DEPARTMENT OF THE ARMY

OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
U.S. ARMY FORT MONMOUTH
P.O. 148
OCEANPORT, NEW JERSEY 07757

23 January 2017

Ms. Linda Range
New Jersey Department of Environmental Protection
Bureau of Case Management
401 East State Street
PO Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028

Re: Request for No Further Action at Multiple 800 Area Underground Storage Tanks
Site Investigation Report Addendum
Fort Monmouth, New Jersey

Attachments:

A. Figure 1 Study Area Location (800 Area) and Figure 2 – Study Area 800 Sample Locations (showing exceedances)
B. Tables: Validated Laboratory Data Results for Groundwater, Area 800
C. Field Notes
D. Boring Logs
E. Analytical Data

Previous Correspondence (not attached):

1. Army letter to NJDEP dated 12 June 2015, re: *No Further Action Request Site Investigation Report Addendum for the 800 Area Including ECP Parcels 55 and 56, Fort Monmouth, New Jersey.*
2. NJDEP letter to the Army dated 10 November 2015, re: *Site Investigation Report Addendum for the 800 Area Including ECP Parcels 55 & 56 Fort Monmouth, Oceanport, Monmouth County.*
3. Army letter to NJDEP dated 3 March 2016, Subject: *800 Area Work Plan Addendum and Response to NJDEP's November 10, 2015 Comments on the June 2015 No Further Action Request, Site Investigation Report Addendum for the 800 Area Including ECP Parcels 55 and 56, Fort Monmouth, New Jersey.*
4. NJDEP letter to Army dated 4 April 2016, re: *800 Area Work Plan Addendum and Response to NJDEP's November 10, 2015 Comments on the June 2015 No Further Action Request, Site Investigation Report Addendum for the 800 Area Including ECP Parcels 55 and 56, Fort Monmouth, New Jersey.*

Dear Ms. Range:

The U.S. Army Fort Monmouth (FTMM) Team has prepared this addendum to present the results of additional field sampling at nine former Underground Storage Tanks (USTs) 800-1, 800-9, 800-12, 800-20, 800-21, 813, 814, 884, and 888). These USTs were unregulated heating oil tanks (UHOTs) and were located within Environmental Condition of Property (ECP) Parcels 54, 55, 56 and 57 (designated as the 800 Area). In the previous 1993 through 2011 field investigations, soil contamination was found to extend within the proximity of the groundwater table. The Army's 03 March 2016 Work Plan (Correspondence 3) that described the groundwater investigation to be performed in April 2016 was determined to be acceptable by the NJDEP (Correspondence 4). The Work Plan did not include additional soil sampling at the nine UST locations.

One temporary groundwater monitoring well was installed with a Geoprobe® rig immediately downgradient of the limits of excavation at each of the nine UST locations. Temporary monitoring wells ARE-800-TMW05 and ARE-800-TMW06 were sampled on 18 and 19 April 2016. Temporary monitoring wells ARE-800-TMW01, ARE-800-TMW02, ARE-800-TMW03, ARE-800-TMW04, ARE-800-TMW07, ARE-800-TMW08, and ARE-800-TMW09 were sampled on 1, 2, and 4 August 2016. A groundwater sample was collected from each temporary well and analyzed for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) plus tentatively identified compounds (TICs), in accordance with the requirements for No. 2 fuel oil in Table 2-1 of the New Jersey Administrative Code (NJAC) 7:26E Technical Requirements for Site Remediation.

The locations of the field samples are presented in **Attachment A**. The analytical results and exceedances of applicable NJDEP criteria are provided in **Attachment B**. Field notes are provided in **Attachment C**, and boring logs are provided in **Attachment D**. The samples were analyzed by ALS Environmental; analytical data packages are provided in **Attachment E**.

The results of the groundwater sampling and analyses are provided below for each of the nine UST sites.

UST 800-1

UST 800-1 was a residential fuel oil tank that was removed in 2003 as described in Attachment F of Correspondence 1. Temporary well ARE-800-TMW-04 was installed, sampled, and subsequently abandoned (**Attachment A**). Groundwater was encountered at approximately 4 feet below ground surface (bgs); please see **Attachment D.** As shown on Table 2 of **Attachment B**, there were no exceedances of the NJDEP Ground Water Quality Criteria (GWQC).

UST 800-9

UST 800-9 was a residential fuel oil tank that was removed in 2004 as described in Attachment H of Correspondence 1. Temporary well ARE-800-TMW-06 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D**, groundwater was

encountered at approximately 9 feet below ground surface (bgs). As shown on Table 2 of **Attachment B**, there were no exceedances of the GWQC.

UST 800-12

UST 800-12 was a residential fuel oil tank that was removed in 2004 as described in Attachment J of Correspondence 1. Temporary well ARE-800-TMW-07 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D**, groundwater was encountered at approximately 8.5 feet bgs. As shown on Table 2 of **Attachment B**, two SVOCs (2-methylnaphthalene and benzo[a]anthracene) exceeded the GWQC. SVOC TICs also exceeded the GWQC.

UST 800-20

UST 800-20 was a residential fuel oil tank that was removed in 2003 as described in Attachment O of Correspondence 1. Temporary well ARE-800-TMW-08 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D,** groundwater was encountered at approximately 7 feet bgs. As shown on Table 2 of Attachment B, one VOC (1,1,2-trichloroethane) and six SVOCs (2-methylnaphthalene, benzo[a]anthracene, benzo[a]pyrene, benzo[ghi]perylene, benzo[k]fluoranthene, and indeno[1,2,3-cd]pyrene) exceeded the GWQC. SVOC TICs also exceeded the GWQC.

UST 800-21

UST 800-21 was a residential fuel oil tank that was removed in 2003 as described in Attachment P of Correspondence 1. Temporary well ARE-800-TMW-09 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D**, groundwater was encountered at approximately 8.5 feet bgs. As shown on Table 2 of **Attachment B**, there were no exceedances of the GWQC.

UST 813

UST 813 was a residential fuel oil tank that was removed in 2010 as described in Attachment R of Correspondence 1. Temporary well ARE-800-TMW-02 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D**, groundwater was encountered at approximately 5.5 feet bgs. As shown on Table 2 of **Attachment B**, the SVOC benzo(a)anthracene (0.2 µg/l) and benzo(a)pyrene (0.11 µg/l) slightly exceeded the GWQC (0.1 µg/l). However, this detection was estimated ("J" flagged) due to the low concentrations encountered. These analytes are polycyclic aromatic hydrocarbons (PAHs) that have been encountered at other FTMM locations within surficial soils and fill. These low level groundwater exceedances are considered to have resulted from entrainment of soil from other anthropogenic, non-UST related sources (such as surficial soils or fill) resulting in sample turbidity which is common with temporary well groundwater samples. There were no exceedances of the GWQC indicative of fuel oil.

UST 814

UST 814 was a residential fuel oil tank that was removed in 1990 as described in Attachment S of Correspondence 1. Temporary well ARE-800-TMW-01 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D**, groundwater was encountered at approximately 5 feet bgs. As shown on Table 2 of **Attachment B**, there were no exceedances of the GWQC.

UST 884

UST 884 was a residential fuel oil tank that was removed in 2003 as described in Attachment U of Correspondence 1. Temporary well ARE-800-TMW-05 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D**, groundwater was encountered at approximately 6 feet bgs. As shown on Table 2 of **Attachment B**, the sum of VOC TICs concentrations (981 µg/l) and the SVOC 2-methynapthalene (150 µg/l) exceeded the GWQC (500 and 30 µg/l, respectively). The SVOC naphthalene was also detected (86 µg/l), but it did not exceed the GWQC (300 µg/l).

UST 888

UST 888 was a residential fuel oil tank that was removed in 2011 as described in Attachment V of Correspondence 1. Temporary well ARE-800-TMW-03 was installed, sampled, and subsequently abandoned (**Attachment A**). As indicated in **Attachment D**, groundwater was encountered at approximately 5 feet bgs. As shown on Table 2 of **Attachment B**, there were no exceedances of the GWQC.

In summary, we request No Further Action determinations for USTs 800-1, 800-9, 800-21, 813, 814, and 888. Additional work would be needed for NFA determinations to be made for USTs 800-12, 800-20, and 884. Our technical Point of Contact (POC) is Kent Friesen; (732) 383-7201 or kent.friesen@parsons.com. Should you have any questions or require additional information, please contact me by phone at (732) 380-7064 or by email at william.r.colvin18.civ@mail.mil.

Sincerely,

William R. Colvin, PMP, PG, CHMM
BRAC Environmental Coordinator

cc: Linda Range, NJDEP (e-mail and 3 hard copies)
Delight Balducci, HQDA ACSIM (e-mail)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)

New Jersey Department of Environmental Protection
Site Remediation Program

Report Certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites

These certifications are to be used for reports submitted for RCRA GPRA 2020, CERCLA, and Federal Facility Sites. The Department has developed guidance for report certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites under traditional oversight. The "Person Responsible for Conducting the Remediation Information and Certification" is required to be submitted with each report. For those sites that are required or opt to use a Licensed Site Remediation Professional (LSRP) the report must also be certified by the LSRP using the "Licensed Site Remediation Professional Information and Statement". For additional guidance regarding the requirement for LSRPs at RCRA GPRA 2020, CERCLA and Federal Facility Sites see http://www.nj.gov/dep/srp/srra/training/matrix/quick_ref/rcra_cercla_fed_facility_sites.pdf.

Documents:

"Request for No Further Action at Multiple 800 Area Underground Storage Tanks, Site Investigation Report Addendum, Fort Monmouth, New Jersey"

PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: William R. Colvin
Representative First Name: William Representative Last Name: Colvin
Title: Fort Monmouth BRAC Environmental Coordinator (BEC)
Phone Number: (732) 380-7064 Ext: Fax:
Mailing Address: P.O. Box 148
City/Town: Oceanport State: NJ Zip Code: 07757
Email Address: william.r.colvin18.civ@mail.mil

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: William R Colvin Date: 23 January 2017

Name/Title: William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator

Attachment A
Figure 1 Study Area Location (800 Area) and Figure 2 Study Area 800 Sample Locations (showing exceedances)

Little Silver Borough

Shrewsbury Borough

Tinton Falls Borough

Eatontown Borough

Oceanport Borough

West Long Branch Borough

Parkers Creek

North Branch Parkers Creek

Lafetra Creek

Mill Creek

Oceanport Creek

Wampum Lake

Wampum Brook

Husky Brook

Turtle Mill Brook

Study Area

LEGEND:

- Parcel Boundary
- Installation Boundary
- Municipal Boundary
- Surface Water Feature

N

1 inch = 1,000 feet

0 500 1,000 2,000 Feet

Source: FTMM Supplied CAD, 2013; ESRI Data and Maps, 2011; USGS NHD, 2012.

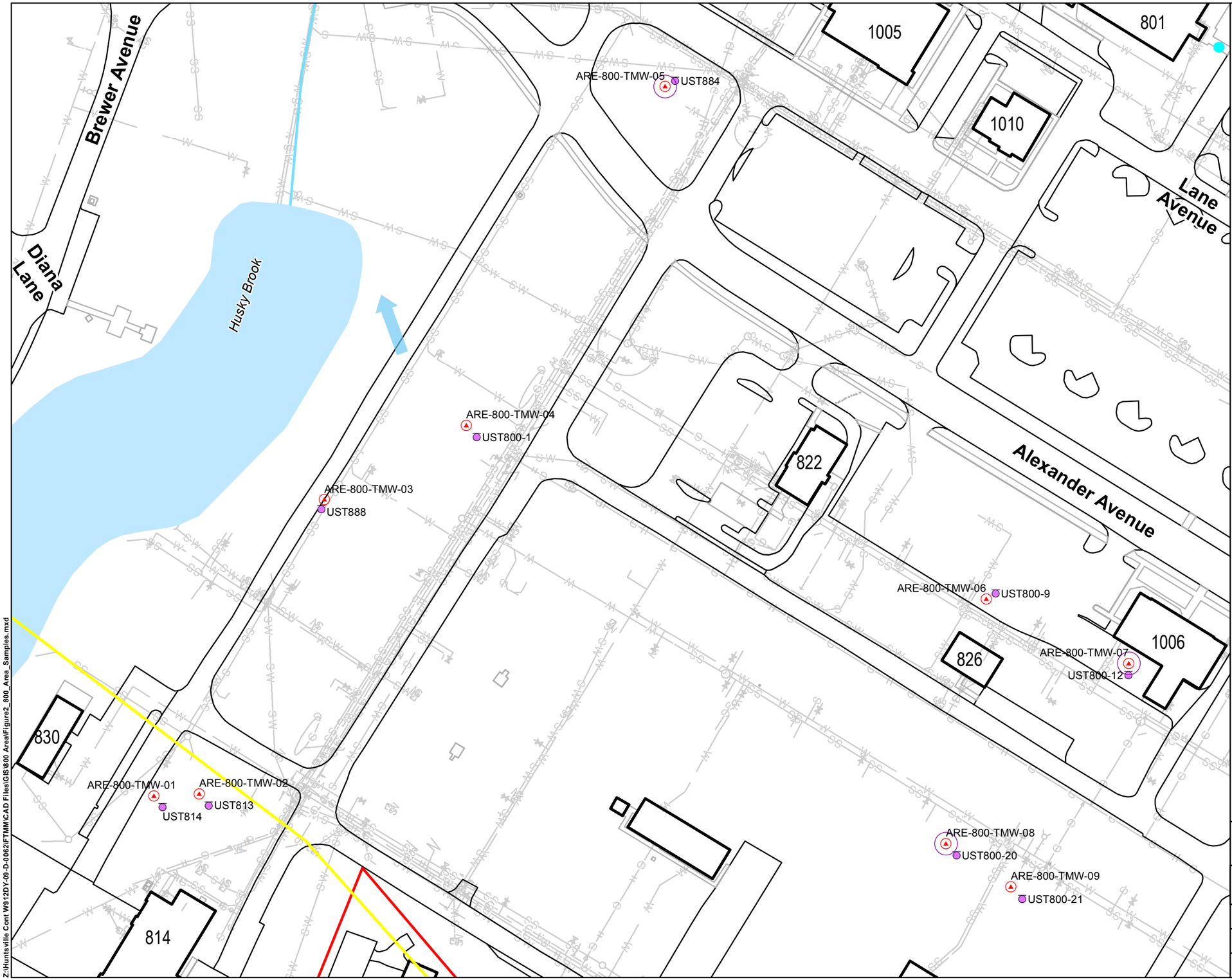
PARSONS
401 Diamond Drive NW,
Huntsville AL

