---
Xylene (sum of isomers)	770	nd	3.5	---	---	---	---	---	nd	nd	---	---	---	---	**5 (each)**	nd	nd	**590** *	nd	nd	820	---
BTEX total	2870	nd	24.2	---	---	---	---	---	nd	4680	---	---	---	---	---	nd	nd	---	nd	nd	3010	---
PAHs (µg/L)																						
Naphthalene	2100	nd	0.28 J	---	---	---	---	---	nd	3300	---	---	---	---	**10** *	nd	nd	**110** *	---	nd	2600	---
Acenaphthylene	nd	nd	0.72 J	---	---	---	---	---	nd	nd	---	---	---	---	**NL** *	nd	nd	**NL**	---	nd	nd	---
Acenaphthene	76 J	nd	2.6 J	---	---	---	---	---	nd	nd	---	---	---	---	**20** *	nd	nd	**48** *	---	nd	92 J	---
Fluorene	13 J	nd	0.83 J	---	---	---	---	---	nd	nd	---	---	---	---	**50** *	nd	nd	**4.8** *	---	nd	16 J	---
Phenanthrene	16 J	0.69 J	nd	---	---	---	---	---	nd	nd	---	---	---	---	**50** *	nd	nd	**45** *	---	nd	16 J	---
Anthracene	nd	nd	0.24 J	---	---	---	---	---	nd	nd	---	---	---	---	**50** *	nd	nd	**35** *	---	nd	nd	---
Fluoranthene	nd	0.77 J	0.45 J	---	---	---	---	---	nd	nd	---	---	---	---	**50** *	nd	nd	**NL**	---	nd	nd	---
Pyrene	nd	0.53 J	0.71 J	---	---	---	---	---	nd	nd	---	---	---	---	**50** *	nd	nd	**42** *	---	nd	nd	---
Benzo(a)anthracene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**0.002** *	nd	nd	**0.23** *	---	nd	nd	---
Chrysene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**0.002** *	nd	nd	**NL**	---	nd	nd	---
Benzo(b)fluoranthene	nd	0.18 J	nd	---	---	---	---	---	nd	nd	---	---	---	---	**0.002** *	nd	nd	**NL**	---	nd	nd	---
Benzo(k)fluoranthene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**0.002** *	nd	nd	**NL**	---	nd	nd	---
Benzo(a)pyrene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**NL**	nd	nd	**0.0012** *	---	nd	nd	---
Indeno(1,2,3-cd)pyrene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**0.002** *	nd	nd	**NL**	---	nd	nd	---
Dibenz(a,h)anthracene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**NL**	nd	nd	**NL**	---	nd	nd	---
Benzo(g,h,i)perylene	nd	nd	nd	---	---	---	---	---	nd	nd	---	---	---	---	**NL**	nd	nd	**NL**	---	nd	nd	---
2-Methylnaphthalene	160 J	nd	nd	---	---	---	---	---	nd	9.3 J	---	---	---	---	**NL**	nd	nd	**NL**	---	nd	190	---
PAHs total	2365	2.17 J	5.83 J	---	---	---	---	---	nd	3309.3	---	---	---	---	---	nd	nd	---	---	nd	2914	---
CYANIDE (µg/L)																						
Cyanide, total	---	---	---	837	nd	623	---	617	297	---	690	539	1030	307	**200**	30.3	nd	**9000**	---	nd	---	612
Cyanide, free	---	---	---	7.0 J	nd	nd	---	9.0 J	4.0 J	---	6.0 J	6.0 J	7.0 J	6.0 J	**NL**	6.0 J	6.0 J	**22**	---	6.0 J	---	6.0 J
Water Elevation (feet)	583.60	583.39	584.05	583.27	581.97	579.98	582.58	584.06	583.98	583.45	580.62	579.32	583.13	580.42	**NL**	580.19	---	**NL**	---	---	---	---

Notes:

NL Not listed

nd Not detected above method detection limit

--- Not analyzed

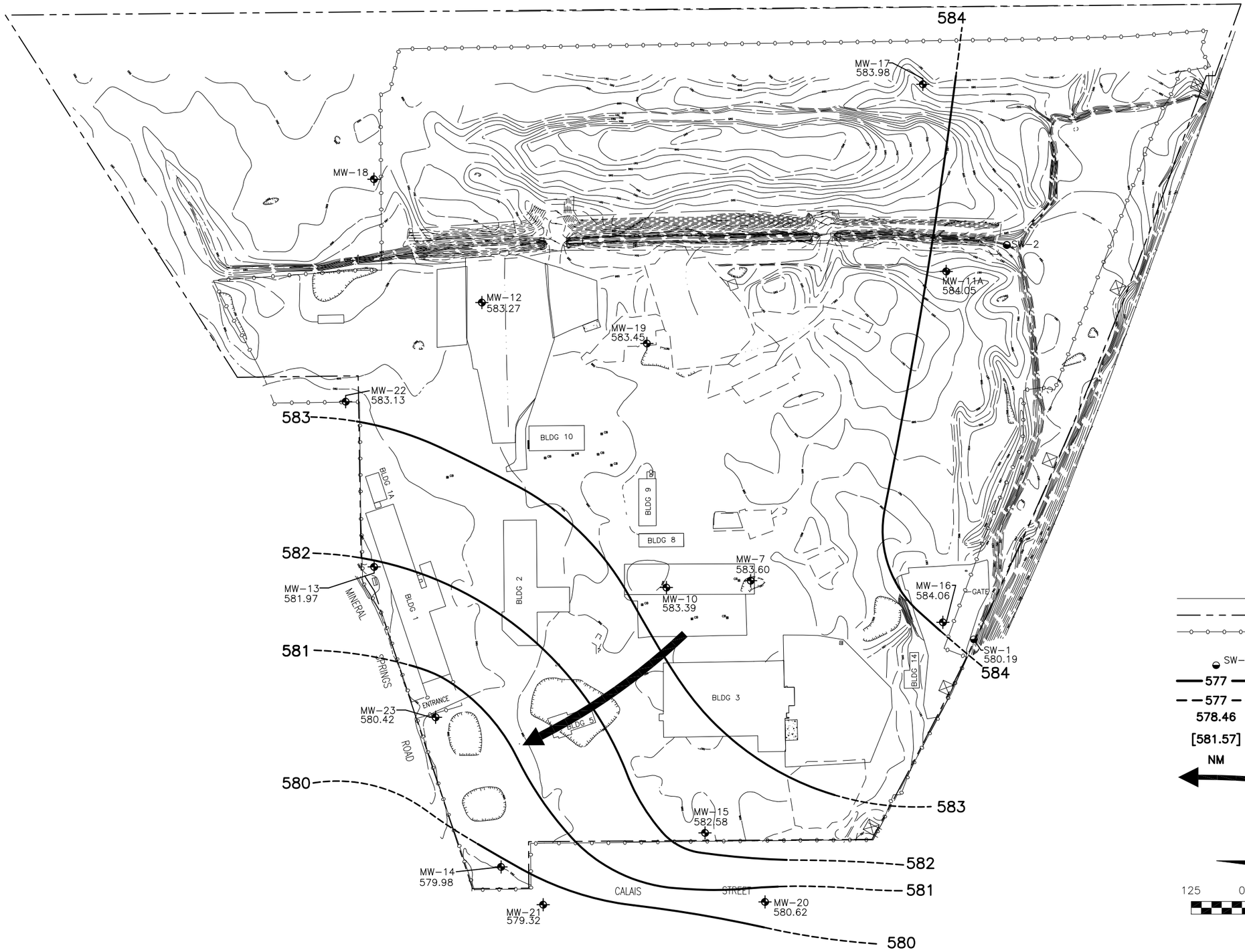
J Indicates laboratory estimated value

(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



LEGEND

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

125 0 250

1"=250'

AECOM

NATIONAL FUEL GAS MINERAL SPRINGS ROAD MGP SITE 60137322-300			**GROUNDWATER CONTOURS APRIL 2011**
DATE: 7/2011	DRWN: BcV/W-MA		**FIGURE 1**

File: J:\Codfiles\CADD\60137322\GW4-2011.dwg Layout: pnts User: vershonb Plotted: Jul 08, 2011 - 4:33pm Xref's:

LABORATORY ANALYTICAL RESULTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. 60137322.300

AECOM, Mineral Springs

Lot #: C1D280444

Helen Jones

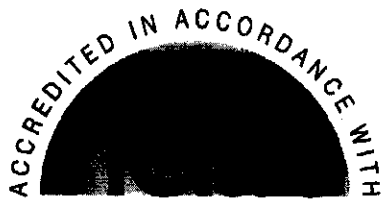
AECOM, Inc

TESTAMERICA LABORATORIES, INC.