Fort Monmouth
New Jersey

STUDY AREA LOCATION (800 AREA)

CREATED BY:	REVIEWED BY:
RR	KF
DATE:	FIGURE NUMBER:
FEB. 2016	FIGURE 1
PROJECT NUMBER:	FILE:
748810-01000	Figure1_800_Area.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\800 Area\Figure1_800_Area.mxd 2/11/2016 1:10:09 PM



LEGEND:

- Groundwater Sample
- Exceedance of Groundwater Quality Criteria
- Former UST Location
- Shallow Monitoring Well
- Municipal Boundary
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Estimated Groundwater Flow Direction

NOTE:

1. Groundwater samples will be collected from temporary wells.

N

1 inch = 100 feet

0 50 100 200 Feet

Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

STUDY AREA 800
SAMPLE LOCATIONS

CREATED BY: TS	REVIEWED BY: KF
DATE: JAN. 2017	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-02060	FILE: Figure2_800_Area_Samples.mxd

Z:\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\800 Area\Figure2_800_Area_Samples.mxd

Attachment B
Validated Laboratory Data Results for Groundwater, Area 800

Attachment A
Validated Laboratory Data Results for Groundwater
Area 800

Loc ID	NJ Ground Water Quality Criteria	A800-TMW-01	A800-TMW-02	A800-TMW-03	A800-TMW-04		A800-TMW-05	A800-TMW-06	A800-TMW-07	A800-TMW-08	A800-TMW-09
Sample ID		ARE-800-TMW-01	ARE-800-TMW-02	ARE-800-TMW-03	ARE-800-TMW-04	ARE-800-TMW-104	ARE-800-TMW05	ARE-800-TMW06	ARE-800-TMW-07	ARE-800-TMW-08	ARE-800-TMW-09
Sample Date		8/2/2016	8/2/2016	8/2/2016	8/2/2016	8/2/2016	4/19/2016	4/19/2016	8/4/2016	8/2/2016	8/4/2016
Filtered		Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
Volatile Organic Compounds (µg/l)											
1,1,1,2-Tetrachloroethane	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,1,1-Trichloroethane	30	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,1,2,2-Tetrachloroethane	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,1,2-Trichloroethane	3	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	**5.5**	< 0.75
1,1-Dichloroethane	50	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,1-Dichloroethene	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,1-Dichloropropene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,2,3-Trichlorobenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,2,3-Trichloropropane	0.03	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 1	< 1	< 2.5	< 2.5	< 2.5
1,2,4-Trichlorobenzene	9	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,2,4-Trimethylbenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**55**	< 1	**73.9**	**14.7**	< 0.75
1,2-Dibromo-3-chloropropane	0.02	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 1	< 1	< 2.5	< 2.5	< 2.5
1,2-Dibromoethane	0.03	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,2-Dichlorobenzene	600	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,2-Dichloroethane	2	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,2-Dichloropropane	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,3,5-Trimethylbenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**11**	< 1	**10.9**	**8.4**	< 0.75
1,3-Dichlorobenzene	600	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
1,3-Dichloropropane	100	< 0.75 UJ	< 0.75 UJ	< 0.75 UJ	< 0.75 UJ	< 0.75 UJ	< 1	< 1	< 0.75	< 0.75 UJ	< 0.75
1,4-Dichlorobenzene	75	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
2,2-Dichloropropane	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
2-Chlorotoluene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Acetone	6,000	**3.9 J**	**4 J**	**4.1 J**	< 3.8	< 3.8	**7.7 J**	**11**	**6.3**	**4.8 J**	**3.6 J**
Benzene	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Bromobenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Bromochloromethane	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Bromodichloromethane	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Bromoform	4	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Carbon tetrachloride	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1 UJ	< 0.75	< 0.75	< 0.75
Chlorobenzene	50	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Chlorodibromomethane	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Chloroethane	5	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Chloroform	70	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Cis-1,2-Dichloroethene	70	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Cis-1,3-Dichloropropene	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Cymene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**1.9 J**	< 1	**22.3**	**4.7**	< 0.75
Dichlorodifluoromethane	1,000	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Ethyl benzene	700	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**3 J**	< 1	**0.55 J**	**2.8**	< 0.75
Hexachlorobutadiene	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Isopropylbenzene	700	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**8.3**	< 1	**10.3**	**3.5**	< 0.75
Meta/Para Xylene	1,000	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 2	< 2	< 1.5	**0.89 J**	< 1.5
Methyl bromide	10	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Methyl butyl ketone	300	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 5	< 5	< 3.8	< 3.8	< 3.8
Methyl chloride	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	**0.32 BJ**	< 0.75	< 0.75	< 0.75
Methyl ethyl ketone	300	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	**1.1 J**	**2 J**	< 3.8	< 3.8	< 3.8
Methyl isobutyl ketone	100	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 1	**0.93 J**	< 3.8	< 3.8	< 3.8
Methyl Tertbutyl Ether	70	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Methylene chloride	3	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Naphthalene	300	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**140**	< 1	**68.7**	**46.9**	< 0.75
n-Butylbenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**5.7**	< 1	**18.1**	< 0.75	< 0.75
Ortho Xylene	1,000	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
p-Chlorotoluene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Propylbenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**10**	< 1	**12.9**	**3.6**	< 0.75
sec-Butylbenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**7.4**	< 1	**25.6**	**6.8**	< 0.75
Styrene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Tert Butyl Alcohol	100	< 12.5	< 12.5	< 12.5	< 12.5	< 12.5	< 20	< 20	< 12.5	< 12.5	< 12.5
tert-Butylbenzene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	**1.2 J**	< 1	< 0.75	< 0.75	< 0.75
Tetrachloroethene	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Toluene	600	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	**0.25 J**	< 0.75	< 0.75	< 0.75
Trans-1,2-Dichloroethene	100	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Trans-1,3-Dichloropropene	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Trichloroethene	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Trichlorofluoromethane	2,000	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
Vinyl chloride	1	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	< 1	< 1	< 0.75	< 0.75	< 0.75
TIC VOCs (µg/l)											
Total TICs, Volatile	500	NA	NA	NA	NA	NA	**981 JN**	26 JN	NA	**232.1 JN**	NA

Attachment A
Validated Laboratory Data Results for Groundwater
Area 800

Loc ID	NJ Ground Water Quality Criteria	A800-TMW-01	A800-TMW-02	A800-TMW-03	A800-TMW-04		A800-TMW-05	A800-TMW-06	A800-TMW-07	A800-TMW-08	A800-TMW-09
Sample ID		ARE-800-TMW-01	ARE-800-TMW-02	ARE-800-TMW-03	ARE-800-TMW-04	ARE-800-TMW-104	ARE-800-TMW05	ARE-800-TMW06	ARE-800-TMW-07	ARE-800-TMW-08	ARE-800-TMW-09
Sample Date		8/2/2016	8/2/2016	8/2/2016	8/2/2016	8/2/2016	4/19/2016	4/19/2016	8/4/2016	8/2/2016	8/4/2016
Filtered		Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
Semivolatile Organic Compounds (µg/l)								26			
1,2,4-Trichlorobenzene	9	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
1,2-Dichlorobenzene	600	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
1,2-Diphenylhydrazine	20	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
1,3-Dichlorobenzene	600	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
1,4-Dichlorobenzene	75	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
2,4,5-Trichlorophenol	700	< 15	< 3.1	< 3	< 2.9	< 3.1	< 10	< 5	< 3.1	< 3.3	< 3.2
2,4,6-Trichlorophenol	20	< 5	< 1	< 1	< 0.98	< 1	< 10	< 5	< 1	< 1.1	< 1.1
2,4-Dichlorophenol	20	< 5	< 1	< 1	< 0.98	< 1	< 10	< 5	< 1	< 1.1	< 1.1
2,4-Dimethylphenol	100	< 25	< 5.1	< 5	< 4.9	< 5.1	< 10	< 5	< 5.2	< 5.5	< 5.3
2,4-Dinitrophenol	40	< 40	< 8.2	< 8	< 7.8	< 8.2	< 50	< 25	< 8.3	< 8.8	< 8.5
2,4-Dinitrotoluene	10	< 0.2	< 0.041 UJ	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	< 0.042	< 0.044	< 0.043
2,6-Dinitrotoluene	10	< 0.2	< 0.041 UJ	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	< 0.042	< 0.044	< 0.043
2-Chloronaphthalene	600	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
2-Chlorophenol	40	< 10	< 2.1	< 2	< 2	< 2.1	< 10	< 5	< 2.1	< 2.2	< 2.1
2-Methylnaphthalene	30	< 5	< 1	< 1	< 0.98 UJ	< 1	**150**	< 5	**148**	**41.2**	< 1.1
2-Methylphenol	100	< 5	< 1	< 1	< 0.98	< 1	< 10	< 5	< 1	< 1.1	< 1.1
2-Nitroaniline	100	< 5	< 1	< 1	< 0.98 UJ	< 1	< 50	< 25	< 1	< 1.1	< 1.1
2-Nitrophenol	100	< 10	< 2.1	< 2	< 2	< 2.1	< 10	< 5	< 2.1	< 2.2	< 2.1
3,3'-Dichlorobenzidine	30	< 15	< 3.1	< 3	< 2.9 UJ	< 3.1	< 10	< 5	< 3.1	< 3.3	< 3.2
3-Nitroaniline	100	< 10	< 2.1	< 2	< 2 UJ	< 2.1	< 50	< 25	< 2.1	< 2.2	< 2.1
4,6-Dinitro-2-methylphenol	1	< 25	< 5.1	< 5	< 4.9	< 5.1	< 50	< 25	< 5.2	< 5.5	< 5.3
4-Bromophenyl phenyl ether	100	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
4-Chloro-3-methylphenol	100	< 5	< 1	< 1	< 0.98	< 1	< 10	< 5	< 1	< 1.1	< 1.1
4-Chloroaniline	30	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
4-Chlorophenyl phenyl ether	100	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
4-Nitroaniline	5	< 5	< 1	< 1	< 0.98 UJ	< 1	< 50	< 25	< 1	< 1.1	< 1.1
4-Nitrophenol	100	< 25	< 5.1	< 5	< 4.9	< 5.1	< 50	< 25	< 5.2	< 5.5	< 5.3
Acenaphthene	400	< 0.2	< 0.041 UJ	< 0.04 UJ	< 0.039 UJ	< 0.041	**7.2 J**	< 5	**1.2**	**2.9**	< 0.043
Acenaphthylene	100	< 0.2	**0.024 J**	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	< 0.042	< 0.044	< 0.043
Anthracene	2,000	< 0.2	**0.026 J**	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	**1.8 J**	**2 J**	< 0.043
Benzidine	20	< 150 UJ	< 30.8 UJ	< 30 UJ	< 29.4 UJ	< 30.8 UJ	< 200 UJ	< 100 UJ	< 31.3 UJ	< 33 UJ	< 31.9 UJ
Benzo(a)anthracene	0.1	< 0.2	**0.2 J**	< 0.04 UJ	**0.017 J**	< 0.041	< 10	< 5	**0.2 J**	**2.2**	< 0.043
Benzo(a)pyrene	0.1	< 0.2	**0.11 J**	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	< 0.042	**1.6**	< 0.043
Benzo(b)fluoranthene	0.2	< 0.2	**0.15 J**	< 0.04 UJ	**0.023 J**	< 0.041	< 10	< 5	< 0.042	**2.4**	< 0.043
Benzo(ghi)perylene	100	< 0.2	**0.064 J**	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	< 0.042	**0.72 J**	< 0.043
Benzo(k)fluoranthene	0.5	< 0.2	**0.055 J**	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	< 0.042	**0.86**	< 0.043
Benzyl alcohol	2,000	< 10	< 2.1	< 2	< 2	< 2.1	< 10	< 5	< 2.1	< 2.2	< 2.1
Bis(2-Chloroethoxy)methane	100	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Bis(2-Chloroethyl)ether	7	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Bis(2-Chloroisopropyl)ether	300	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Bis(2-Ethylhexyl)phthalate	3	< 5	< 1	< 1	**0.26 J**	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Butyl benzyl phthalate	100	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Carbazole	100	< 5	< 1	< 1	< 0.98 UJ	< 1	**3.6 J**	< 5	< 1	< 1.1	< 1.1
Chrysene	5	< 0.2	**0.16 J**	< 0.04 UJ	**0.028 J**	< 0.041	< 10	< 5	**0.14**	**2**	< 0.043
Cresol	NLE	< 5	< 1	< 1	< 0.98	< 1	< 20	< 10	< 1	< 1.1	< 1.1
Dibenz(a,h)anthracene	0.3	< 0.2	< 0.041 UJ	< 0.04 UJ	< 0.039 UJ	< 0.041	< 10	< 5	< 0.042	**0.23 J**	< 0.043
Dibenzofuran	100	< 5	< 1	< 1	< 0.98 UJ	< 1	**5 J**	< 5	**4.5 J**	**6.6 J**	< 1.1
Diethyl phthalate	6,000	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Dimethyl phthalate	100	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Di-n-butylphthalate	700	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Di-n-octylphthalate	100	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10 UJ	< 5 UJ	< 1	< 1.1	< 1.1
Fluoranthene	300	**3.8**	**0.6 J**	**0.454 J**	**0.355 J**	**0.741**	< 10	< 5	**1.67**	**6.21 J**	< 0.043
Fluorene	300	< 0.2	**0.028 J**	**0.015 J**	**0.021 J**	< 0.041	**6.2 J**	< 5	**4.5 J**	**11.2**	< 0.043
Hexachlorobenzene	0.02	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Hexachlorobutadiene	1	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Hexachlorocyclopentadiene	40	< 10	< 2.1	< 2	< 2 UJ	< 2.1	< 10 UJ	< 5 UJ	< 2.1	< 2.2	< 2.1
Hexachloroethane	7	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Indeno(1,2,3-cd)pyrene	0.2	< 0.25	**0.067 J**	< 0.05 UJ	< 0.049 UJ	< 0.051	< 10	< 5	< 0.052	**0.84 J**	< 0.053
Isophorone	40	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Naphthalene	300	< 0.2	**0.048 J**	< 0.04 UJ	< 0.039 UJ	< 0.041	**86**	< 5	**24.5 J**	**16.2**	< 0.043
Nitrobenzene	6	< 10	< 2.1	< 2	< 2 UJ	< 2.1	< 10	< 5	< 2.1	< 2.2	< 2.1
N-Nitrosodimethylamine	0.8	< 10	< 2.1	< 2	< 2 UJ	< 2.1	< 10	< 5	< 2.1	< 2.2	< 2.1
N-Nitroso-di-n-propylamine	10	< 5	< 1	< 1	< 0.98 UJ	< 1	< 10	< 5	< 1	< 1.1	< 1.1
N-Nitrosodiphenylamine	10	< 10	< 2.1	< 2	< 2 UJ	< 2.1	< 10	< 5	< 2.1	< 2.2	< 2.1
Pentachlorophenol	0.3	< 5 UJ	< 1 UJ	< 1 UJ	< 0.98 UJ	< 1 UJ	< 50 UJ	< 25 UJ	< 1 UJ	< 1.1 UJ	< 1.1 UJ
Phenanthrene	100	**0.1 J**	**0.19 J**	**0.042 J**	**0.055 J**	**0.027 J**	**8.2 J**	< 5	**20.5**	**21.9**	< 0.043
Phenol	2,000	< 5	< 1	< 1	< 0.98	< 1	< 10	< 5	< 1	< 1.1	< 1.1
Pyrene	200	< 0.2	**0.26 J**	**0.024 J**	**0.047 J**	< 0.041	< 10	< 5	**3.3**	**6.5 J**	< 0.043
TIC SVOCs (µg/l)											
Total TICs, Semi-Volatile	500	**136.3 JN**	**163 JN**	**12.5 JN**	**40.9 JN**	**41.3 JN**	NA	NA	**510.5 JN**	**724 JN**	**4.3 JN**

Footnote:

1) All historical data collected prior to 2013 are reported as provided by others.

2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.

3) NLE = no limit established.

4) **Bold** = chemical dectection

5) Chemical result qualifiers are assigned by the laboratory and are evaluated and modified (if necessary) during the data validation.

B =Compound detected in the sample at a concentration less than or equal to 5 times (10 times for common lab contaminants) the blank concentration.

J = estimated detected value due to a concetration below the reporting limit or due to discrepancies in meeting certain analyte-specific quality control.

U = non-detect, i.e. not detected at or above this value.

JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.

- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

7) Criteria action level source document and web address.

- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010

http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf

Attachment C
Field Notes

Attachment C

Summary of Sample and Analytical Information for 800 Area

Sampling Location	UST ID	Date Installed	Date Sampled	Lab Report Service Request Number
ARE-800-TMW-01	UST 814	8/1/2016	8/2/2016	2164282
ARE-800-TMW-02	UST 813	8/1/2016	8/2/2016	2164282
ARE-800-TMW-03	UST 888	8/1/2016	8/2/2016	2164282
ARE-800-TMW-04/104	UST 800-1	8/1/2016	8/2/2016	2164282
ARE-800-TMW-05	UST 884	4/18/2016	4/19/2016	R1603837
ARE-800-TMW-06	UST 800-9	4/18/2016	4/19/2016	R1603837
ARE-800-TMW-07	UST 800-12	8/2/2016	8/4/2016	2165198
ARE-800-TMW-08	UST 800-20	8/2/2016	8/2/2016	2164282
ARE-800-TMW-09	UST 800-21	8/2/2016	8/4/2016	2165198

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Location: Oceanport, NJ Date 4/15/16

Project / Client FTMM phase II / USACE

Tech: CW, JM, FV, JB, CT

Task: TMW installation

Weather: 58°F clear

0730: on-site H+S tailgate, cal, prep

0830: mob to Area 800

0900: Begin Drilling

0925: TMW-04 installed - GW @ 5.5'

0935: move to TMW03

1000: TMW03 installed

1015: move to TMW-02

SAMPLE ID	Time	Analysis
ARE-800-TMW02	1230	SVOC / VOC
TMW01	1250	
TMW04	0930	
TMW03	1030	
TMW09	1345	
PAR-68-TMW01	1020	
TMW02	1000	

1500: mob to trailer for paperwork / cleanup

1545: off-site

127

Location Oceanport, NJ Date 4/18/16

Project / Client FTMM Phase II / USACE

Tech: CW, FA, JB, CT

Task: TW sample + installation

Weather: 45-65°F

0730: on-site H+S tailgate

0815: Mob to Area 800 to sample and install TMW's

0830: SAMPLE ARE-800-TMW08

0845: SAMPLE ALE-800-TMW07

0915: Begin TMW06 Boring

0935: TMW06 installed

1025: TMW-05 installed

1030: pull/fill TMW's

1200: Lunch

1330: TMW-01 (Parcel 26) installed

1415: TMW-02 installed

1430: mob to office area. Drillers head to take trailer off-site for tomorrow - unload well development equipment for tomorrow

1600: ECDI off-site, Parsons sample prep

1600: off-site to Ship

Location Oceanport, NJ Date 4/19/16

Project / Client Ftmm phase II / USACE

Tech: CW, JM, JB, CT, FA

Tasks: well Development / TMW Sample

Weather: 70°F clear

0730: onsite - H&S tailgate

0815: JM + ECDI to prod 28 to Develope.

0820: CW + FA to Sample TMW's

0845: Sample 800-TMW-06 + MS/MSD

0945: Sample 800-TMW-05

1030: Sample ~~800-~~ PAR-76-TMW01

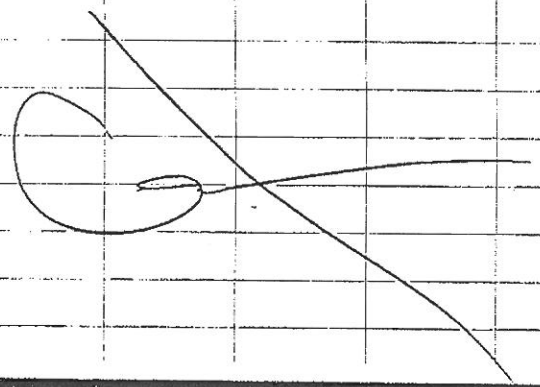
1100: Sample PAR-76-TMW02

1150: Prep coolers / write up COC's - Pine has not yet arrived.

1230: JM + ECDI Mob to Develope @ FTMM-22

1400: CW to Ship SAMPLES and then to FTMM-22

1545: off-site



Location Oceanport, NJ Date 6/20/16 129

Project / Client Ftmm phase II / USACE

Tech: CW, JM, JB, CT, FA

Tasks: well Development / PAR-49 SB

Weather: 55°F

0730: on-site + H&S tailgate

0815: Mob to PARCEL 49

0850: Begin drilling

SAMPLE ID	TIME	Analysis
PAR-49-SB-09R-3-3.5	1110	VOC's + TICS
PAR-49-SB-09R-8-8.5	1115	SVOC's + TICS
PAR-49-SB-09R-9.5-10	1120	

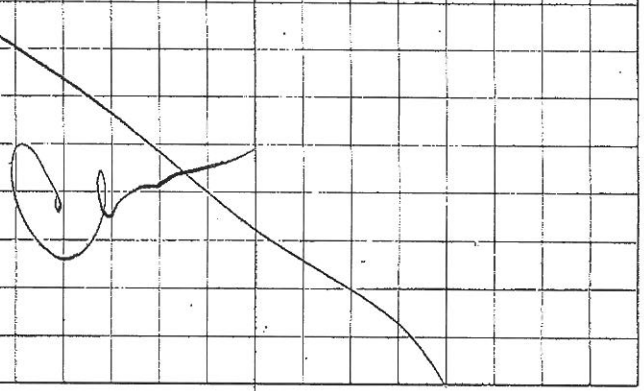
1120: ECDI / PARSONS Mob Geoprobe from 49 to 57

1145: Mob to C. WOOD

1200: Begin Developing MW-35

1500: MW-35 Developed, Mob to office

1545: off-site

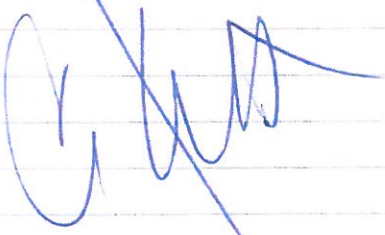


Aug 1 2012

Tech: C. Watson, S. Walker, JOE (ECOI)
Task: installation of temp wells
Weather 75°F Flash flood warning

0720: on-site
0730: H&S tailgate, scope review
0815: check equipment, bottleware
0850: Mob to Parcel 68
0910: ECOI prep rig
0920: Start drilling PAR-68-GW-TMW02
0955: install PAR-68-GW-TMW02
1010: begin drilling at TMW01
1030: install PAR-68-GW-TMW01
Allow wells to recharge
1115: Gauge wells TMW01: 5.6' BGS
TMW02: 5.4' BGS
1120: Sample ~~TW01~~ (GW) TMW01
1130: Sample TMW02
1200: Finish collecting sample - Lunch
1245: Mob to ~~Parcel~~ (GW) Area 800
1305: begin drilling ~~PAR~~ (GW) ARE-800-TMW-04
1325 install TMW-04
1340: begin drilling ARE-800-TMW-03
1355 install ARE-800-TMW-03
1410: begin drilling ARE-800-TMW-02
1430: install ARE-800-TMW-02
1445: begin drilling ARE-800-TMW-01
1455: install ARE-800-TMW-01
allow wells to recharge overnight

1510: Mob to office
1520: prep samples, COCs, DCQR
1530: Collect EB
1600: offsite



Aug 2, 2016

Tech: S. Paralkar, C. Watson, JOE + colin (ECDI

TASK: Temp well installation + Simple

Weather: >75°f clear

0720: on-site

0730: H+S tailgate

0750: Prep bottleware, cal. P.I.D

0845: Mob to ~~AREA~~ 800

0900: C. Watson to install TMW's
S. Paralkar to begin sampling TMW's from yesterday

Sample ID	Time	Gauged Depth
ARE-800-TMW-04	0910	4.91 +MS/MSD/Dup/Equip
ARE-800-TMW-03	0935	5.80
ARE-800-TMW-01	1030	4.15
ARE-800-TMW-02	1045	4.09

0945: Install ARE-800-TMW-08

1070: Install ARE-800-TMW-09

1135: Install ARE-800-TMW-07

12:15: Lunch

1300: Continue sampling TMW-04, Drillers Mob to 79

1345: Sample ARE-800-TMW-08, Drillers pull completed wells

1400: MOB to office, C. Watson continue Sampling

1430: Prep samples, COCs, DCQR

1445: Collect EB

1500: C. Watson back to office

1510: De Mob

1540: off-site

Aug 3, 2016

Tech: S. Paralkar, Z Lavy, Joe + Colin (ECDI)

Task: Temp well installation + simple

Weather: 75°F clear

0720: onsite

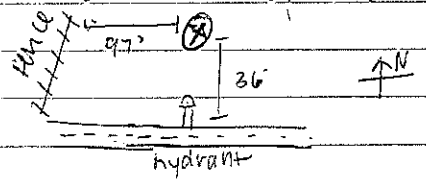
0730: H+S tailgate

0820: prep bottleware, cal PID → 100 ppm (ID: 4521)

0845: Mob to Parcel 79

0855: EDCI prep rig

0910: start drilling PAR-79-MP-TMW01
36' north of fire hydrant, 97' east of fence



0940: ~~Fn~~ Install temp well PAR-79-MP-TMW01

0950: TMW01 guaged depth 8.43 - 3.1 = 5.33 ft
pulled up to 5' to 15' (screen)

1000: start drilling PAR-79-MP-TMW02

1015: install tempwell PAR-79-MP-TMW02
124.9' north of fire hydrant, 83.4' east of fence
TMW02 guaged at 3.75'

1050: start drilling PAR-79-MP-TMW03

1110: installed tempwell PAR-79-MP-TMW03
198.4' north of hydrant,
100.1' east of fence
guaging depth @ 3.75'

1130: Started drilling PAR-79-MP-TMW04

1200: install PAR-79-MP-TMW04

Aug 4 2016

101.11' North of hydrant
229.3' east of fence
gauging depth: 4.49

12:20 lunch

1300: Drillers went to landfill.
Z. Lary and S. Paralkar tried to organize bottleware + talk to lab

1400: Mob to 79

1420: start drilling TMW05

1430: S. Paralkar sample PAR-79-MP-TWP01

1445: INStall TMW05
94' ft north of utility pole line/street
140' west of building 451
gauging depth: 6.65-7.9 = ~~4.75~~ 4.75

1445: S. Paralkar sample PAR-79-MP-TWP02

1450: start drilling TMW06

1510: INstall TMW06
181' north of utility pole line/street
140' east of building 451

1520: mob to office

1540: Prep samples, COCs, DCQR, collect EB

1620: offsite

Tech: S. Paralkar, C. Watson, Joe (ECOI)

Task: Temp well installation + sample

weather: 80F clear

0720: on-site

0730: H+S tailgate

0750: prep bottleware, cal PID

0815: S. Paralkar mob to ARE800 to sample
C. Watson + drillers mob to PAR-79

Sample ID	Time	gauged depth
ARE-800-TMW-09	0845	8.75
ARE-800-TMW-07	0915	10.1

0925: S. Paralkar MOB to office

0935: S. Paralkar MOB to Par 79

Sample ID	Time	gauged depth
PAR-79-MP-TMW03	1010	3.73
PAR-79-MP-TMW04	1035	4.5
PAR-79-MP-TMW05	1055	4.8
PAR-79-MP-TMW06	1120	4.8
PAR-79-MP-TMW08	1145	5.45
PAR-79-MP-TMW07	1150	7.9
PAR-79-490-TMW03	1405	3.4
PAR-79-MP-TMW09	1315	3.6

TMW NAME	Time installed
PAR-79-MP-TMW08	0920
" " TMW07	0940
PAR-79-142-TMW01	1345
PAR-79-490-TMW02	1155
PAR-79-490-TMW01	1050

Attachment D
Boring Logs

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~5
DATE: 8/1/16
TIME: 1455
MEAS. FROM:

INSPECTOR: C. Watson
DRILLER: J. SARNAK
WEATHER: 78° overcast
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 8/1/16 1445
DATE/TIME FINISH: 8/1/16 1455
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: ARE 780-TMW-1
LOCATION DESCRIPTION: AREA 780
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/45	0	0-4" moist, Brown, mf SAND little silt		
1					4"-12" Crushed Concrete/Rocks	I	
2					12"-38" moist, Brown, mf SAND, little silt		
3					38"-45" Moist green-gray/ orange/Brown, mf SAND, trace silt trace clay	II	
4							
5			60/60	0	0-23" Saturated, SAA	II	
6					23"-50" wet, Orange/grey/ light Brown, mf mottled SAND, little silt		
7							
8					50"-60" moist, Black, f SAND, some silt, Micah present		
9							
0							

Remarks:

Sample Types
S -- Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: 45.5
DATE: 8/1/16
TIME: 1430
MEAS. FROM:

INSPECTOR: C. Watson
DRILLER: J. BARNAK
WEATHER: 78° Overcast
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 8/1/16 1410
DATE/TIME FINISH: 8/1/16 1425
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: AFE-800-TMW02
LOCATION DESCRIPTION: AREA 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/60	0	0-12" Brown, M. Dense, mf SAND, little silt		
1					12"-20" Moist, orange/Brown, mf SAND, little silt		
2					20"-45" Moist, Dark grey, mf SAND, some silt trace clay		
3							
4					45"-60" Moist, Grey/Green, mf SAND, some silt little clay		
5			60/60	0	0-5" SAA		
6					5-10" Saturated, SAA		
7					10"-56" Saturated, grey/orange/ Brown, mf SAND trace silt		
8					56"-60" Black, wet, M. Dense mf, SAND, little silt, Micah		
9							
0							

Remarks:

Sample Types	Consistency vs. Blowcount / Foot				
S – Split-Spoon	Granular (Sand & Gravel)		Fine Grained (Silt & Clay)		and - 35-50%
U – Undisturbed Tube	V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15	some - 20-35%
C – Rock Core	Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30	little - 10-20%
A – Auger Cuttings	M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30	trace - <10%
					moisture, density, color, gradation

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~5
DATE: 8/1/16
TIME: 1355
MEAS. FROM:

INSPECTOR: C. WATSON
DRILLER: J. BARNAK
WEATHER: 78°F Overcast
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 8/1/16 1340
DATE/TIME FINISH: 8/1/16 1350
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: ARE-800-TMW03
LOCATION DESCRIPTION: AREA 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/60	0	0-4" Brown, mf, m. Dense moist, SAND, little silt	I	
1					4"-8" Concrete chunks		
2					8"-24" Brown, mf, m. Dense moist, SAND trace silt		
3					24"-50" moist, light Brown and grey mf SAND, trace silt, trace f gravel	II	
4							
5			60/60	0	0-25" Saturated, SAA		
6					25"-60" Saturated, light grey/ Brown/orange, mottled mf SAND, little silt	II	
7							
8							
9							
0							

Remarks:

Sample Types
S -- Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)		Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: n/a
DATE: 8/1/16
TIME:
MEAS. FROM:

INSPECTOR: C. Watson
DRILLER: J. BARNAK
WEATHER: 78°F overcast
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 8/1/16 1305
DATE/TIME FINISH: 8/1/16 1325
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: ARE-B00 -TAN04
LOCATION DESCRIPTION: AREA B00
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/52	0	0-14" Moist, Brown, mf m. dense SAND, little silt	I	
1					14"-46" Moist, light Brown mf SAND, little silt, trace f gravel saturated @ 46"		
2							
3					46"-52" saturated, Brown/orange/light gray, mf SAND little silt, trace clay	II	▽
4							
5			60/60	0	0-58" SAA		
6					58-60" Dark Brown, mf SAND, little silt, mica present		
7							
8							
9							
10							

Remarks:

Sample Types
S – Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

INSPECTOR: BW
DRILLER: JB
WEATHER: 65°F Clear
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/18/16 1005
DATE/TIME FINISH: 4/18/16 1025
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: ARE-800-TMW05
LOCATION DESCRIPTION:
LOCATION PLAN: Oceanport, New Jersey

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~6
DATE: 4/18/16
TIME: 1030
MEAS. FROM: BGS

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/49	0	0 - 25" Brown, m Dense, mf SAND, little silt, trace Rock frags	I	
1							
2					25" - 49" moist, m. Dense, grey-green mf SAND, little silt		
3						VI	
4							
5			60/60	0	0 - 41" SAA, saturated @ 12"		▽
				0			
6				6.7			
				10.6	41" - 60" ~~moist~~ Saturated, orange MC SAND, trace silt, trace f gravel	III	
7				13.4			
				0			
8				0			
				0			
9				0			
				0			
10							

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~9
DATE: 4/18/16
TIME: 0930
MEAS. FROM: BGS

INSPECTOR: CW
DRILLER: JB
WEATHER: 50° f clear
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/18/16 0915
DATE/TIME FINISH: 4/18/16 0936
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: ASE-800 - TMW06
LOCATION DESCRIPTION: Area 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/1	0	0-5" Asphalt + millings		
					5-44" gray, moist, Dense, MF SAND, little silt, little Rock frags	I	
1							
2							
3					44"-51" moist, orange-brown, Dense, MF SAND, some silt, trace f gravel	II	
4							
5			60/60	0	0-11" SAA		
6					11-60" Moist, orange-Brown, M. Dense, MC SAND, trace silt. Saturated @ 9'	III	
7							
8							
9							
10							

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)		Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL:
DATE:
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JB
WEATHER: ☒ 60°F clr
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/18/16
DATE/TIME FINISH: 4/18/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: AFE-800-TMW06
LOCATION DESCRIPTION: AREA 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/60	0	0-60" Saturated, Orange-Brown, MC SAND, some f gravel, trace silt	III	
1							
2							
3							
4							
5					end of Boring 15'		
6							
7							
8							
9							
10							

Remarks:

Sample Types
S -- Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)		Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~8.5
DATE: 8/2/16
TIME: 1130
MEAS. FROM: BGS

INSPECTOR: C. Watson
DRILLER: J. BARNAK
WEATHER: 78f clear
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 1110
DATE/TIME FINISH: 1120
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: AR-E-800-TMW07
LOCATION DESCRIPTION: AREA 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/45	0	0-6" Asphalt		
					6"-45" moist, Brown, m. course mf SAND, trace silt, trace f gravel		
1							
2							
3							
4				NR			
				NR			
5			60/44	0	0-15" SAA		
				0	15"-38" moist, orange/light Brown MC SAND, trace f gravel		
6				0			
				0			
7				0			
				1.2	38"-44" Saturated, grey, MC SAND, stained, ODOR		
8				7.8			
				64.1			
9				NC			
				NC			
10							

Remarks:

Sample Types
S -- Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: @ 8.5
DATE:
TIME:
MEAS. FROM:

INSPECTOR:
DRILLER: SEE P. 1
WEATHER:
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: SEE P. 2
DATE/TIME FINISH:
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: AOE-800-TMW07
LOCATION DESCRIPTION: AREA 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
1 0			6%60	37.6	0-18" SAA, saturated		
				54.1	18-60" Saturated, orange/		
1 1				18.9	Brown, mf SAND,		
				26.7	some silt, trace +		
1 2					gravel		
1 3							
1 4							
1 5							
6							
7							
8							
9							
0							

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: -7
DATE: 8/2/16
TIME:
MEAS. FROM:

INSPECTOR: C. Watson
DRILLER: J. BARNAK
WEATHER: 78°F
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 8/2/16 0920
DATE/TIME FINISH: 8/2/16 0930
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: EAPE-800-TMW03
LOCATION DESCRIPTION: AREA 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/55	0	0-2" Topsoil / grass 2"-60" Moist, Brown, Dense SAND, some silt trace f gravel	I	
1							
2							
3							
4							
5			60/16	0	0-10" SAA 10"-60" Moist, M. Dense, green/grey, mf SAND, little f gravel, Saturated @ 24"	II	
6							
7							
8							
9							
10							

Remarks:

Sample Types
S -- Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~8.5
DATE: 8/2/16
TIME: 1000
MEAS. FROM:

INSPECTOR: C. Watson
DRILLER: J. BARNAK
WEATHER: 75°F Clear
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 8/2/16 0945
DATE/TIME FINISH: 8/2/16 0955
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: AFE-800-TMW04
LOCATION DESCRIPTION: AREA 300
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/50	0	0-6" grass, topsoil (Brown)	I	
					6"-50" moist, Brown, MF to coarse SAND, trace silt, trace f gravel		
1							
2							
3							
4							
5			60/47	0	0-30" SAA		
6					30"-47" wet, orange/light ~~Brown~~ Brown, MC SAND, trace f gravel		
7					Saturated @ 42"		
8							
9							
10							

Remarks:

Sample Types
S -- Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~8.5
DATE: 3/2/16
TIME: 1000
MEAS. FROM:

INSPECTOR:
DRILLER: SEE P. 1
WEATHER: SEE P. 1
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: SEE P. 1
DATE/TIME FINISH:
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: AFE-800-TMW09
LOCATION DESCRIPTION: AREA 800
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
10			60/60	0	0-20" SAA; saturated		
					20"-26" light gry, wet, mf SAND		
11							
					26"-60" Dark Brown, organic silt, fine wood and roots, trace f sand		
12							
13							
14							
15							
16							
17							
18							
19							
20							

Remarks:

Sample Types
S -- Split-Spoon
U -- Undisturbed Tube
C -- Rock Core
A -- Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

Attachment E
Analytical Data

May 05, 2016 Service Request No:R1603837

Mr. Cory Mahony
Parsons Engineering Science
100 High St. 4th Floor
Boston, MA 02110

Laboratory Results for: FTMM Baseline

Dear Mr.Mahony,

Enclosed are the results of the sample(s) submitted to our laboratory April 20, 2016
For your reference, these analyses have been assigned our service request number **R1603837.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7478. You may also contact me via email at Vanessa.Badman@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Vanessa Badman
Customer Service
Manager

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ALS Group USA, Corp.
dba ALS Environmental

CASE NARRATIVE

This report contains analytical results for the following samples:

Service Request Number: R1603837

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1603837-001	ARE-800-TMW05	4/19/2016	0945
R1603837-002	ARE-800-TMW06	4/19/2016	0845
R1603837-003	ARE-800-EB-04192016	4/19/2016	1200
R1603837-004	ARE-800-TB-04192016	4/19/2016	

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by ALS personnel have been in accordance with “ALS Field Procedures and Measurements Manual” or by client specifications.

Client: Parsons Engineering Science **Service Request:**R1603837

Project: FTMM Baseline/748810-03000

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1603837-001	ARE-800-TMW05	4/19/2016	0945
R1603837-002	ARE-800-TMW06	4/19/2016	0845
R1603837-003	ARE-800-EB-04192016	4/19/2016	1200
R1603837-004	ARE-800-TB-04192016	4/19/2016	

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 09:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW05	**Units:**	ug/L
Lab Code:	R1603837-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	1	04/25/16 13:53	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	1	04/25/16 13:53	
1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	1	04/25/16 13:53	
1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	1	04/25/16 13:53	
1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	1	04/25/16 13:53	
1,1-Dichloropropene	ND	U	5.0	1.0	0.29	1	04/25/16 13:53	
1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	1	04/25/16 13:53	
1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	1	04/25/16 13:53	
1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	1	04/25/16 13:53	
1,2,4-Trimethylbenzene	**55**		5.0	1.0	0.20	1	04/25/16 13:53	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	1	04/25/16 13:53	
1,2-Dibromoethane	ND	U	5.0	1.0	0.24	1	04/25/16 13:53	
1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	1	04/25/16 13:53	
1,2-Dichloroethane	ND	U	5.0	1.0	0.36	1	04/25/16 13:53	
1,2-Dichloropropane	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
1,3,5-Trimethylbenzene	**11**		5.0	1.0	0.20	1	04/25/16 13:53	
1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
1,3-Dichloropropane	ND	U	5.0	1.0	0.27	1	04/25/16 13:53	
1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
2,2-Dichloropropane	ND	U	5.0	1.0	0.27	1	04/25/16 13:53	
2-Butanone (MEK)	**1.1**	**J**	10	1.0	0.81	1	04/25/16 13:53	
2-Chlorotoluene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
2-Hexanone	ND	U	10	5.0	1.7	1	04/25/16 13:53	
tert-Butyl Alcohol	ND	U	100	20	11	1	04/25/16 13:53	
4-Chlorotoluene	ND	U	5.0	1.0	0.24	1	04/25/16 13:53	
p-Isopropyltoluene	**1.9**	**J**	5.0	1.0	0.20	1	04/25/16 13:53	
4-Methyl-2-pentanone	ND	U	10	1.0	0.67	1	04/25/16 13:53	
Acetone	**7.7**	**J**	10	5.0	1.3	1	04/25/16 13:53	
Benzene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
Bromobenzene	ND	U	5.0	1.0	0.28	1	04/25/16 13:53	
Bromochloromethane	ND	U	5.0	1.0	0.32	1	04/25/16 13:53	
Bromodichloromethane	ND	U	5.0	1.0	0.32	1	04/25/16 13:53	
Bromoform	ND	U	5.0	1.0	0.42	1	04/25/16 13:53	
Bromomethane	ND	U	5.0	1.0	0.29	1	04/25/16 13:53	
Carbon Tetrachloride	ND	U	5.0	1.0	0.45	1	04/25/16 13:53	
Chlorobenzene	ND	U	5.0	1.0	0.29	1	04/25/16 13:53	
Chloroethane	ND	U	5.0	1.0	0.24	1	04/25/16 13:53	
Chloroform	ND	U	5.0	1.0	0.25	1	04/25/16 13:53	
Chloromethane	ND	U	5.0	1.0	0.21	1	04/25/16 13:53	
Dibromochloromethane	ND	U	5.0	1.0	0.31	1	04/25/16 13:53	
Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	1	04/25/16 13:53	
Methylene Chloride	ND	U	5.0	1.0	0.60	1	04/25/16 13:53	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 09:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW05	**Units:**	ug/L
Lab Code:	R1603837-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Ethylbenzene	**3.0**	**J**	5.0	1.0	0.20	1	04/25/16 13:53	
Hexachlorobutadiene	ND	U	5.0	1.0	0.62	1	04/25/16 13:53	
Isopropylbenzene (Cumene)	**8.3**		5.0	1.0	0.20	1	04/25/16 13:53	
Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	1	04/25/16 13:53	
Naphthalene	**140**		5.0	1.0	0.20	1	04/25/16 13:53	
Styrene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	1	04/25/16 13:53	
Toluene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	1	04/25/16 13:53	
Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
Vinyl Chloride	ND	U	5.0	1.0	0.32	1	04/25/16 13:53	
cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	1	04/25/16 13:53	
cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	1	04/25/16 13:53	
m,p-Xylenes	ND	U	5.0	2.0	0.33	1	04/25/16 13:53	
n-Butylbenzene	**5.7**		5.0	1.0	0.21	1	04/25/16 13:53	
n-Propylbenzene	**10**		5.0	1.0	0.20	1	04/25/16 13:53	
o-Xylene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	
sec-Butylbenzene	**7.4**		5.0	1.0	0.27	1	04/25/16 13:53	
tert-Butylbenzene	**1.2**	**J**	5.0	1.0	0.20	1	04/25/16 13:53	
trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	1	04/25/16 13:53	
trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	1	04/25/16 13:53	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000637-50-3	Benzene, 1-propenyl-	12.21	53	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	12.51	22	JN
002870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	12.59	22	JN
027133-93-3	2,3-Dihydro-1-methylindene	12.68	64	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	12.91	28	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	12.95	34	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	13.16	20	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	13.28	89	JN
000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	13.41	20	JN
017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	13.54	20	JN
017057-82-8	1H-Indene, 2,3-dihydro-1,2-dimethy	13.58	25	JN
006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethy	13.66	24	JN
000095-15-8	Benzo[b]thiophene	13.86	21	JN
001075-22-5	1H-Indene, 2,3-dihydro-5,6-dimethyl-	14.08	20	JN
004489-84-3	Benzene, (3-methyl-2-butenyl)-	14.22	35	JN
	unknown	14.38	19	J
	unknown	14.49	19	J
000091-57-6	Naphthalene, 2-methyl-	14.65	240	JN