Dave Dunlap
Project Manager

June 23, 2011

301 Alpha Drive Pittsburgh, PA 15238 **tel** 412.963.7058 **fax** 412.963.2468 **www.testamericainc.com**



NELAC REPORTING:

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

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	WW HW	X
US Dept of Agriculture	(#P330-10-00139)	Foreign Soil Import Permit	X
Arkansas	(#88-0690)	WW HW	X X
California – NELAC	04224CA	WW HW	X X
Connecticut	(#PH-0688)	WW HW	X X
Florida – NELAC	(#E871008)	WW HW	X X
Illinois – NELAC	(#002602)	WW HW	X X
Kansas – NELAC	(#E-10350)	WW HW	X X
Louisiana – NELAC	(#04041)	WW HW	X X
New Hampshire – NELAC	(#203011)	WW --	X --
New Jersey – NELAC	(PA-005)	WW HW	X X
New York – NELAC	(#11182)	WW HW	X X
North Carolina	(#434)	WW HW	X X
Pennsylvania - NELAC	(#02-00416)	WW HW	X X
South Carolina	(#89014002)	WW HW	X X
Utah – NELAC	(STLP)	WW HW	X X
West Virginia	(#142)	WW HW	X X
Wisconsin	998027800	WW HW	X X

The codes utilized for program types are described below:

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

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pttsburgh_Updated 051910.doc

CASE NARRATIVE

AECOM –Mineral Springs

Lot # C1D280444

Sample Receiving:
Samples were received at TestAmerica's Pittsburgh laboratory on April 28, 2011. The coolers were received within the proper temperature range.

Both liter bottles for PAH analysis were received broken for sample MW-57. As discussed with the client, sample MW-57 was the field duplicate of MW-07. The laboratory was instructed to use one of the PAH bottles from sample MW-07 for the analysis of sample MW-57.

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

GC/MS Volatiles:
Due to the concentration of target compounds detected, several samples were analyzed at a dilution.

GC/MS Semivolatiles:
Due to the concentration of target compounds detected, several samples were analyzed at a dilution. The surrogates were diluted out.

General Chemistry:
Several samples were analyzed at a dilution for total cyanide.

TestAmerica's Connecticut laboratory performed the free cyanide analysis. Their report is attached.

C1D280444

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: PITTSBURGH

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: AECOM	Client Project Manager: CHARLES BURKE NATIONAL FUEL GAS (AECOM TAMARA RABY)	Site Contact: TAMARA RABY	Lab Contact: DAVE DUNLAP	COC No: 1 of 2 COCs
Address: 100 Corporate Pkwy Ste 311	Telephone: (716) 827-2359 ((716) 836-4506)	Telephone: (716) 836-4506	Telephone: (412) 963-7058	
City/State/Zip: Amherst, NY 14226	Email: BURKEC@NATFUELGAS.COM (TAMARA.RABY@AECOM.COM)			
Phone: (716) 836-4506		TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: AECOM-mineral springs	Method of Shipment/Carrier:			
Project Number: 04870-025-200	Shipping/Tracking No:			
PO# NONE				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Analyses: BTEX-laskevel 8260B	PAHs-selected 8270C	Total CN 9012A	Free CN ASTM, M1292-02	Sample Specific Notes / Special Instructions:
MW-07 042611	4/26/11	1840		X						3			2		X	X			
MW-10 042711	4/27/11	810		X						3			2		X	X			
MW-11A 042611	4/26/11	1650		X						3			2		X	X			
MW-12 042711	4/27/11	1725		X							2						X	X	
MW-13 042711	4/27/11	1635		X							2						X	X	
MW-14 042711	4/27/11	1335		X							2						X	X	
MW-16 042711	4/27/11	910		X							2						X	X	
MW-17 042711	4/27/11	1035		X						3	2		2		X	X	X	X	
MW-19 042711	4/27/11	1540		X						3			2		X	X			
MW-20 042611	4/26/11	1305		X							2						X	X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by: Tamara Raby	Company: AECOM	Date/Time: 4/27/11 1930	Received by:	Company: TA	Date/Time: 4/28/11 1006
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-0018 (1008)

C1D280444

Chain of Custody Record

TestAmerica Laboratory location: PITTSBURGH

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: AECOM	Client Project Manager: AECOM TAMARA RABY	Site Contact: TAMARA RABY	Lab Contact: DAVE DUNLAP	COC No:
Address: 100 Corporate Pkwy #341	Telephone: (716) 836-4506	Telephone: (716) 836-4506	Telephone: (412) 963-7058	2 of 2 COCs
City/State/Zip: AMHERST, NY 14226	Email: TAMARA.RABY@AECOM.COM	Analysis Turnaround Time (in BUSINESS days)	Analyses	
Phone: (716) 836-4506		TAT if different from below _____		
Project Name: AECOM-Mineral Springs	Method of Shipment/Carrier:	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Number: 04870-025-200	Shipping/Tracking No:			
PO# NONE				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	MS/MSD (Y/N)	BTEX - lowlevel 8260B	PAHs - selected 8270C	TotalCN 9012A	FreeCN ASTM D4282	Sample Specific Notes / Special Instructions:
MW-21 042611	4/26/11	1500		X							2								X	X	
MW-22 042711	4/27/11	1505		X							2								X	X	
MW-23 042711	4/27/11	1235		X							2								X	X	
MW-57 042611	4/26/11	1715		X						3			2				X	X			
MW-66 042711	4/27/11	836		X							2								X	X	
SW-01 042611	4/26/11	1700		X						3	2		2				X	X	X	X	
SW-02 042611	4/26/11	1545		X						3	2		2				X	X	X	X	
TRIP BLANK 042611	4/26/11	—		X													X				
EQUIPMENT BLANK 04 11	4/26/11	1330		X						3	2						X	X	X	X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by: Tamara Raby	Company: AECOM	Date/Time: 4/27/11 1930	Received by:	Company:	Date/Time: 4/28/11 1000
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-0018 (1008)

METHODS SUMMARY

C1D280444

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Cyanide, Total	SW846 9012A	SW846 9012A
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3520C
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

C1D280444

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MHLPW	001	MW-07 042611	04/26/11	18:40
MHLQK	002	MW-10 042711	04/27/11	08:10
MHLQN	003	MW-11A 042611	04/26/11	16:50
MHLQR	004	MW-12 042711	04/27/11	17:25
MHLQT	005	MW-13 042711	04/27/11	16:35
MHLQV	006	MW-14 042711	04/27/11	13:35
MHLQW	007	MW-16 042711	04/27/11	09:10
MHLQX	008	MW-17 042711	04/27/11	10:35
MHLQ1	009	MW-19 042711	04/27/11	15:40
MHLQ2	010	MW-20 042611	04/26/11	13:05
MHLQ4	011	MW-21 042611	04/26/11	15:00
MHLQ7	012	MW-22 042711	04/27/11	15:05
MHLRA	013	MW-23 042711	04/27/11	12:35
MHLRD	014	MW-57 042611	04/26/11	17:15
MHLRG	015	MW-66 042711	04/27/11	08:30
MHLRK	016	SW-01 042611	04/26/11	17:00
MHLRM	017	SW-02 042611	04/26/11	15:45
MHLRP	018	EQUIPMENT BLANK 042611	04/26/11	13:30
MHLRQ	019	TRIP BLANK 042611	04/26/11	