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 09:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW05	**Units:**	ug/L
Lab Code:	R1603837-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000090-12-0	Naphthalene, 1-methyl-	14.79	180	JN
000827-54-3	Naphthalene, 2-ethenyl-	15.22	26	JN

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75 - 120	04/25/16 13:53	
Dibromofluoromethane	103	85 - 115	04/25/16 13:53	
Toluene-d8	102	85 - 120	04/25/16 13:53	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 08:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	1	04/26/16 17:45	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	1	04/26/16 17:45	
1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	1	04/26/16 17:45	
1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	1	04/26/16 17:45	
1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	1	04/26/16 17:45	
1,1-Dichloropropene	ND	U	5.0	1.0	0.29	1	04/26/16 17:45	
1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	1	04/26/16 17:45	
1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	1	04/26/16 17:45	
1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	1	04/26/16 17:45	
1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	1	04/26/16 17:45	
1,2-Dibromoethane	ND	U	5.0	1.0	0.24	1	04/26/16 17:45	
1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	1	04/26/16 17:45	
1,2-Dichloroethane	ND	U	5.0	1.0	0.36	1	04/26/16 17:45	
1,2-Dichloropropane	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
1,3-Dichloropropane	ND	U	5.0	1.0	0.27	1	04/26/16 17:45	
1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
2,2-Dichloropropane	ND	U	5.0	1.0	0.27	1	04/26/16 17:45	
2-Butanone (MEK)	**2.0**	**J**	10	1.0	0.81	1	04/26/16 17:45	
2-Chlorotoluene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
2-Hexanone	ND	U	10	5.0	1.7	1	04/26/16 17:45	
tert-Butyl Alcohol	ND	U	100	20	11	1	04/26/16 17:45	
4-Chlorotoluene	ND	U	5.0	1.0	0.24	1	04/26/16 17:45	
p-Isopropyltoluene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
4-Methyl-2-pentanone	**0.93**	**J**	10	1.0	0.67	1	04/26/16 17:45	
Acetone	**11**		10	5.0	1.3	1	04/26/16 17:45	
Benzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
Bromobenzene	ND	U	5.0	1.0	0.28	1	04/26/16 17:45	
Bromochloromethane	ND	U	5.0	1.0	0.32	1	04/26/16 17:45	
Bromodichloromethane	ND	U	5.0	1.0	0.32	1	04/26/16 17:45	
Bromoform	ND	U	5.0	1.0	0.42	1	04/26/16 17:45	
Bromomethane	ND	U	5.0	1.0	0.29	1	04/26/16 17:45	
Carbon Tetrachloride	ND	U	5.0	1.0	0.45	1	04/26/16 17:45	
Chlorobenzene	ND	U	5.0	1.0	0.29	1	04/26/16 17:45	
Chloroethane	ND	U	5.0	1.0	0.24	1	04/26/16 17:45	
Chloroform	ND	U	5.0	1.0	0.25	1	04/26/16 17:45	
Chloromethane	**0.32**	**BJ**	5.0	1.0	0.21	1	04/26/16 17:45	
Dibromochloromethane	ND	U	5.0	1.0	0.31	1	04/26/16 17:45	
Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	1	04/26/16 17:45	
Methylene Chloride	ND	U	5.0	1.0	0.60	1	04/26/16 17:45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 08:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Ethylbenzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
Hexachlorobutadiene	ND	U	5.0	1.0	0.62	1	04/26/16 17:45	
Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	1	04/26/16 17:45	
Naphthalene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
Styrene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	1	04/26/16 17:45	
Toluene	**0.25**	**J**	5.0	1.0	0.20	1	04/26/16 17:45	
Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	1	04/26/16 17:45	
Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
Vinyl Chloride	ND	U	5.0	1.0	0.32	1	04/26/16 17:45	
cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	1	04/26/16 17:45	
cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	1	04/26/16 17:45	
m,p-Xylenes	ND	U	5.0	2.0	0.33	1	04/26/16 17:45	
n-Butylbenzene	ND	U	5.0	1.0	0.21	1	04/26/16 17:45	
n-Propylbenzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
o-Xylene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
sec-Butylbenzene	ND	U	5.0	1.0	0.27	1	04/26/16 17:45	
tert-Butylbenzene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	
trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	1	04/26/16 17:45	
trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	1	04/26/16 17:45	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
000115-07-1	Propene	1.13	13	JN
000115-11-7	1-Propene, 2-methyl-	1.36	7.1	JN
	unknown	1.61	5.9	J

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	75 - 120	04/26/16 17:45	
Dibromofluoromethane	102	85 - 115	04/26/16 17:45	
Toluene-d8	103	85 - 120	04/26/16 17:45	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 12:00
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-EB-04192016	**Units:**	ug/L
Lab Code:	R1603837-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.22	1	04/25/16 13:05	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.36	1	04/25/16 13:05	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.25	1	04/25/16 13:05	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.34	1	04/25/16 13:05	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.57	1	04/25/16 13:05	
1,1-Dichloropropene	ND U	5.0	1.0	0.29	1	04/25/16 13:05	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.82	1	04/25/16 13:05	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.70	1	04/25/16 13:05	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.23	1	04/25/16 13:05	
1,2,4-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.74	1	04/25/16 13:05	
1,2-Dibromoethane	ND U	5.0	1.0	0.24	1	04/25/16 13:05	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.21	1	04/25/16 13:05	
1,2-Dichloroethane	ND U	5.0	1.0	0.36	1	04/25/16 13:05	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
1,3,5-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
1,3-Dichloropropane	ND U	5.0	1.0	0.27	1	04/25/16 13:05	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
2,2-Dichloropropane	ND U	5.0	1.0	0.27	1	04/25/16 13:05	
2-Butanone (MEK)	ND U	10	1.0	0.81	1	04/25/16 13:05	
2-Chlorotoluene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
2-Hexanone	ND U	10	5.0	1.7	1	04/25/16 13:05	
tert-Butyl Alcohol	ND U	100	20	11	1	04/25/16 13:05	
4-Chlorotoluene	ND U	5.0	1.0	0.24	1	04/25/16 13:05	
p-Isopropyltoluene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
4-Methyl-2-pentanone	ND U	10	1.0	0.67	1	04/25/16 13:05	
Acetone	ND U	10	5.0	1.3	1	04/25/16 13:05	
Benzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
Bromobenzene	ND U	5.0	1.0	0.28	1	04/25/16 13:05	
Bromochloromethane	ND U	5.0	1.0	0.32	1	04/25/16 13:05	
Bromodichloromethane	ND U	5.0	1.0	0.32	1	04/25/16 13:05	
Bromoform	ND U	5.0	1.0	0.42	1	04/25/16 13:05	
Bromomethane	ND U	5.0	1.0	0.29	1	04/25/16 13:05	
Carbon Tetrachloride	ND U	5.0	1.0	0.45	1	04/25/16 13:05	
Chlorobenzene	ND U	5.0	1.0	0.29	1	04/25/16 13:05	
Chloroethane	ND U	5.0	1.0	0.24	1	04/25/16 13:05	
Chloroform	ND U	5.0	1.0	0.25	1	04/25/16 13:05	
Chloromethane	ND U	5.0	1.0	0.21	1	04/25/16 13:05	
Dibromochloromethane	ND U	5.0	1.0	0.31	1	04/25/16 13:05	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.46	1	04/25/16 13:05	
Methylene Chloride	ND U	5.0	1.0	0.60	1	04/25/16 13:05	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 12:00
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-EB-04192016	**Units:**	ug/L
Lab Code:	R1603837-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
Hexachlorobutadiene	ND U	5.0	1.0	0.62	1	04/25/16 13:05	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.29	1	04/25/16 13:05	
Naphthalene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
Styrene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.30	1	04/25/16 13:05	
Toluene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
Trichloroethene (TCE)	ND U	5.0	1.0	0.22	1	04/25/16 13:05	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
Vinyl Chloride	ND U	5.0	1.0	0.32	1	04/25/16 13:05	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.30	1	04/25/16 13:05	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.24	1	04/25/16 13:05	
m,p-Xylenes	ND U	5.0	2.0	0.33	1	04/25/16 13:05	
n-Butylbenzene	ND U	5.0	1.0	0.21	1	04/25/16 13:05	
n-Propylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
o-Xylene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
sec-Butylbenzene	ND U	5.0	1.0	0.27	1	04/25/16 13:05	
tert-Butylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.33	1	04/25/16 13:05	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/25/16 13:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75 - 120	04/25/16 13:05	
Dibromofluoromethane	104	85 - 115	04/25/16 13:05	
Toluene-d8	105	85 - 120	04/25/16 13:05	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TB-04192016	**Units:**	ug/L
Lab Code:	R1603837-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.22	1	04/25/16 13:29	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.36	1	04/25/16 13:29	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.25	1	04/25/16 13:29	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.34	1	04/25/16 13:29	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.57	1	04/25/16 13:29	
1,1-Dichloropropene	ND U	5.0	1.0	0.29	1	04/25/16 13:29	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.82	1	04/25/16 13:29	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.70	1	04/25/16 13:29	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.23	1	04/25/16 13:29	
1,2,4-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.74	1	04/25/16 13:29	
1,2-Dibromoethane	ND U	5.0	1.0	0.24	1	04/25/16 13:29	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.21	1	04/25/16 13:29	
1,2-Dichloroethane	ND U	5.0	1.0	0.36	1	04/25/16 13:29	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
1,3,5-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
1,3-Dichloropropane	ND U	5.0	1.0	0.27	1	04/25/16 13:29	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
2,2-Dichloropropane	ND U	5.0	1.0	0.27	1	04/25/16 13:29	
2-Butanone (MEK)	ND U	10	1.0	0.81	1	04/25/16 13:29	
2-Chlorotoluene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
2-Hexanone	ND U	10	5.0	1.7	1	04/25/16 13:29	
tert-Butyl Alcohol	ND U	100	20	11	1	04/25/16 13:29	
4-Chlorotoluene	ND U	5.0	1.0	0.24	1	04/25/16 13:29	
p-Isopropyltoluene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
4-Methyl-2-pentanone	ND U	10	1.0	0.67	1	04/25/16 13:29	
Acetone	ND U	10	5.0	1.3	1	04/25/16 13:29	
Benzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
Bromobenzene	ND U	5.0	1.0	0.28	1	04/25/16 13:29	
Bromochloromethane	ND U	5.0	1.0	0.32	1	04/25/16 13:29	
Bromodichloromethane	ND U	5.0	1.0	0.32	1	04/25/16 13:29	
Bromoform	ND U	5.0	1.0	0.42	1	04/25/16 13:29	
Bromomethane	ND U	5.0	1.0	0.29	1	04/25/16 13:29	
Carbon Tetrachloride	ND U	5.0	1.0	0.45	1	04/25/16 13:29	
Chlorobenzene	ND U	5.0	1.0	0.29	1	04/25/16 13:29	
Chloroethane	ND U	5.0	1.0	0.24	1	04/25/16 13:29	
Chloroform	ND U	5.0	1.0	0.25	1	04/25/16 13:29	
Chloromethane	ND U	5.0	1.0	0.21	1	04/25/16 13:29	
Dibromochloromethane	ND U	5.0	1.0	0.31	1	04/25/16 13:29	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.46	1	04/25/16 13:29	
Methylene Chloride	ND U	5.0	1.0	0.60	1	04/25/16 13:29	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TB-04192016	**Units:**	ug/L
Lab Code:	R1603837-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
Hexachlorobutadiene	ND U	5.0	1.0	0.62	1	04/25/16 13:29	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.29	1	04/25/16 13:29	
Naphthalene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
Styrene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.30	1	04/25/16 13:29	
Toluene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
Trichloroethene (TCE)	ND U	5.0	1.0	0.22	1	04/25/16 13:29	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
Vinyl Chloride	ND U	5.0	1.0	0.32	1	04/25/16 13:29	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.30	1	04/25/16 13:29	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.24	1	04/25/16 13:29	
m,p-Xylenes	ND U	5.0	2.0	0.33	1	04/25/16 13:29	
n-Butylbenzene	ND U	5.0	1.0	0.21	1	04/25/16 13:29	
n-Propylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
o-Xylene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
sec-Butylbenzene	ND U	5.0	1.0	0.27	1	04/25/16 13:29	
tert-Butylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.33	1	04/25/16 13:29	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/25/16 13:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75 - 120	04/25/16 13:29	
Dibromofluoromethane	102	85 - 115	04/25/16 13:29	
Toluene-d8	105	85 - 120	04/25/16 13:29	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