NOTE(S):

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

AECOM, Inc

Client Sample ID: MW-07 042611

GC/MS Volatiles

Lot-Sample #...: C1D280444-001 **Work Order #...:** MHLPW1AA **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1125171
Prep Date.....: 05/05/11 **Analysis Date..:** 05/05/11
Prep Batch #...: 1125358
Dilution Factor: 100 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**690**	**100**	**ug/L**
Ethylbenzene	**1200**	**100**	**ug/L**
Toluene	**210**	**100**	**ug/L**
Xylenes (total)	**770**	**300**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	101	(71 - 118)
1,2-Dichloroethane-d4	88	(64 - 135)
4-Bromofluorobenzene	78	(70 - 118)
Dibromofluoromethane	89	(70 - 128)

AECOM, Inc

Client Sample ID: MW-10 042711

GC/MS Volatiles

Lot-Sample #...: C1D280444-002 **Work Order #...:** MHLQK1AA **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1124164
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	105	(71 - 118)
1,2-Dichloroethane-d4	87	(64 - 135)
4-Bromofluorobenzene	81	(70 - 118)
Dibromofluoromethane	89	(70 - 128)

AECOM, Inc

Client Sample ID: MW-11A 042611

GC/MS Volatiles

Lot-Sample #...: C1D280444-003 **Work Order #...:** MHLQN1AA **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1125171
Prep Date.....: 05/05/11 **Analysis Date..:** 05/05/11
Prep Batch #...: 1125358
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**15**	**1.0**	**ug/L**
Ethylbenzene	**5.7**	**1.0**	**ug/L**
Toluene	ND	1.0	ug/L
Xylenes (total)	**3.5**	**3.0**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	101	(71 - 118)
1,2-Dichloroethane-d4	80	(64 - 135)
4-Bromofluorobenzene	75	(70 - 118)
Dibromofluoromethane	85	(70 - 128)

AECOM, Inc

Client Sample ID: MW-17 042711

GC/MS Volatiles

Lot-Sample #...: C1D280444-008 **Work Order #...:** MHLQX1AA **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1124164
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	98	(71 - 118)
1,2-Dichloroethane-d4	80	(64 - 135)
4-Bromofluorobenzene	77	(70 - 118)
Dibromofluoromethane	83	(70 - 128)

AECOM, Inc

Client Sample ID: MW-19 042711

GC/MS Volatiles

Lot-Sample #...: C1D280444-009 **Work Order #...:** MHLQ11AA **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1125171
Prep Date.....: 05/05/11 **Analysis Date..:** 05/05/11
Prep Batch #...: 1125358
Dilution Factor: 300 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**4400**	**300**	**ug/L**
Ethylbenzene	**280 J**	**300**	**ug/L**
Toluene	ND	300	ug/L
Xylenes (total)	ND	900	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	103	(71 - 118)
1,2-Dichloroethane-d4	95	(64 - 135)
4-Bromofluorobenzene	82	(70 - 118)
Dibromofluoromethane	97	(70 - 128)

NOTE(S):

J Estimated result. Result is less than RL.

AECOM, Inc

Client Sample ID: MW-57 042611

GC/MS Volatiles

Lot-Sample #...: C1D280444-014 **Work Order #...:** MHLRD1AA **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1125171
Prep Date.....: 05/05/11 **Analysis Date..:** 05/05/11
Prep Batch #...: 1125358
Dilution Factor: 100 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**760**	**100**	**ug/L**
Ethylbenzene	**1200**	**100**	**ug/L**
Toluene	**230**	**100**	**ug/L**
Xylenes (total)	**820**	**300**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	101	(71 - 118)
1,2-Dichloroethane-d4	89	(64 - 135)
4-Bromofluorobenzene	78	(70 - 118)
Dibromofluoromethane	93	(70 - 128)

AECOM, Inc

Client Sample ID: SW-01 042611

GC/MS Volatiles

Lot-Sample #...: C1D280444-016 **Work Order #...:** MHLRK1AA **Matrix.....:** WS
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1124164
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	100	(71 - 118)
1,2-Dichloroethane-d4	82	(64 - 135)
4-Bromofluorobenzene	79	(70 - 118)
Dibromofluoromethane	85	(70 - 128)

AECOM, Inc

Client Sample ID: SW-02 042611

GC/MS Volatiles

Lot-Sample #...: C1D280444-017 **Work Order #...:** MHLRM1AA **Matrix.....:** WS
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1124164
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	101	(71 - 118)
1,2-Dichloroethane-d4	86	(64 - 135)
4-Bromofluorobenzene	81	(70 - 118)
Dibromofluoromethane	89	(70 - 128)

AECOM, Inc

Client Sample ID: EQUIPMENT BLANK 042611

GC/MS Volatiles

Lot-Sample #...: C1D280444-018 **Work Order #...:** MHLRP1AA **Matrix.....:** WQ
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1124164
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	104	(71 - 118)
1,2-Dichloroethane-d4	92	(64 - 135)
4-Bromofluorobenzene	84	(70 - 118)
Dibromofluoromethane	96	(70 - 128)

AECOM, Inc

Client Sample ID: TRIP BLANK 042611

GC/MS Volatiles

Lot-Sample #...: C1D280444-019 **Work Order #...:** MHLRQ1AA **Matrix.....:** WQ
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:** 1124164
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	106	(71 - 118)
1,2-Dichloroethane-d4	90	(64 - 135)
4-Bromofluorobenzene	85	(70 - 118)
Dibromofluoromethane	95	(70 - 128)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C1D280444 **Work Order #...:** MHW0V1AA **Matrix.....:** WATER
MB Lot-Sample #: C1E040000-324
Prep Date.....: 05/04/11
Analysis Date..: 05/04/11 **Prep Batch #...:** 1124324
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	105	(71 - 118)
1,2-Dichloroethane-d4	82	(64 - 135)
4-Bromofluorobenzene	82	(70 - 118)
Dibromofluoromethane	86	(70 - 128)

NOTE(S):

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

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: C1D280444 **Work Order #...:** MH0T31AA **Matrix.....:** WATER
MB Lot-Sample #: C1E050000-358
Prep Date.....: 05/05/11
Analysis Date..: 05/05/11 **Prep Batch #...:** 1125358
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	105	(71 - 118)
1,2-Dichloroethane-d4	85	(64 - 135)
4-Bromofluorobenzene	82	(70 - 118)
Dibromofluoromethane	89	(70 - 128)

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: C1D280444 **Work Order #...:** MHW0V1AC **Matrix.....:** WATER
LCS Lot-Sample#: C1E040000-324
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**83**	**(80 - 120)**	**SW846 8260B**
Toluene	**100**	**(80 - 123)**	**SW846 8260B**
1,1-Dichloroethene	**76**	**(65 - 136)**	**SW846 8260B**
Chlorobenzene	**97**	**(80 - 120)**	**SW846 8260B**
Trichloroethene	**92**	**(73 - 120)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	109	(71 - 118)
1,2-Dichloroethane-d4	79	(64 - 135)
4-Bromofluorobenzene	81	(70 - 118)
Dibromofluoromethane	86	(70 - 128)

NOTE(S):

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: C1D280444 **Work Order #...:** MH0T31AC **Matrix.....:** WATER
LCS Lot-Sample#: C1E050000-358
Prep Date.....: 05/05/11 **Analysis Date..:** 05/05/11
Prep Batch #...: 1125358
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**86**	**(80 - 120)**	**SW846 8260B**
Toluene	**99**	**(80 - 123)**	**SW846 8260B**
1,1-Dichloroethene	**82**	**(65 - 136)**	**SW846 8260B**
Chlorobenzene	**99**	**(80 - 120)**	**SW846 8260B**
Trichloroethene	**93**	**(73 - 120)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	107	(71 - 118)
1,2-Dichloroethane-d4	84	(64 - 135)
4-Bromofluorobenzene	80	(70 - 118)
Dibromofluoromethane	87	(70 - 128)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: C1D280444 **Work Order #...:** MHP3G1D6-MS **Matrix.....:** WATER
MS Lot-Sample #: C1D300453-001 MHP3G1D7-MSD
Date Sampled...: 04/29/11 **Date Received..:** 04/30/11 **MS Run #.....:** 1124164
Prep Date.....: 05/04/11 **Analysis Date..:** 05/04/11
Prep Batch #...: 1124324
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**83**	**(80 - 120)**			**SW846 8260B**
	83	**(80 - 120)**	**0.01**	**(0-32)**	**SW846 8260B**
Toluene	**97**	**(80 - 123)**			**SW846 8260B**
	97	**(80 - 123)**	**0.47**	**(0-35)**	**SW846 8260B**
1,1-Dichloroethene	**76**	**(65 - 136)**			**SW846 8260B**
	79	**(65 - 136)**	**4.2**	**(0-35)**	**SW846 8260B**
Chlorobenzene	**95**	**(80 - 120)**			**SW846 8260B**
	94	**(80 - 120)**	**0.87**	**(0-29)**	**SW846 8260B**
Trichloroethene	**93**	**(73 - 120)**			**SW846 8260B**
	96	**(73 - 120)**	**2.6**	**(0-35)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	106	(71 - 118)
	105	(71 - 118)
1,2-Dichloroethane-d4	79	(64 - 135)
	81	(64 - 135)
4-Bromofluorobenzene	76	(70 - 118)
	79	(70 - 118)
Dibromofluoromethane	86	(70 - 128)
	86	(70 - 128)

NOTE(S):

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: C1D280444 **Work Order #...:** MHN761CE-MS **Matrix.....:** WATER
MS Lot-Sample #: C1D290568-001 MHN761CF-MSD
Date Sampled...: 04/28/11 **Date Received..:** 04/29/11 **MS Run #.....:** 1125171
Prep Date.....: 05/05/11 **Analysis Date..:** 05/05/11
Prep Batch #...: 1125358
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**81**	**(80 - 120)**			**SW846 8260B**
	81	**(80 - 120)**	**0.03**	**(0-32)**	**SW846 8260B**
Toluene	**90**	**(80 - 123)**			**SW846 8260B**
	94	**(80 - 123)**	**3.5**	**(0-35)**	**SW846 8260B**
1,1-Dichloroethene	**76**	**(65 - 136)**			**SW846 8260B**
	74	**(65 - 136)**	**3.0**	**(0-35)**	**SW846 8260B**
Chlorobenzene	**90**	**(80 - 120)**			**SW846 8260B**
	94	**(80 - 120)**	**4.6**	**(0-29)**	**SW846 8260B**
Trichloroethene	**89**	**(73 - 120)**			**SW846 8260B**
	88	**(73 - 120)**	**0.70**	**(0-35)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	105	(71 - 118)
	106	(71 - 118)
1,2-Dichloroethane-d4	81	(64 - 135)
	84	(64 - 135)
4-Bromofluorobenzene	80	(70 - 118)
	82	(70 - 118)
Dibromofluoromethane	87	(70 - 128)
	88	(70 - 128)

NOTE(S):

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

Bold print denotes control parameters

AECOM, Inc

Client Sample ID: MW-07 042611

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-001 **Work Order #...:** MHLPW1AC **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 19.4 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	**76 J**	**190**	**ug/L**
Acenaphthylene	ND	190	ug/L
Anthracene	ND	190	ug/L
Benzo(a)anthracene	ND	190	ug/L
Benzo(b)fluoranthene	ND	190	ug/L
Benzo(k)fluoranthene	ND	190	ug/L
Benzo(ghi)perylene	ND	190	ug/L
Benzo(a)pyrene	ND	190	ug/L
Chrysene	ND	190	ug/L
Fluoranthene	ND	190	ug/L
Fluorene	**13 J**	**190**	**ug/L**
Indeno(1,2,3-cd)pyrene	ND	190	ug/L
2-Methylnaphthalene	**160 J**	**190**	**ug/L**
Naphthalene	**2100**	**190**	**ug/L**
Phenanthrene	**16 J**	**190**	**ug/L**
Pyrene	ND	190	ug/L
Dibenzo(a,h)anthracene	ND	190	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	NC,DIL	(33 - 122)
2-Fluorobiphenyl	NC,DIL	(35 - 108)
2-Fluorophenol	NC,DIL	(26 - 100)
Nitrobenzene-d5	NC,DIL	(37 - 104)
Phenol-d5	NC,DIL	(30 - 102)
Terphenyl-d14	NC,DIL	(25 - 130)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

J Estimated result. Result is less than RL.

AECOM, Inc

Client Sample ID: MW-10 042711

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-002 **Work Order #...:** MHLQK1AC **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 0.99 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.9	ug/L
Acenaphthylene	ND	9.9	ug/L
Anthracene	ND	9.9	ug/L
Benzo(a)anthracene	ND	9.9	ug/L
Benzo(b)fluoranthene	**0.18 J**	**9.9**	**ug/L**
Benzo(k)fluoranthene	ND	9.9	ug/L
Benzo(ghi)perylene	ND	9.9	ug/L
Benzo(a)pyrene	ND	9.9	ug/L
Chrysene	ND	9.9	ug/L
Fluoranthene	**0.77 J**	**9.9**	**ug/L**
Fluorene	ND	9.9	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.9	ug/L
2-Methylnaphthalene	ND	9.9	ug/L
Naphthalene	ND	9.9	ug/L
Phenanthrene	**0.69 J**	**9.9**	**ug/L**
Pyrene	**0.53 J**	**9.9**	**ug/L**
Dibenzo(a,h)anthracene	ND	9.9	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	60	(33 - 122)
2-Fluorobiphenyl	55	(35 - 108)
2-Fluorophenol	48	(26 - 100)
Nitrobenzene-d5	48	(37 - 104)
Phenol-d5	53	(30 - 102)
Terphenyl-d14	47	(25 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

AECOM, Inc

Client Sample ID: MW-11A 042611

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-003 **Work Order #...:** MHLQN1AC **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 1.22 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	**2.6 J**	**12**	**ug/L**
Acenaphthylene	**0.72 J**	**12**	**ug/L**
Anthracene	**0.24 J**	**12**	**ug/L**
Benzo(a)anthracene	ND	12	ug/L
Benzo(b)fluoranthene	ND	12	ug/L
Benzo(k)fluoranthene	ND	12	ug/L
Benzo(ghi)perylene	ND	12	ug/L
Benzo(a)pyrene	ND	12	ug/L
Chrysene	ND	12	ug/L
Fluoranthene	**0.45 J**	**12**	**ug/L**
Fluorene	**0.83 J**	**12**	**ug/L**
Indeno(1,2,3-cd)pyrene	ND	12	ug/L
2-Methylnaphthalene	ND	12	ug/L
Naphthalene	**0.28 J**	**12**	**ug/L**
Phenanthrene	ND	12	ug/L
Pyrene	**0.71 J**	**12**	**ug/L**
Dibenzo(a,h)anthracene	ND	12	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	70	(33 - 122)
2-Fluorobiphenyl	57	(35 - 108)
2-Fluorophenol	49	(26 - 100)
Nitrobenzene-d5	47	(37 - 104)
Phenol-d5	56	(30 - 102)
Terphenyl-d14	53	(25 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