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QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1603837
Date Analyzed: 04/25/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1604585-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260C	21.5	20.0	107	80-130
1,1,1-Trichloroethane (TCA)	8260C	21.1	20.0	106	65-130
1,1,2,2-Tetrachloroethane	8260C	23.4	20.0	117	65-130
1,1,2-Trichloroethane	8260C	24.1	20.0	120	75-125
1,1-Dichloroethane (1,1-DCA)	8260C	22.9	20.0	115	70-135
1,1-Dichloroethene (1,1-DCE)	8260C	20.9	20.0	105	70-130
1,1-Dichloropropene	8260C	21.5	20.0	108	75-130
1,2,3-Trichlorobenzene	8260C	23.0	20.0	115	55-140
1,2,3-Trichloropropane	8260C	21.8	20.0	109	75-125
1,2,4-Trichlorobenzene	8260C	22.1	20.0	111	65-135
1,2,4-Trimethylbenzene	8260C	22.4	20.0	112	75-130
1,2-Dibromo-3-chloropropane (DBCP)	8260C	22.7	20.0	114	50-130
1,2-Dibromoethane	8260C	22.8	20.0	114	80-120
1,2-Dichlorobenzene	8260C	22.4	20.0	112	70-120
1,2-Dichloroethane	8260C	23.1	20.0	116	70-130
1,2-Dichloropropane	8260C	22.9	20.0	114	75-125
1,3,5-Trimethylbenzene	8260C	22.8	20.0	114	75-130
1,3-Dichlorobenzene	8260C	22.0	20.0	110	75-125
1,3-Dichloropropane	8260C	23.2	20.0	116	75-125
1,4-Dichlorobenzene	8260C	21.4	20.0	107	75-125
2,2-Dichloropropane	8260C	20.8	20.0	104	70-135
2-Butanone (MEK)	8260C	19.3	20.0	97	30-150
2-Chlorotoluene	8260C	22.5	20.0	112	75-125
2-Hexanone	8260C	19.7	20.0	98	55-130
tert-Butyl Alcohol	8260C	407	400	102	50-150
4-Chlorotoluene	8260C	22.6	20.0	113	75-130
p-Isopropyltoluene	8260C	21.3	20.0	106	75-130
4-Methyl-2-pentanone	8260C	21.3	20.0	106	60-135
Acetone	8260C	20.5	20.0	102	40-140
Benzene	8260C	21.5	20.0	108	80-120
Bromobenzene	8260C	22.4	20.0	112	75-125
Bromochloromethane	8260C	21.6	20.0	108	65-130
Bromodichloromethane	8260C	22.6	20.0	113	75-120

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QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1603837
Date Analyzed: 04/25/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1604585-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	8260C	27.2	20.0	136 *	70-130
Bromomethane	8260C	19.6	20.0	98	30-145
Carbon Tetrachloride	8260C	23.3	20.0	116	65-140
Chlorobenzene	8260C	21.1	20.0	105	80-120
Chloroethane	8260C	21.7	20.0	108	60-135
Chloroform	8260C	21.5	20.0	107	65-135
Chloromethane	8260C	21.1	20.0	106	40-125
Dibromochloromethane	8260C	21.7	20.0	108	60-135
Dichlorodifluoromethane (CFC 12)	8260C	22.6	20.0	113	30-155
Methylene Chloride	8260C	21.6	20.0	108	55-140
Ethylbenzene	8260C	21.5	20.0	107	75-125
Hexachlorobutadiene	8260C	20.9	20.0	105	50-140
Isopropylbenzene (Cumene)	8260C	21.5	20.0	108	75-125
Methyl tert-Butyl Ether	8260C	23.0	20.0	115	65-125
Naphthalene	8260C	23.5	20.0	118	55-140
Styrene	8260C	21.8	20.0	109	65-135
Tetrachloroethene (PCE)	8260C	20.1	20.0	101	45-150
Toluene	8260C	21.1	20.0	106	75-120
Trichloroethene (TCE)	8260C	21.9	20.0	110	70-125
Trichlorofluoromethane (CFC 11)	8260C	20.6	20.0	103	60-145
Vinyl Chloride	8260C	20.4	20.0	102	50-145
cis-1,2-Dichloroethene	8260C	21.8	20.0	109	70-125
cis-1,3-Dichloropropene	8260C	22.8	20.0	114	70-130
m,p-Xylenes	8260C	42.3	40.0	106	75-130
n-Butylbenzene	8260C	22.8	20.0	114	70-135
n-Propylbenzene	8260C	22.4	20.0	112	70-130
o-Xylene	8260C	21.6	20.0	108	80-120
sec-Butylbenzene	8260C	22.2	20.0	111	70-125
tert-Butylbenzene	8260C	22.6	20.0	113	70-130
trans-1,2-Dichloroethene	8260C	21.5	20.0	108	60-140
trans-1,3-Dichloropropene	8260C	25.9	20.0	129	55-140

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1604585-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.22	1	04/25/16 11:52	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.36	1	04/25/16 11:52	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.25	1	04/25/16 11:52	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.34	1	04/25/16 11:52	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.57	1	04/25/16 11:52	
1,1-Dichloropropene	ND U	5.0	1.0	0.29	1	04/25/16 11:52	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.82	1	04/25/16 11:52	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.70	1	04/25/16 11:52	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.23	1	04/25/16 11:52	
1,2,4-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.74	1	04/25/16 11:52	
1,2-Dibromoethane	ND U	5.0	1.0	0.24	1	04/25/16 11:52	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.21	1	04/25/16 11:52	
1,2-Dichloroethane	ND U	5.0	1.0	0.36	1	04/25/16 11:52	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
1,3,5-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
1,3-Dichloropropane	ND U	5.0	1.0	0.27	1	04/25/16 11:52	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
2,2-Dichloropropane	ND U	5.0	1.0	0.27	1	04/25/16 11:52	
2-Butanone (MEK)	ND U	10	1.0	0.81	1	04/25/16 11:52	
2-Chlorotoluene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
2-Hexanone	ND U	10	5.0	1.7	1	04/25/16 11:52	
tert-Butyl Alcohol	ND U	100	20	11	1	04/25/16 11:52	
4-Chlorotoluene	ND U	5.0	1.0	0.24	1	04/25/16 11:52	
p-Isopropyltoluene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
4-Methyl-2-pentanone	ND U	10	1.0	0.67	1	04/25/16 11:52	
Acetone	ND U	10	5.0	1.3	1	04/25/16 11:52	
Benzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
Bromobenzene	ND U	5.0	1.0	0.28	1	04/25/16 11:52	
Bromochloromethane	ND U	5.0	1.0	0.32	1	04/25/16 11:52	
Bromodichloromethane	ND U	5.0	1.0	0.32	1	04/25/16 11:52	
Bromoform	ND U	5.0	1.0	0.42	1	04/25/16 11:52	
Bromomethane	ND U	5.0	1.0	0.29	1	04/25/16 11:52	
Carbon Tetrachloride	ND U	5.0	1.0	0.45	1	04/25/16 11:52	
Chlorobenzene	ND U	5.0	1.0	0.29	1	04/25/16 11:52	
Chloroethane	ND U	5.0	1.0	0.24	1	04/25/16 11:52	
Chloroform	ND U	5.0	1.0	0.25	1	04/25/16 11:52	
Chloromethane	ND U	5.0	1.0	0.21	1	04/25/16 11:52	
Dibromochloromethane	ND U	5.0	1.0	0.31	1	04/25/16 11:52	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.46	1	04/25/16 11:52	
Methylene Chloride	ND U	5.0	1.0	0.60	1	04/25/16 11:52	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1604585-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
Hexachlorobutadiene	ND U	5.0	1.0	0.62	1	04/25/16 11:52	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.29	1	04/25/16 11:52	
Naphthalene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
Styrene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.30	1	04/25/16 11:52	
Toluene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
Trichloroethene (TCE)	ND U	5.0	1.0	0.22	1	04/25/16 11:52	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
Vinyl Chloride	ND U	5.0	1.0	0.32	1	04/25/16 11:52	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.30	1	04/25/16 11:52	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.24	1	04/25/16 11:52	
m,p-Xylenes	ND U	5.0	2.0	0.33	1	04/25/16 11:52	
n-Butylbenzene	ND U	5.0	1.0	0.21	1	04/25/16 11:52	
n-Propylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
o-Xylene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
sec-Butylbenzene	ND U	5.0	1.0	0.27	1	04/25/16 11:52	
tert-Butylbenzene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.33	1	04/25/16 11:52	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/25/16 11:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75 - 120	04/25/16 11:52	
Dibromofluoromethane	103	85 - 115	04/25/16 11:52	
Toluene-d8	104	85 - 120	04/25/16 11:52	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

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QA/QC Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16
Sample Matrix:	Water	**Date Received:**	04/20/16
		Date Analyzed:	04/25/16
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ1604585-05			**Duplicate Matrix Spike** RQ1604585-06				
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND U	55.0	50.0	110	57.9	50.0	116	80-130	5	30
1,1,1-Trichloroethane (TCA)	ND U	60.6	50.0	121	64.5	50.0	129	65-130	6	30
1,1,2,2-Tetrachloroethane	ND U	56.1	50.0	112	57.4	50.0	115	65-130	2	30
1,1,2-Trichloroethane	ND U	55.6	50.0	111	57.1	50.0	114	75-125	3	30
1,1-Dichloroethane (1,1-DCA)	ND U	63.0	50.0	126	65.0	50.0	130	70-135	3	30
1,1-Dichloroethene (1,1-DCE)	ND U	60.8	50.0	122	64.0	50.0	128	70-130	5	30
1,1-Dichloropropene	ND U	62.1	50.0	124	64.8	50.0	130	75-130	4	30
1,2,3-Trichlorobenzene	ND U	49.8	50.0	100	50.8	50.0	102	55-140	2	30
1,2,3-Trichloropropane	ND U	50.1	50.0	100	52.7	50.0	105	75-125	5	30
1,2,4-Trichlorobenzene	ND U	51.1	50.0	102	50.8	50.0	102	65-135	<1	30
1,2,4-Trimethylbenzene	ND U	58.1	50.0	116	57.5	50.0	115	75-130	1	30
1,2-Dibromo-3-chloropropane (DBCP)	ND U	51.8	50.0	104	56.1	50.0	112	50-130	8	30
1,2-Dibromoethane	ND U	52.7	50.0	105	56.5	50.0	113	80-120	7	30
1,2-Dichlorobenzene	ND U	52.6	50.0	105	53.2	50.0	106	70-120	1	30
1,2-Dichloroethane	ND U	56.5	50.0	113	59.1	50.0	118	70-130	4	30
1,2-Dichloropropane	ND U	58.2	50.0	116	61.8	50.0	124	75-125	6	30
1,3,5-Trimethylbenzene	ND U	58.6	50.0	117	60.4	50.0	121	75-130	3	30
1,3-Dichlorobenzene	ND U	52.8	50.0	106	53.4	50.0	107	75-125	1	30
1,3-Dichloropropane	ND U	55.2	50.0	110	57.6	50.0	115	75-125	4	30
1,4-Dichlorobenzene	ND U	51.0	50.0	102	51.4	50.0	103	75-125	<1	30
2,2-Dichloropropane	ND U	47.5	50.0	95	52.4	50.0	105	70-135	10	30
2-Butanone (MEK)	2.0 J	48.4	50.0	93	50.1	50.0	96	30-150	3	30
2-Chlorotoluene	ND U	56.9	50.0	114	57.8	50.0	116	75-125	2	30
2-Hexanone	ND U	49.9	50.0	100	52.4	50.0	105	55-130	5	30
4-Chlorotoluene	ND U	56.7	50.0	113	58.5	50.0	117	75-130	3	30
4-Methyl-2-pentanone	0.93 J	54.5	50.0	107	57.4	50.0	113	60-135	5	30
Acetone	11	51.0	50.0	81	53.1	50.0	85	40-140	4	30
Benzene	ND U	58.2	50.0	116	61.3	50.0	123 *	80-120	5	30
Bromobenzene	ND U	53.4	50.0	107	54.5	50.0	109	75-125	2	30
Bromochloromethane	ND U	53.4	50.0	107	55.6	50.0	111	65-130	4	30
Bromodichloromethane	ND U	56.3	50.0	113	60.9	50.0	122 *	75-120	8	30
Bromoform	ND U	57.2	50.0	114	62.8	50.0	126	70-130	9	30
Bromomethane	ND U	50.3	50.0	101	53.6	50.0	107	30-145	6	30
Carbon Tetrachloride	ND U	59.2	50.0	118	66.6	50.0	133	65-140	12	30
Chlorobenzene	ND U	53.7	50.0	107	56.0	50.0	112	80-120	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16
Sample Matrix:	Water	**Date Received:**	04/20/16
		Date Analyzed:	04/25/16
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ1604585-05			**Duplicate Matrix Spike** RQ1604585-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chloroethane	ND U	63.2	50.0	126	64.2	50.0	128	60-135	2	30
Chloroform	ND U	56.3	50.0	113	59.7	50.0	119	65-135	6	30
Chloromethane	0.32 BJ	60.6	50.0	121	63.0	50.0	125	40-125	4	30
cis-1,2-Dichloroethene	ND U	59.0	50.0	118	61.1	50.0	122	70-125	3	30
cis-1,3-Dichloropropene	ND U	54.5	50.0	109	58.7	50.0	117	70-130	7	30
Dibromochloromethane	ND U	51.2	50.0	102	55.7	50.0	111	60-135	8	30
Dichlorodifluoromethane (CFC 12)	ND U	63.5	50.0	127	66.5	50.0	133	30-155	5	30
Ethylbenzene	ND U	58.5	50.0	117	61.1	50.0	122	75-125	4	30
Hexachlorobutadiene	ND U	48.8	50.0	98	49.7	50.0	99	50-140	2	30
Isopropylbenzene (Cumene)	ND U	59.7	50.0	119	62.5	50.0	125	75-125	5	30
m,p-Xylenes	ND U	114	100	114	120	100	120	75-130	5	30
Methyl tert-Butyl Ether	ND U	56.1	50.0	112	57.8	50.0	116	65-125	3	30
Methylene Chloride	ND U	54.1	50.0	108	56.6	50.0	113	55-140	4	30
Naphthalene	ND U	56.4	50.0	113	56.9	50.0	114	55-140	<1	30
n-Butylbenzene	ND U	56.9	50.0	114	57.8	50.0	116	70-135	2	30
n-Propylbenzene	ND U	59.7	50.0	119	60.5	50.0	121	70-130	1	30
o-Xylene	ND U	56.7	50.0	113	58.6	50.0	117	80-120	3	30
p-Isopropyltoluene	ND U	55.0	50.0	110	55.8	50.0	112	75-130	1	30
sec-Butylbenzene	ND U	58.4	50.0	117	59.2	50.0	118	70-125	1	30
Styrene	ND U	56.8	50.0	114	60.1	50.0	120	65-135	6	30
tert-Butyl Alcohol	ND U	1010	1000	101	1100	1000	110	50-150	9	30
tert-Butylbenzene	ND U	59.5	50.0	119	60.5	50.0	121	70-130	2	30
Tetrachloroethene (PCE)	ND U	53.9	50.0	108	56.7	50.0	113	45-150	5	30
Toluene	0.25 J	56.7	50.0	113	59.3	50.0	118	75-120	4	30
trans-1,2-Dichloroethene	ND U	59.1	50.0	118	61.3	50.0	123	60-140	4	30
trans-1,3-Dichloropropene	ND U	56.6	50.0	113	61.2	50.0	122	55-140	8	30
Trichloroethene (TCE)	ND U	57.3	50.0	115	60.3	50.0	121	70-125	5	30
Trichlorofluoromethane (CFC 11)	ND U	61.4	50.0	123	64.0	50.0	128	60-145	4	30
Vinyl Chloride	ND U	59.9	50.0	120	62.2	50.0	124	50-145	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1604747-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	ND U	5.0	1.0	0.22	1	04/26/16 17:21	
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.36	1	04/26/16 17:21	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.25	1	04/26/16 17:21	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.34	1	04/26/16 17:21	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.57	1	04/26/16 17:21	
1,1-Dichloropropene	ND U	5.0	1.0	0.29	1	04/26/16 17:21	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.82	1	04/26/16 17:21	
1,2,3-Trichloropropane	ND U	5.0	1.0	0.70	1	04/26/16 17:21	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.23	1	04/26/16 17:21	
1,2,4-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.74	1	04/26/16 17:21	
1,2-Dibromoethane	ND U	5.0	1.0	0.24	1	04/26/16 17:21	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.21	1	04/26/16 17:21	
1,2-Dichloroethane	ND U	5.0	1.0	0.36	1	04/26/16 17:21	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
1,3,5-Trimethylbenzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
1,3-Dichloropropane	ND U	5.0	1.0	0.27	1	04/26/16 17:21	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
2,2-Dichloropropane	ND U	5.0	1.0	0.27	1	04/26/16 17:21	
2-Butanone (MEK)	ND U	10	1.0	0.81	1	04/26/16 17:21	
2-Chlorotoluene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
2-Hexanone	ND U	10	5.0	1.7	1	04/26/16 17:21	
tert-Butyl Alcohol	ND U	100	20	11	1	04/26/16 17:21	
4-Chlorotoluene	ND U	5.0	1.0	0.24	1	04/26/16 17:21	
p-Isopropyltoluene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
4-Methyl-2-pentanone	ND U	10	1.0	0.67	1	04/26/16 17:21	
Acetone	ND U	10	5.0	1.3	1	04/26/16 17:21	
Benzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
Bromobenzene	ND U	5.0	1.0	0.28	1	04/26/16 17:21	
Bromochloromethane	ND U	5.0	1.0	0.32	1	04/26/16 17:21	
Bromodichloromethane	ND U	5.0	1.0	0.32	1	04/26/16 17:21	
Bromoform	ND U	5.0	1.0	0.42	1	04/26/16 17:21	
Bromomethane	ND U	5.0	1.0	0.29	1	04/26/16 17:21	
Carbon Tetrachloride	ND U	5.0	1.0	0.45	1	04/26/16 17:21	
Chlorobenzene	ND U	5.0	1.0	0.29	1	04/26/16 17:21	
Chloroethane	ND U	5.0	1.0	0.24	1	04/26/16 17:21	
Chloroform	ND U	5.0	1.0	0.25	1	04/26/16 17:21	
Chloromethane	**0.29 J**	5.0	1.0	0.21	1	04/26/16 17:21	
Dibromochloromethane	ND U	5.0	1.0	0.31	1	04/26/16 17:21	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.46	1	04/26/16 17:21	
Methylene Chloride	ND U	5.0	1.0	0.60	1	04/26/16 17:21	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1604747-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
Hexachlorobutadiene	ND U	5.0	1.0	0.62	1	04/26/16 17:21	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.29	1	04/26/16 17:21	
Naphthalene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
Styrene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.30	1	04/26/16 17:21	
Toluene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
Trichloroethene (TCE)	ND U	5.0	1.0	0.22	1	04/26/16 17:21	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
Vinyl Chloride	ND U	5.0	1.0	0.32	1	04/26/16 17:21	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.30	1	04/26/16 17:21	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.24	1	04/26/16 17:21	
m,p-Xylenes	ND U	5.0	2.0	0.33	1	04/26/16 17:21	
n-Butylbenzene	ND U	5.0	1.0	0.21	1	04/26/16 17:21	
n-Propylbenzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
o-Xylene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
sec-Butylbenzene	ND U	5.0	1.0	0.27	1	04/26/16 17:21	
tert-Butylbenzene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.33	1	04/26/16 17:21	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/26/16 17:21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75 - 120	04/26/16 17:21	
Dibromofluoromethane	103	85 - 115	04/26/16 17:21	
Toluene-d8	104	85 - 120	04/26/16 17:21	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

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QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1603837
Date Analyzed: 04/26/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1604747-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260C	19.0	20.0	95	80-130
1,1,1-Trichloroethane (TCA)	8260C	18.6	20.0	93	65-130
1,1,2,2-Tetrachloroethane	8260C	21.5	20.0	107	65-130
1,1,2-Trichloroethane	8260C	20.9	20.0	104	75-125
1,1-Dichloroethane (1,1-DCA)	8260C	19.3	20.0	96	70-135
1,1-Dichloroethene (1,1-DCE)	8260C	17.4	20.0	87	70-130
1,1-Dichloropropene	8260C	17.8	20.0	89	75-130
1,2,3-Trichlorobenzene	8260C	19.0	20.0	95	55-140
1,2,3-Trichloropropane	8260C	20.9	20.0	104	75-125
1,2,4-Trichlorobenzene	8260C	18.7	20.0	94	65-135
1,2,4-Trimethylbenzene	8260C	18.4	20.0	92	75-130
1,2-Dibromo-3-chloropropane (DBCP)	8260C	21.7	20.0	109	50-130
1,2-Dibromoethane	8260C	20.3	20.0	102	80-120
1,2-Dichlorobenzene	8260C	19.0	20.0	95	70-120
1,2-Dichloroethane	8260C	20.7	20.0	103	70-130
1,2-Dichloropropane	8260C	20.0	20.0	100	75-125
1,3,5-Trimethylbenzene	8260C	18.5	20.0	92	75-130
1,3-Dichlorobenzene	8260C	18.0	20.0	90	75-125
1,3-Dichloropropane	8260C	20.6	20.0	103	75-125
1,4-Dichlorobenzene	8260C	18.0	20.0	90	75-125
2,2-Dichloropropane	8260C	18.8	20.0	94	70-135
2-Butanone (MEK)	8260C	19.5	20.0	98	30-150
2-Chlorotoluene	8260C	18.6	20.0	93	75-125
2-Hexanone	8260C	19.8	20.0	99	55-130
tert-Butyl Alcohol	8260C	430	400	108	50-150
4-Chlorotoluene	8260C	18.8	20.0	94	75-130
p-Isopropyltoluene	8260C	17.3	20.0	86	75-130
4-Methyl-2-pentanone	8260C	20.7	20.0	104	60-135
Acetone	8260C	19.6	20.0	98	40-140
Benzene	8260C	18.4	20.0	92	80-120
Bromobenzene	8260C	18.4	20.0	92	75-125
Bromochloromethane	8260C	19.0	20.0	95	65-130
Bromodichloromethane	8260C	20.0	20.0	100	75-120

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QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1603837
Date Analyzed: 04/26/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1604747-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	8260C	23.7	20.0	118	70-130
Bromomethane	8260C	16.6	20.0	83	30-145
Carbon Tetrachloride	8260C	21.4	20.0	107	65-140
Chlorobenzene	8260C	18.2	20.0	91	80-120
Chloroethane	8260C	18.7	20.0	94	60-135
Chloroform	8260C	18.5	20.0	92	65-135
Chloromethane	8260C	18.1	20.0	90	40-125
Dibromochloromethane	8260C	19.3	20.0	96	60-135
Dichlorodifluoromethane (CFC 12)	8260C	18.4	20.0	92	30-155
Methylene Chloride	8260C	18.6	20.0	93	55-140
Ethylbenzene	8260C	17.9	20.0	90	75-125
Hexachlorobutadiene	8260C	17.0	20.0	85	50-140
Isopropylbenzene (Cumene)	8260C	17.9	20.0	90	75-125
Methyl tert-Butyl Ether	8260C	21.3	20.0	107	65-125
Naphthalene	8260C	20.9	20.0	104	55-140
Styrene	8260C	18.8	20.0	94	65-135
Tetrachloroethene (PCE)	8260C	16.8	20.0	84	45-150
Toluene	8260C	17.8	20.0	89	75-120
Trichloroethene (TCE)	8260C	17.6	20.0	88	70-125
Trichlorofluoromethane (CFC 11)	8260C	17.6	20.0	88	60-145
Vinyl Chloride	8260C	16.8	20.0	84	50-145
cis-1,2-Dichloroethene	8260C	19.3	20.0	97	70-125
cis-1,3-Dichloropropene	8260C	19.8	20.0	99	70-130
m,p-Xylenes	8260C	35.7	40.0	89	75-130
n-Butylbenzene	8260C	18.3	20.0	91	70-135
n-Propylbenzene	8260C	18.4	20.0	92	70-130
o-Xylene	8260C	18.4	20.0	92	80-120
sec-Butylbenzene	8260C	18.0	20.0	90	70-125
tert-Butylbenzene	8260C	18.2	20.0	91	70-130
trans-1,2-Dichloroethene	8260C	17.9	20.0	90	60-140
trans-1,3-Dichloropropene	8260C	23.6	20.0	118	55-140