AECOM, Inc

Client Sample ID: MW-17 042711

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-008 **Work Order #...:** MHLQX1AC **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 0.95 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.5	ug/L
Acenaphthylene	ND	9.5	ug/L
Anthracene	ND	9.5	ug/L
Benzo(a)anthracene	ND	9.5	ug/L
Benzo(b)fluoranthene	ND	9.5	ug/L
Benzo(k)fluoranthene	ND	9.5	ug/L
Benzo(ghi)perylene	ND	9.5	ug/L
Benzo(a)pyrene	ND	9.5	ug/L
Chrysene	ND	9.5	ug/L
Fluoranthene	ND	9.5	ug/L
Fluorene	ND	9.5	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.5	ug/L
2-Methylnaphthalene	ND	9.5	ug/L
Naphthalene	ND	9.5	ug/L
Phenanthrene	ND	9.5	ug/L
Pyrene	ND	9.5	ug/L
Dibenzo(a,h)anthracene	ND	9.5	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	66	(33 - 122)
2-Fluorobiphenyl	61	(35 - 108)
2-Fluorophenol	55	(26 - 100)
Nitrobenzene-d5	52	(37 - 104)
Phenol-d5	59	(30 - 102)
Terphenyl-d14	49	(25 - 130)

AECOM, Inc

Client Sample ID: MW-19 042711

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-009 **Work Order #...:** MHLQ11AC **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 20.4 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	200	ug/L
Acenaphthylene	ND	200	ug/L
Anthracene	ND	200	ug/L
Benzo(a)anthracene	ND	200	ug/L
Benzo(b)fluoranthene	ND	200	ug/L
Benzo(k)fluoranthene	ND	200	ug/L
Benzo(ghi)perylene	ND	200	ug/L
Benzo(a)pyrene	ND	200	ug/L
Chrysene	ND	200	ug/L
Fluoranthene	ND	200	ug/L
Fluorene	ND	200	ug/L
Indeno(1,2,3-cd)pyrene	ND	200	ug/L
2-Methylnaphthalene	**9.3 J**	**200**	**ug/L**
Naphthalene	**3300**	**200**	**ug/L**
Phenanthrene	ND	200	ug/L
Pyrene	ND	200	ug/L
Dibenzo(a,h)anthracene	ND	200	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	NC,DIL	(33 - 122)
2-Fluorobiphenyl	NC,DIL	(35 - 108)
2-Fluorophenol	NC,DIL	(26 - 100)
Nitrobenzene-d5	NC,DIL	(37 - 104)
Phenol-d5	NC,DIL	(30 - 102)
Terphenyl-d14	NC,DIL	(25 - 130)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

J Estimated result. Result is less than RL.

AECOM, Inc

Client Sample ID: MW-57 042611

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-014 **Work Order #...:** MHLRD1AC **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 18.8 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	**92 J**	**190**	**ug/L**
Acenaphthylene	ND	190	ug/L
Anthracene	ND	190	ug/L
Benzo(a)anthracene	ND	190	ug/L
Benzo(b)fluoranthene	ND	190	ug/L
Benzo(k)fluoranthene	ND	190	ug/L
Benzo(ghi)perylene	ND	190	ug/L
Benzo(a)pyrene	ND	190	ug/L
Chrysene	ND	190	ug/L
Fluoranthene	ND	190	ug/L
Fluorene	**16 J**	**190**	**ug/L**
Indeno(1,2,3-cd)pyrene	ND	190	ug/L
2-Methylnaphthalene	**190**	**190**	**ug/L**
Naphthalene	**2600**	**190**	**ug/L**
Phenanthrene	**16 J**	**190**	**ug/L**
Pyrene	ND	190	ug/L
Dibenzo(a,h)anthracene	ND	190	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	NC,DIL	(33 - 122)
2-Fluorobiphenyl	NC,DIL	(35 - 108)
2-Fluorophenol	NC,DIL	(26 - 100)
Nitrobenzene-d5	NC,DIL	(37 - 104)
Phenol-d5	NC,DIL	(30 - 102)
Terphenyl-d14	NC,DIL	(25 - 130)

NOTE(S):

NC The recovery and/or RPD were not calculated.

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

J Estimated result. Result is less than RL.

AECOM, Inc

Client Sample ID: SW-01 042611

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-016 **Work Order #...:** MHLRK1AC **Matrix.....:** WS
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 1.03 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
Anthracene	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Chrysene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Fluorene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
2-Methylnaphthalene	ND	10	ug/L
Naphthalene	ND	10	ug/L
Phenanthrene	ND	10	ug/L
Pyrene	ND	10	ug/L
Dibenzo(a,h)anthracene	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	56	(33 - 122)
2-Fluorobiphenyl	54	(35 - 108)
2-Fluorophenol	48	(26 - 100)
Nitrobenzene-d5	46	(37 - 104)
Phenol-d5	54	(30 - 102)
Terphenyl-d14	43	(25 - 130)

AECOM, Inc

Client Sample ID: SW-02 042611

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-017 **Work Order #...:** MHLRM1AC **Matrix.....:** WS
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 0.97 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	9.7	ug/L
Acenaphthylene	ND	9.7	ug/L
Anthracene	ND	9.7	ug/L
Benzo(a)anthracene	ND	9.7	ug/L
Benzo(b)fluoranthene	ND	9.7	ug/L
Benzo(k)fluoranthene	ND	9.7	ug/L
Benzo(ghi)perylene	ND	9.7	ug/L
Benzo(a)pyrene	ND	9.7	ug/L
Chrysene	ND	9.7	ug/L
Fluoranthene	ND	9.7	ug/L
Fluorene	ND	9.7	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.7	ug/L
2-Methylnaphthalene	ND	9.7	ug/L
Naphthalene	ND	9.7	ug/L
Phenanthrene	ND	9.7	ug/L
Pyrene	ND	9.7	ug/L
Dibenzo(a,h)anthracene	ND	9.7	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	71	(33 - 122)
2-Fluorobiphenyl	57	(35 - 108)
2-Fluorophenol	52	(26 - 100)
Nitrobenzene-d5	46	(37 - 104)
Phenol-d5	56	(30 - 102)
Terphenyl-d14	42	(25 - 130)

AECOM, Inc

Client Sample ID: EQUIPMENT BLANK 042611

GC/MS Semivolatiles

Lot-Sample #...: C1D280444-018 **Work Order #...:** MHLRP1AC **Matrix.....:** WQ
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11 **MS Run #.....:**
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 1.03 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
Anthracene	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzo(ghi)perylene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Chrysene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Fluorene	ND	10	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
2-Methylnaphthalene	ND	10	ug/L
Naphthalene	ND	10	ug/L
Phenanthrene	ND	10	ug/L
Pyrene	ND	10	ug/L
Dibenzo(a,h)anthracene	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	69	(33 - 122)
2-Fluorobiphenyl	65	(35 - 108)
2-Fluorophenol	59	(26 - 100)
Nitrobenzene-d5	53	(37 - 104)
Phenol-d5	64	(30 - 102)
Terphenyl-d14	68	(25 - 130)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: C1D280444 **Work Order #...:** MHNK71AA **Matrix.....:** WATER
MB Lot-Sample #: C1D290000-198

Prep Date.....: 04/29/11
Analysis Date..: 05/02/11 **Prep Batch #...:** 1119198
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
2-Methylnaphthalene	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
Dibenzo(a,h)anthracene	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	85	(33 - 122)
2-Fluorobiphenyl	70	(35 - 108)
2-Fluorophenol	70	(26 - 100)
Nitrobenzene-d5	62	(37 - 104)
Phenol-d5	83	(30 - 102)
Terphenyl-d14	85	(25 - 130)

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: C1D280444 **Work Order #...:** MHNK71AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: C1D290000-198 MHNK71AD-LCSD
Prep Date.....: 04/29/11 **Analysis Date..:** 05/02/11
Prep Batch #...: 1119198
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	67	(36 - 97)			SW846 8270C
	71	(36 - 97)	5.9	(0-32)	SW846 8270C
1,4-Dichlorobenzene	65	(32 - 94)			SW846 8270C
	65	(32 - 94)	0.56	(0-33)	SW846 8270C
2,4-Dinitrotoluene	77	(41 - 117)			SW846 8270C
	79	(41 - 117)	2.6	(0-32)	SW846 8270C
Acenaphthene	76	(39 - 106)			SW846 8270C
	78	(39 - 106)	3.4	(0-32)	SW846 8270C
2-Chlorophenol	68	(34 - 100)			SW846 8270C
	70	(34 - 100)	3.6	(0-31)	SW846 8270C
4-Chloro-3-methylphenol	67	(40 - 107)			SW846 8270C
	70	(40 - 107)	4.0	(0-32)	SW846 8270C
4-Nitrophenol	55	(29 - 120)			SW846 8270C
	55	(29 - 120)	0.70	(0-39)	SW846 8270C
N-Nitrosodi-n-propyl-amine	61	(37 - 106)			SW846 8270C
	64	(37 - 106)	3.4	(0-36)	SW846 8270C
Pentachlorophenol	60	(10 - 118)			SW846 8270C
	65	(10 - 118)	7.0	(0-49)	SW846 8270C
Phenol	63	(35 - 98)			SW846 8270C
	63	(35 - 98)	1.4	(0-35)	SW846 8270C
Butyl benzyl phthalate	73	(34 - 110)			SW846 8270C
	78	(34 - 110)	6.6	(0-35)	SW846 8270C
4-Bromophenyl phenyl ether	69	(38 - 108)			SW846 8270C
	70	(38 - 108)	1.7	(0-40)	SW846 8270C
4-Methylphenol	68	(34 - 104)			SW846 8270C
	69	(34 - 104)	2.3	(0-34)	SW846 8270C
Hexachloroethane	64	(27 - 94)			SW846 8270C
	63	(27 - 94)	1.2	(0-43)	SW846 8270C
Naphthalene	70	(35 - 98)			SW846 8270C
	73	(35 - 98)	4.7	(0-39)	SW846 8270C
Pyrene	74	(36 - 115)			SW846 8270C
	80	(36 - 115)	8.4	(0-38)	SW846 8270C
1-Methylnaphthalene	72	(10 - 140)			SW846 8270C
	74	(10 - 140)	3.1	(0-30)	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: C1D280444 **Work Order #...:** MHNK71AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: C1D290000-198 MHNK71AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	79	(33 - 122)
	85	(33 - 122)
2-Fluorobiphenyl	67	(35 - 108)
	70	(35 - 108)
2-Fluorophenol	64	(26 - 100)
	64	(26 - 100)
Nitrobenzene-d5	58	(37 - 104)
	61	(37 - 104)
Phenol-d5	72	(30 - 102)
	74	(30 - 102)
Terphenyl-d14	73	(25 - 130)
	79	(25 - 130)

NOTE(S):

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

Bold print denotes control parameters

AECOM, Inc

Client Sample ID: MW-12 042711

General Chemistry

Lot-Sample #...: C1D280444-004 **Work Order #...:** MHLQR **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**837**	**100**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 10 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-13 042711

General Chemistry

Lot-Sample #...: C1D280444-005 **Work Order #...:** MHLQT **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	04/29/11	1119094

Dilution Factor: 1 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-14 042711

General Chemistry

Lot-Sample #...: C1D280444-006 **Work Order #...:** MHLQV **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**623**	**100**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 10 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-16 042711

General Chemistry

Lot-Sample #...: C1D280444-007 **Work Order #...:** MHLQW **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**617**	**100**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 10 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-17 042711

General Chemistry

Lot-Sample #...: C1D280444-008 **Work Order #...:** MHLQX **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**297**	**10.0**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 1 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-20 042611

General Chemistry

Lot-Sample #...: C1D280444-010 **Work Order #...:** MHLQ2 **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**690**	**100**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 10 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-21 042611

General Chemistry

Lot-Sample #...: C1D280444-011 **Work Order #...:** MHLQ4 **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**539**	**100**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 10 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-22 042711

General Chemistry

Lot-Sample #...: C1D280444-012 **Work Order #...:** MHLQ7 **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**1030**	**100**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 10 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-23 042711

General Chemistry

Lot-Sample #...: C1D280444-013 **Work Order #...:** MHLRA **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**307**	**10.0**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 1 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: MW-66 042711

General Chemistry

Lot-Sample #...: C1D280444-015 **Work Order #...:** MHLRG **Matrix.....:** WG
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**612**	**100**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 10 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: SW-01 042611

General Chemistry

Lot-Sample #...: C1D280444-016 **Work Order #...:** MHLRK **Matrix.....:** WS
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	**30.3**	**10.0**	**ug/L**	**SW846 9012A**	**04/29/11**	**1119094**

Dilution Factor: 1 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: SW-02 042611

General Chemistry

Lot-Sample #...: C1D280444-017 **Work Order #...:** MHLRM **Matrix.....:** WS
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	04/29/11	1119094

Dilution Factor: 1 MS Run #.....: 1119042

AECOM, Inc

Client Sample ID: EQUIPMENT BLANK 042611

General Chemistry

Lot-Sample #...: C1D280444-018 **Work Order #...:** MHLRP **Matrix.....:** WQ
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	04/29/11	1119094

Dilution Factor: 1 MS Run #.....: 1119042

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C1D280444 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MHM8H1AA		MB Lot-Sample #:	C1D290000-094	
	ND	10.0	ug/L	SW846 9012A	04/29/11	1119094
		Dilution Factor: 1				

NOTE(S):

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1D280444 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: MHM8H1AC	LCS Lot-Sample#: C1D290000-094		
	98	(85 - 115)	SW846 9012A	04/29/11	1119094
		Dilution Factor: 1			

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1D280444 **Matrix.....:** WG
Date Sampled...: 04/26/11 **Date Received..:** 04/28/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #...: MHLQ41AE		MS Lot-Sample #: C1D280444-011	
	117	(75 - 125)	SW846 9012A	04/29/11	1119094
		Dilution Factor: 10			
		MS Run #.....: 1119042			

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1D280444 **Matrix.....:** WATER
Date Sampled...: 04/27/11 **Date Received..:** 04/28/11

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: MHLQ91DV-MS/MHLQ91DW-MSD				MS Lot-Sample #: C1D280447-001	
	103	(75 - 125)			SW846 9012A	04/29/11	1119094
	102	(75 - 125)	0.69	(0-20)	SW846 9012A	04/29/11	1119094

Dilution Factor: 1
MS Run #.....: 1119042

NOTE(S):

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: (203)929-8140

TestAmerica Job ID: 220-15359-1
Client Project/Site: Workshare - D4282_02

For:
TestAmerica Laboratories, Inc.
301 Alpha Drive
RIDC Park
Pittsburgh, Pennsylvania 15238

Attn: Carrie Gamber

Authorized for release by:
05/06/2011 12:01:54 PM

Kristina Blocker
Project Manager I
kristina.blocker@testamericainc.com

Table of Contents

Qualifier Definition/Glossary

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Sample result is greater than the MDL but below the CRDL
U	Indicates analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Job ID: 220-15359-1

Laboratory: TestAmerica Connecticut

Narrative

Job Narrative
220-15359-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

General Chemistry
No analytical or quality issues were noted.

Client Sample ID: MW-12 042711 — Lab Sample ID: 220-15359-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	7.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: MW-13 042711 — Lab Sample ID: 220-15359-2

No Detections.

Client Sample ID: MW-14 042711 — Lab Sample ID: 220-15359-3

No Detections.

Client Sample ID: MW-16 042711 — Lab Sample ID: 220-15359-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	9.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: MW-17 042711 — Lab Sample ID: 220-15359-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	4.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: MW-20 042611 — Lab Sample ID: 220-15359-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	6.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: MW-21 042611 — Lab Sample ID: 220-15359-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	6.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: MW-22 042711 — Lab Sample ID: 220-15359-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	7.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: MW-23 042711 — Lab Sample ID: 220-15359-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	6.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: MW-66 042711 — Lab Sample ID: 220-15359-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	6.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: SW-01 042611 — Lab Sample ID: 220-15359-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	6.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client Sample ID: SW-02 042611 — Lab Sample ID: 220-15359-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	6.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: EQUIPMENT BLANK — **Lab Sample ID: 220-15359-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Free	6.0	J	10.0	3.4	ug/L	1		D4282_02	Total/NA

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-12 042711
Date Collected: 04/27/11 17:25
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	7.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:24	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-13 042711
Date Collected: 04/27/11 16:35
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	10.0	U	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:26	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-14 042711
Date Collected: 04/27/11 13:35
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	10.0	U	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:32	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-16 042711
Date Collected: 04/27/11 09:10
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	9.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:34	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-17 042711
Date Collected: 04/27/11 10:35
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	4.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:36	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-20 042611
Date Collected: 04/26/11 13:05
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-6
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	6.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:38	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-21 042611
Date Collected: 04/26/11 15:00
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	6.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:44	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-22 042711
Date Collected: 04/27/11 15:05
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-8
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	7.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:46	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-23 042711
Date Collected: 04/27/11 12:35
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-9
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	6.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:48	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: MW-66 042711
Date Collected: 04/27/11 08:30
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-10
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	6.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:50	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: SW-01 042611
Date Collected: 04/26/11 17:00
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-11
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	6.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:52	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: SW-02 042611
Date Collected: 04/26/11 15:45
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-12
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	6.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:54	1

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: EQUIPMENT BLANK
Date Collected: 04/26/11 13:30
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-13
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	6.0	J	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:56	1

Method: D4282_02 - Cyanide, Free

Lab Sample ID: MB 220-50371/11-A
Matrix: Water
Analysis Batch: 50373

Client Sample ID: MB 220-50371/11-A
Prep Type: Total/NA
Prep Batch: 50371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	10.0	U	10.0	3.4	ug/L		05/02/11 10:30	05/02/11 17:20	1

Lab Sample ID: MSB 220-50371/12-A MSB
Matrix: Water
Analysis Batch: 50373

Client Sample ID: MSB 220-50371/12-A
Prep Type: Total/NA
Prep Batch: 50371

Analyte			Spike Added	MSB Result	MSB Qualifier	Unit	D	% Rec	% Rec. Limits		
Cyanide, Free			50.0	48.00		ug/L		96	90 - 110		

Lab Sample ID: 220-15359-2 MS
Matrix: Water
Analysis Batch: 50373

Client Sample ID: MW-13 042711
Prep Type: Total/NA
Prep Batch: 50371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits		
Cyanide, Free	10.0	U	50.0	42.00		ug/L		84	75 - 125		

Lab Sample ID: 220-15359-2 MSD
Matrix: Water
Analysis Batch: 50373

Client Sample ID: MW-13 042711
Prep Type: Total/NA
Prep Batch: 50371

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Cyanide, Free	10.0	U	50.0	41.00		ug/L		82	75 - 125	2	20

General Chemistry

Prep Batch: 50371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 220-50371/11-A	MB 220-50371/11-A	Total/NA	Water	D4282_02	
MSB 220-50371/12-A MSB	MSB 220-50371/12-A	Total/NA	Water	D4282_02	
220-15359-1	MW-12 042711	Total/NA	Water	D4282_02	
220-15359-2	MW-13 042711	Total/NA	Water	D4282_02	
220-15359-2 MS	MW-13 042711	Total/NA	Water	D4282_02	
220-15359-2 MSD	MW-13 042711	Total/NA	Water	D4282_02	
220-15359-3	MW-14 042711	Total/NA	Water	D4282_02	
220-15359-4	MW-16 042711	Total/NA	Water	D4282_02	
220-15359-5	MW-17 042711	Total/NA	Water	D4282_02	
220-15359-6	MW-20 042611	Total/NA	Water	D4282_02	
220-15359-7	MW-21 042611	Total/NA	Water	D4282_02	
220-15359-8	MW-22 042711	Total/NA	Water	D4282_02	
220-15359-9	MW-23 042711	Total/NA	Water	D4282_02	
220-15359-10	MW-66 042711	Total/NA	Water	D4282_02	
220-15359-11	SW-01 042611	Total/NA	Water	D4282_02	
220-15359-12	SW-02 042611	Total/NA	Water	D4282_02	
220-15359-13	EQUIPMENT BLANK	Total/NA	Water	D4282_02	

Analysis Batch: 50373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 220-50371/11-A	MB 220-50371/11-A	Total/NA	Water	D4282_02	50371
MSB 220-50371/12-A MSB	MSB 220-50371/12-A	Total/NA	Water	D4282_02	50371
220-15359-1	MW-12 042711	Total/NA	Water	D4282_02	50371
220-15359-2	MW-13 042711	Total/NA	Water	D4282_02	50371
220-15359-2 MS	MW-13 042711	Total/NA	Water	D4282_02	50371
220-15359-2 MSD	MW-13 042711	Total/NA	Water	D4282_02	50371
220-15359-3	MW-14 042711	Total/NA	Water	D4282_02	50371
220-15359-4	MW-16 042711	Total/NA	Water	D4282_02	50371
220-15359-5	MW-17 042711	Total/NA	Water	D4282_02	50371
220-15359-6	MW-20 042611	Total/NA	Water	D4282_02	50371
220-15359-7	MW-21 042611	Total/NA	Water	D4282_02	50371
220-15359-8	MW-22 042711	Total/NA	Water	D4282_02	50371
220-15359-9	MW-23 042711	Total/NA	Water	D4282_02	50371
220-15359-10	MW-66 042711	Total/NA	Water	D4282_02	50371
220-15359-11	SW-01 042611	Total/NA	Water	D4282_02	50371
220-15359-12	SW-02 042611	Total/NA	Water	D4282_02	50371
220-15359-13	EQUIPMENT BLANK	Total/NA	Water	D4282_02	50371

Client Sample ID: MW-12 042711 — **Lab Sample ID: 220-15359-1**
Date Collected: 04/27/11 17:25 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:24	JM	TestAmerica Connecticut

Client Sample ID: MW-13 042711 — **Lab Sample ID: 220-15359-2**
Date Collected: 04/27/11 16:35 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:26	JM	TestAmerica Connecticut

Client Sample ID: MW-14 042711 — **Lab Sample ID: 220-15359-3**
Date Collected: 04/27/11 13:35 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:32	JM	TestAmerica Connecticut

Client Sample ID: MW-16 042711 — **Lab Sample ID: 220-15359-4**
Date Collected: 04/27/11 09:10 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:34	JM	TestAmerica Connecticut

Client Sample ID: MW-17 042711 — **Lab Sample ID: 220-15359-5**
Date Collected: 04/27/11 10:35 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:36	JM	TestAmerica Connecticut

Client Sample ID: MW-20 042611 — **Lab Sample ID: 220-15359-6**
Date Collected: 04/26/11 13:05 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:38	JM	TestAmerica Connecticut

Client Sample ID: MW-21 042611 — **Lab Sample ID: 220-15359-7**
Date Collected: 04/26/11 15:00 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:44	JM	TestAmerica Connecticut

Client Sample ID: MW-22 042711 — **Lab Sample ID: 220-15359-8**
Date Collected: 04/27/11 15:05 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:46	JM	TestAmerica Connecticut

Client Sample ID: MW-23 042711 — **Lab Sample ID: 220-15359-9**
Date Collected: 04/27/11 12:35 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:48	JM	TestAmerica Connecticut

Client Sample ID: MW-66 042711 — **Lab Sample ID: 220-15359-10**
Date Collected: 04/27/11 08:30 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:50	JM	TestAmerica Connecticut

Client Sample ID: SW-01 042611 — **Lab Sample ID: 220-15359-11**
Date Collected: 04/26/11 17:00 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:52	JM	TestAmerica Connecticut

Client Sample ID: SW-02 042611 — **Lab Sample ID: 220-15359-12**
Date Collected: 04/26/11 15:45 — **Matrix: Water**
Date Received: 04/29/11 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:54	JM	TestAmerica Connecticut

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Client Sample ID: EQUIPMENT BLANK
Date Collected: 04/26/11 13:30
Date Received: 04/29/11 10:25

Lab Sample ID: 220-15359-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	D4282_02			50371	05/02/11 10:30	JM	TestAmerica Connecticut
Total/NA	Analysis	D4282_02		1	50373	05/02/11 17:56	JM	TestAmerica Connecticut

Certification Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Connecticut		NRC		06-30139-01
TestAmerica Connecticut		USDA		P330-11-00082
TestAmerica Connecticut	Connecticut	State Program	1	PH-0497
TestAmerica Connecticut	Massachusetts	State Program	1	M-CT023
TestAmerica Connecticut	New Jersey	NELAC	2	CT410
TestAmerica Connecticut	New York	NELAC	2	10602
TestAmerica Connecticut	Rhode Island	State Program	1	LAO00226

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

Method Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Method	Method Description	Protocol	Laboratory
D4282_02	Cyanide, Free	ASTM	TAL CT

Protocol References:

ASTM = ASTM International

Laboratory References:

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

Sample Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: Workshare - D4282_02

TestAmerica Job ID: 220-15359-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
220-15359-1	MW-12 042711	Water	04/27/11 17:25	04/29/11 10:25
220-15359-2	MW-13 042711	Water	04/27/11 16:35	04/29/11 10:25
220-15359-3	MW-14 042711	Water	04/27/11 13:35	04/29/11 10:25
220-15359-4	MW-16 042711	Water	04/27/11 09:10	04/29/11 10:25
220-15359-5	MW-17 042711	Water	04/27/11 10:35	04/29/11 10:25
220-15359-6	MW-20 042611	Water	04/26/11 13:05	04/29/11 10:25
220-15359-7	MW-21 042611	Water	04/26/11 15:00	04/29/11 10:25
220-15359-8	MW-22 042711	Water	04/27/11 15:05	04/29/11 10:25
220-15359-9	MW-23 042711	Water	04/27/11 12:35	04/29/11 10:25
220-15359-10	MW-66 042711	Water	04/27/11 08:30	04/29/11 10:25
220-15359-11	SW-01 042611	Water	04/26/11 17:00	04/29/11 10:25
220-15359-12	SW-02 042611	Water	04/26/11 15:45	04/29/11 10:25
220-15359-13	EQUIPMENT BLANK	Water	04/26/11 13:30	04/29/11 10:25

3460

C1D280444

INTER-COMPANY CHAIN OF CUSTODY

COMMENTS:
Project Manager: Dave Dunlap
Project: 60137322.300 AECOM, Mineral Springs
Report Type: B1 Std Rep - CD only
Client: 61874 - AECOM, Inc

15359

Date Received: 2011-04-28
Analytical Due Date: 2011-05-16
Report Due Date: 2011-05-19

WORK LOCATION: *I6* ***TestAmerica Connecticut***

ADDRESS: 128 Long Hill Cross Road
Shelton CT 06484

SMP# 4 CLIENT ID: MW-12 042711 (1) DATE/TIME SAMPLED: 20110427 1725 MATRIX: I **WATER**
SAMPLE COMMENTS

METHOD: **Z0** NONE NONE **WATER, ASTM D-4282, Free Cyanide, Conn.**
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQR1AD METAL: **XX**

SMP# 5 CLIENT ID: MW-13 042711 (2) DATE/TIME SAMPLED: 20110427 1635 MATRIX: I **WATER**
SAMPLE COMMENTS

METHOD: **Z0** NONE NONE **WATER, ASTM D-4282, Free Cyanide, Conn.**
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQT1AD METAL: **XX**

SMP# 6 CLIENT ID: MW-14 042711 (3) DATE/TIME SAMPLED: 20110427 1335 MATRIX: I **WATER**
SAMPLE COMMENTS

METHOD: **Z0** NONE NONE **WATER, ASTM D-4282, Free Cyanide, Conn.**
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQV1AD METAL: **XX**

SMP# 7 CLIENT ID: MW-16 042711 (4) DATE/TIME SAMPLED: 20110427 910 MATRIX: I **WATER**
SAMPLE COMMENTS

METHOD: **Z0** NONE NONE **WATER, ASTM D-4282, Free Cyanide, Conn.**
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQW1AD METAL: **XX**

SMP# 8 CLIENT ID: MW-17 042711 (5) DATE/TIME SAMPLED: 20110427 1035 MATRIX: I **WATER**
SAMPLE COMMENTS

METHOD: **Z0** NONE NONE **WATER, ASTM D-4282, Free Cyanide, Conn.**
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQX1AF METAL: **XX**

SMP# 10 CLIENT ID: MW-20 042611 (6) DATE/TIME SAMPLED: 20110426 1305 MATRIX: I **WATER**
SAMPLE COMMENTS

METHOD: **Z0** NONE NONE **WATER, ASTM D-4282, Free Cyanide, Conn.**
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQ21AD METAL: **XX**

C1D280444

INTER-COMPANY CHAIN OF CUSTODY

COMMENTS:

Project Manager: Dave Dunlap
Project: 60137322.300 AECOM, Mineral Springs
Report Type: B1 Std Rep - CD only
Client: 61874 - AECOM, Inc

15359

Date Received: 2011-04-28
Analytical Due Date: 2011-05-16
Report Due Date: 2011-05-19

SMP# 11 CLIENT ID: MW-21 042611 (7) DATE/TIME SAMPLED: 20110426 1500 MATRIX: I WATER
SAMPLE COMMENTS

METHOD: Z0 NONE NONE WATER, ASTM D-4282, Free Cyanide, Conn.
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQ41AD METAL: XX

SMP# 12 CLIENT ID: MW-22 042711 (8) DATE/TIME SAMPLED: 20110427 1505 MATRIX: I WATER
SAMPLE COMMENTS

METHOD: Z0 NONE NONE WATER, ASTM D-4282, Free Cyanide, Conn.
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLQ71AD METAL: XX

SMP# 13 CLIENT ID: MW-23 042711 (9) DATE/TIME SAMPLED: 20110427 1235 MATRIX: I WATER
SAMPLE COMMENTS

METHOD: Z0 NONE NONE WATER, ASTM D-4282, Free Cyanide, Conn.
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLRA1AD METAL: XX

SMP# 15 CLIENT ID: MW-66 042711 (10) DATE/TIME SAMPLED: 20110427 2130 MATRIX: I WATER
SAMPLE COMMENTS

METHOD: Z0 NONE NONE WATER, ASTM D-4282, Free Cyanide, Conn.
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLRG1AD METAL: XX

SMP# 16 CLIENT ID: SW-01 042611 (10) DATE/TIME SAMPLED: 20110426 1700 MATRIX: I WATER
SAMPLE COMMENTS

METHOD: Z0 NONE NONE WATER, ASTM D-4282, Free Cyanide, Conn.
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLRK1AF METAL: XX

SMP# 17 CLIENT ID: SW-02 042611 (12) DATE/TIME SAMPLED: 20110426 1545 MATRIX: I WATER
SAMPLE COMMENTS

METHOD: Z0 NONE NONE WATER, ASTM D-4282, Free Cyanide, Conn.
EXTRACTION: 88 NO SAMPLE PREPARATION PERFORMED / QC TYPE: 01 STANDARD TEST SET
WORKORDER MHLRM1AF METAL: XX

SMP# 18 CLIENT ID: EQUIPMEN BLANK (13) DATE/TIME SAMPLED: 20110426 1330 MATRIX: I WATER
SAMPLE COMMENTS

METHOD: Z0 NONE NONE WATER, ASTM D-4282, Free Cyanide, Conn.

C1D280444

INTER-COMPANY CHAIN OF CUSTODY

COMMENTS:

Project Manager:	Dave Dunlap		
Project:	60137322.300	AECOM, Mineral Springs	
Report Type:	B1 Std Rep - CD only		
Client:	61874 - AECOM, Inc		

15359

Date Received:	2011-04-28
Analytical Due Date:	2011-05-16
Report Due Date:	2011-05-19

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

WORKORDER MHLRP1AF METAL: XX

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

Thank You

TestAmerica Pittsburgh
Sample Receiving

RELINQUISHED BY: _____ DATE: 4/28/11 TIME: 1760

RECEIVED FOR LAB BY: _____ DATE: 4-29-11 TIME: 1025

Gun #3
0.2°C

passed rad
screen