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 09:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW05	**Units:**	ug/L
Lab Code:	R1603837-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
1,2-Dichlorobenzene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
1,2-Diphenylhydrazine	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
1,3-Dichlorobenzene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
1,4-Dichlorobenzene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
2,4,5-Trichlorophenol	ND	U	19	10	3.5	2	05/02/16 15:46	4/25/16	
2,4,6-Trichlorophenol	ND	U	19	10	2.7	2	05/02/16 15:46	4/25/16	
2,4-Dichlorophenol	ND	U	19	10	2.5	2	05/02/16 15:46	4/25/16	
2,4-Dimethylphenol	ND	U	19	10	3.0	2	05/02/16 15:46	4/25/16	
2,4-Dinitrophenol	ND	U	94	50	39	2	05/02/16 15:46	4/25/16	
2,4-Dinitrotoluene	ND	U	19	10	3.2	2	05/02/16 15:46	4/25/16	
2,6-Dinitrotoluene	ND	U	19	10	3.5	2	05/02/16 15:46	4/25/16	
2-Chloronaphthalene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
2-Chlorophenol	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
2-Methylnaphthalene	**150**		19	10	2.0	2	05/02/16 15:46	4/25/16	
2-Methylphenol	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
2-Nitroaniline	ND	U	94	50	19	2	05/02/16 15:46	4/25/16	
2-Nitrophenol	ND	U	19	10	2.8	2	05/02/16 15:46	4/25/16	
3,3'-Dichlorobenzidine	ND	U	19	10	8.9	2	05/02/16 15:46	4/25/16	
3- and 4-Methylphenol Coelution	ND	U	20	20	3.9	2	05/02/16 15:46	4/25/16	
3-Nitroaniline	ND	U	94	50	16	2	05/02/16 15:46	4/25/16	
4,6-Dinitro-2-methylphenol	ND	U	94	50	22	2	05/02/16 15:46	4/25/16	
4-Bromophenyl Phenyl Ether	ND	U	19	10	4.3	2	05/02/16 15:46	4/25/16	
4-Chloro-3-methylphenol	ND	U	19	10	2.3	2	05/02/16 15:46	4/25/16	
4-Chloroaniline	ND	U	19	10	2.9	2	05/02/16 15:46	4/25/16	
4-Chlorophenyl Phenyl Ether	ND	U	19	10	2.3	2	05/02/16 15:46	4/25/16	
4-Nitroaniline	ND	U	94	50	16	2	05/02/16 15:46	4/25/16	
4-Nitrophenol	ND	U	94	50	12	2	05/02/16 15:46	4/25/16	
Acenaphthene	**7.2**	**J**	19	10	2.0	2	05/02/16 15:46	4/25/16	
Acenaphthylene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Anthracene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Benz(a)anthracene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Benzidine	ND	U	200	200	180	2	05/02/16 15:46	4/25/16	
Benzo(a)pyrene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Benzo(b)fluoranthene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Benzo(g,h,i)perylene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Benzo(k)fluoranthene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Benzyl Alcohol	ND	U	19	10	2.6	2	05/02/16 15:46	4/25/16	
2,2'-Oxybis(1-chloropropane)	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Bis(2-chloroethoxy)methane	ND	U	19	10	4.4	2	05/02/16 15:46	4/25/16	
Bis(2-chloroethyl) Ether	ND	U	19	10	2.6	2	05/02/16 15:46	4/25/16	
Bis(2-ethylhexyl) Phthalate	ND	U	19	10	2.4	2	05/02/16 15:46	4/25/16	
Butyl Benzyl Phthalate	ND	U	19	10	4.8	2	05/02/16 15:46	4/25/16	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 09:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW05	**Units:**	ug/L
Lab Code:	R1603837-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result		LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	**3.6**	**J**	19	10	2.2	2	05/02/16 15:46	4/25/16	
Chrysene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Di-n-butyl Phthalate	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Di-n-octyl Phthalate	ND	U	19	10	2.4	2	05/02/16 15:46	4/25/16	
Dibenz(a,h)anthracene	ND	U	19	10	2.5	2	05/02/16 15:46	4/25/16	
Dibenzofuran	**5.0**	**J**	19	10	2.0	2	05/02/16 15:46	4/25/16	
Diethyl Phthalate	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Dimethyl Phthalate	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Fluoranthene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Fluorene	**6.2**	**J**	19	10	2.0	2	05/02/16 15:46	4/25/16	
Hexachlorobenzene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Hexachlorobutadiene	ND	U	19	10	2.5	2	05/02/16 15:46	4/25/16	
Hexachlorocyclopentadiene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Hexachloroethane	ND	U	19	10	2.4	2	05/02/16 15:46	4/25/16	
Indeno(1,2,3-cd)pyrene	ND	U	19	10	2.4	2	05/02/16 15:46	4/25/16	
Isophorone	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
N-Nitrosodi-n-propylamine	ND	U	19	10	2.6	2	05/02/16 15:46	4/25/16	
N-Nitrosodimethylamine	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
N-Nitrosodiphenylamine	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Naphthalene	**86**		19	10	2.0	2	05/02/16 15:46	4/25/16	
Nitrobenzene	ND	U	19	10	3.2	2	05/02/16 15:46	4/25/16	
Pentachlorophenol (PCP)	ND	U	94	50	14	2	05/02/16 15:46	4/25/16	
Phenanthrene	**8.2**	**J**	19	10	2.0	2	05/02/16 15:46	4/25/16	
Phenol	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	
Pyrene	ND	U	19	10	2.0	2	05/02/16 15:46	4/25/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	88	40 - 125	05/02/16 15:46	
2-Fluorobiphenyl	65	50 - 110	05/02/16 15:46	
2-Fluorophenol	34	20 - 110	05/02/16 15:46	
Nitrobenzene-d5	73	40 - 110	05/02/16 15:46	
Phenol-d6	27	10 - 115	05/02/16 15:46	
p-Terphenyl-d14	69	50 - 135	05/02/16 15:46	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 08:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
1,2-Dichlorobenzene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
1,2-Diphenylhydrazine	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
1,3-Dichlorobenzene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
1,4-Dichlorobenzene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
2,4,5-Trichlorophenol	ND U	9.4	5.0	1.8	1	05/02/16 16:13	4/25/16	
2,4,6-Trichlorophenol	ND U	9.4	5.0	1.4	1	05/02/16 16:13	4/25/16	
2,4-Dichlorophenol	ND U	9.4	5.0	1.3	1	05/02/16 16:13	4/25/16	
2,4-Dimethylphenol	ND U	9.4	5.0	1.5	1	05/02/16 16:13	4/25/16	
2,4-Dinitrophenol	ND U	47	25	20	1	05/02/16 16:13	4/25/16	
2,4-Dinitrotoluene	ND U	9.4	5.0	1.6	1	05/02/16 16:13	4/25/16	
2,6-Dinitrotoluene	ND U	9.4	5.0	1.8	1	05/02/16 16:13	4/25/16	
2-Chloronaphthalene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
2-Chlorophenol	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
2-Methylnaphthalene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
2-Methylphenol	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
2-Nitroaniline	ND U	47	25	9.1	1	05/02/16 16:13	4/25/16	
2-Nitrophenol	ND U	9.4	5.0	1.4	1	05/02/16 16:13	4/25/16	
3,3'-Dichlorobenzidine	ND U	9.4	5.0	4.5	1	05/02/16 16:13	4/25/16	
3- and 4-Methylphenol Coelution	ND U	10	10	2.0	1	05/02/16 16:13	4/25/16	
3-Nitroaniline	ND U	47	25	7.7	1	05/02/16 16:13	4/25/16	
4,6-Dinitro-2-methylphenol	ND U	47	25	11	1	05/02/16 16:13	4/25/16	
4-Bromophenyl Phenyl Ether	ND U	9.4	5.0	2.2	1	05/02/16 16:13	4/25/16	
4-Chloro-3-methylphenol	ND U	9.4	5.0	1.2	1	05/02/16 16:13	4/25/16	
4-Chloroaniline	ND U	9.4	5.0	1.5	1	05/02/16 16:13	4/25/16	
4-Chlorophenyl Phenyl Ether	ND U	9.4	5.0	1.2	1	05/02/16 16:13	4/25/16	
4-Nitroaniline	ND U	47	25	7.8	1	05/02/16 16:13	4/25/16	
4-Nitrophenol	ND U	47	25	5.9	1	05/02/16 16:13	4/25/16	
Acenaphthene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Acenaphthylene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Anthracene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Benz(a)anthracene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Benzidine	ND U	100	100	90	1	05/02/16 16:13	4/25/16	
Benzo(a)pyrene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Benzo(b)fluoranthene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Benzo(g,h,i)perylene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Benzo(k)fluoranthene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Benzyl Alcohol	ND U	9.4	5.0	1.3	1	05/02/16 16:13	4/25/16	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Bis(2-chloroethoxy)methane	ND U	9.4	5.0	2.2	1	05/02/16 16:13	4/25/16	
Bis(2-chloroethyl) Ether	ND U	9.4	5.0	1.3	1	05/02/16 16:13	4/25/16	
Bis(2-ethylhexyl) Phthalate	ND U	9.4	5.0	1.2	1	05/02/16 16:13	4/25/16	
Butyl Benzyl Phthalate	ND U	9.4	5.0	2.4	1	05/02/16 16:13	4/25/16	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 08:45
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	ND U	9.4	5.0	1.1	1	05/02/16 16:13	4/25/16	
Chrysene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Di-n-butyl Phthalate	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Di-n-octyl Phthalate	ND U	9.4	5.0	1.2	1	05/02/16 16:13	4/25/16	
Dibenz(a,h)anthracene	ND U	9.4	5.0	1.3	1	05/02/16 16:13	4/25/16	
Dibenzofuran	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Diethyl Phthalate	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Dimethyl Phthalate	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Fluoranthene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Fluorene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Hexachlorobenzene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Hexachlorobutadiene	ND U	9.4	5.0	1.3	1	05/02/16 16:13	4/25/16	
Hexachlorocyclopentadiene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Hexachloroethane	ND U	9.4	5.0	1.2	1	05/02/16 16:13	4/25/16	
Indeno(1,2,3-cd)pyrene	ND U	9.4	5.0	1.2	1	05/02/16 16:13	4/25/16	
Isophorone	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
N-Nitrosodi-n-propylamine	ND U	9.4	5.0	1.3	1	05/02/16 16:13	4/25/16	
N-Nitrosodimethylamine	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
N-Nitrosodiphenylamine	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Naphthalene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Nitrobenzene	ND U	9.4	5.0	1.6	1	05/02/16 16:13	4/25/16	
Pentachlorophenol (PCP)	ND U	47	25	6.9	1	05/02/16 16:13	4/25/16	
Phenanthrene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Phenol	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	
Pyrene	ND U	9.4	5.0	1.0	1	05/02/16 16:13	4/25/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	87	40 - 125	05/02/16 16:13	
2-Fluorobiphenyl	65	50 - 110	05/02/16 16:13	
2-Fluorophenol	34	20 - 110	05/02/16 16:13	
Nitrobenzene-d5	69	40 - 110	05/02/16 16:13	
Phenol-d6	27	10 - 115	05/02/16 16:13	
p-Terphenyl-d14	45 *	50 - 135	05/02/16 16:13	*

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 12:00
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-EB-04192016	**Units:**	ug/L
Lab Code:	R1603837-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
1,2-Dichlorobenzene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
1,2-Diphenylhydrazine	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
1,3-Dichlorobenzene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
1,4-Dichlorobenzene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
2,4,5-Trichlorophenol	ND U	9.4	5.0	1.8	1	04/29/16 19:11	4/25/16	
2,4,6-Trichlorophenol	ND U	9.4	5.0	1.4	1	04/29/16 19:11	4/25/16	
2,4-Dichlorophenol	ND U	9.4	5.0	1.3	1	04/29/16 19:11	4/25/16	
2,4-Dimethylphenol	ND U	9.4	5.0	1.5	1	04/29/16 19:11	4/25/16	
2,4-Dinitrophenol	ND U	47	25	20	1	04/29/16 19:11	4/25/16	
2,4-Dinitrotoluene	ND U	9.4	5.0	1.6	1	04/29/16 19:11	4/25/16	
2,6-Dinitrotoluene	ND U	9.4	5.0	1.8	1	04/29/16 19:11	4/25/16	
2-Chloronaphthalene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
2-Chlorophenol	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
2-Methylnaphthalene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
2-Methylphenol	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
2-Nitroaniline	ND U	47	25	9.1	1	04/29/16 19:11	4/25/16	
2-Nitrophenol	ND U	9.4	5.0	1.4	1	04/29/16 19:11	4/25/16	
3,3'-Dichlorobenzidine	ND U	9.4	5.0	4.5	1	04/29/16 19:11	4/25/16	
3- and 4-Methylphenol Coelution	ND U	10	10	2.0	1	04/29/16 19:11	4/25/16	
3-Nitroaniline	ND U	47	25	7.7	1	04/29/16 19:11	4/25/16	
4,6-Dinitro-2-methylphenol	ND U	47	25	11	1	04/29/16 19:11	4/25/16	
4-Bromophenyl Phenyl Ether	ND U	9.4	5.0	2.2	1	04/29/16 19:11	4/25/16	
4-Chloro-3-methylphenol	ND U	9.4	5.0	1.2	1	04/29/16 19:11	4/25/16	
4-Chloroaniline	ND U	9.4	5.0	1.5	1	04/29/16 19:11	4/25/16	
4-Chlorophenyl Phenyl Ether	ND U	9.4	5.0	1.2	1	04/29/16 19:11	4/25/16	
4-Nitroaniline	ND U	47	25	7.8	1	04/29/16 19:11	4/25/16	
4-Nitrophenol	ND U	47	25	5.9	1	04/29/16 19:11	4/25/16	
Acenaphthene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Acenaphthylene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Anthracene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Benz(a)anthracene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Benzidine	ND U	100	100	90	1	04/29/16 19:11	4/25/16	
Benzo(a)pyrene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Benzo(b)fluoranthene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Benzo(g,h,i)perylene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Benzo(k)fluoranthene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Benzyl Alcohol	ND U	9.4	5.0	1.3	1	04/29/16 19:11	4/25/16	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Bis(2-chloroethoxy)methane	ND U	9.4	5.0	2.2	1	04/29/16 19:11	4/25/16	
Bis(2-chloroethyl) Ether	ND U	9.4	5.0	1.3	1	04/29/16 19:11	4/25/16	
Bis(2-ethylhexyl) Phthalate	ND U	9.4	5.0	1.2	1	04/29/16 19:11	4/25/16	
Butyl Benzyl Phthalate	ND U	9.4	5.0	2.4	1	04/29/16 19:11	4/25/16	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16 12:00
Sample Matrix:	Water	**Date Received:**	04/20/16 09:25
Sample Name:	ARE-800-EB-04192016	**Units:**	ug/L
Lab Code:	R1603837-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	ND U	9.4	5.0	1.1	1	04/29/16 19:11	4/25/16	
Chrysene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Di-n-butyl Phthalate	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Di-n-octyl Phthalate	ND U	9.4	5.0	1.2	1	04/29/16 19:11	4/25/16	
Dibenz(a,h)anthracene	ND U	9.4	5.0	1.3	1	04/29/16 19:11	4/25/16	
Dibenzofuran	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Diethyl Phthalate	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Dimethyl Phthalate	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Fluoranthene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Fluorene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Hexachlorobenzene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Hexachlorobutadiene	ND U	9.4	5.0	1.3	1	04/29/16 19:11	4/25/16	
Hexachlorocyclopentadiene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Hexachloroethane	ND U	9.4	5.0	1.2	1	04/29/16 19:11	4/25/16	
Indeno(1,2,3-cd)pyrene	ND U	9.4	5.0	1.2	1	04/29/16 19:11	4/25/16	
Isophorone	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
N-Nitrosodi-n-propylamine	ND U	9.4	5.0	1.3	1	04/29/16 19:11	4/25/16	
N-Nitrosodimethylamine	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
N-Nitrosodiphenylamine	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Naphthalene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Nitrobenzene	ND U	9.4	5.0	1.6	1	04/29/16 19:11	4/25/16	
Pentachlorophenol (PCP)	ND U	47	25	6.9	1	04/29/16 19:11	4/25/16	
Phenanthrene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Phenol	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	
Pyrene	ND U	9.4	5.0	1.0	1	04/29/16 19:11	4/25/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	94	40 - 125	04/29/16 19:11	
2-Fluorobiphenyl	73	50 - 110	04/29/16 19:11	
2-Fluorophenol	36	20 - 110	04/29/16 19:11	
Nitrobenzene-d5	75	40 - 110	04/29/16 19:11	
Phenol-d6	29	10 - 115	04/29/16 19:11	
p-Terphenyl-d14	93	50 - 135	04/29/16 19:11	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

ALS Group USA, Corp.
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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1604387-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4-Trichlorobenzene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
1,2-Dichlorobenzene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
1,2-Diphenylhydrazine	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
1,3-Dichlorobenzene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
1,4-Dichlorobenzene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
2,4,5-Trichlorophenol	ND U	10	5.0	1.8	1	04/29/16 16:02	4/25/16	
2,4,6-Trichlorophenol	ND U	10	5.0	1.4	1	04/29/16 16:02	4/25/16	
2,4-Dichlorophenol	ND U	10	5.0	1.3	1	04/29/16 16:02	4/25/16	
2,4-Dimethylphenol	ND U	10	5.0	1.5	1	04/29/16 16:02	4/25/16	
2,4-Dinitrophenol	ND U	50	25	20	1	04/29/16 16:02	4/25/16	
2,4-Dinitrotoluene	ND U	10	5.0	1.6	1	04/29/16 16:02	4/25/16	
2,6-Dinitrotoluene	ND U	10	5.0	1.8	1	04/29/16 16:02	4/25/16	
2-Chloronaphthalene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
2-Chlorophenol	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
2-Methylnaphthalene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
2-Methylphenol	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
2-Nitroaniline	ND U	50	25	9.1	1	04/29/16 16:02	4/25/16	
2-Nitrophenol	ND U	10	5.0	1.4	1	04/29/16 16:02	4/25/16	
3,3'-Dichlorobenzidine	ND U	10	5.0	4.5	1	04/29/16 16:02	4/25/16	
3- and 4-Methylphenol Coelution	ND U	10	10	2.0	1	04/29/16 16:02	4/25/16	
3-Nitroaniline	ND U	50	25	7.7	1	04/29/16 16:02	4/25/16	
4,6-Dinitro-2-methylphenol	ND U	50	25	11	1	04/29/16 16:02	4/25/16	
4-Bromophenyl Phenyl Ether	ND U	10	5.0	2.2	1	04/29/16 16:02	4/25/16	
4-Chloro-3-methylphenol	ND U	10	5.0	1.2	1	04/29/16 16:02	4/25/16	
4-Chloroaniline	ND U	10	5.0	1.5	1	04/29/16 16:02	4/25/16	
4-Chlorophenyl Phenyl Ether	ND U	10	5.0	1.2	1	04/29/16 16:02	4/25/16	
4-Nitroaniline	ND U	50	25	7.8	1	04/29/16 16:02	4/25/16	
4-Nitrophenol	ND U	50	25	5.9	1	04/29/16 16:02	4/25/16	
Acenaphthene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Acenaphthylene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Anthracene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Benz(a)anthracene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Benzidine	ND U	100	100	90	1	04/29/16 16:02	4/25/16	
Benzo(a)pyrene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Benzo(b)fluoranthene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Benzo(g,h,i)perylene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Benzo(k)fluoranthene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Benzyl Alcohol	ND U	10	5.0	1.3	1	04/29/16 16:02	4/25/16	
2,2'-Oxybis(1-chloropropane)	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Bis(2-chloroethoxy)methane	ND U	10	5.0	2.2	1	04/29/16 16:02	4/25/16	
Bis(2-chloroethyl) Ether	ND U	10	5.0	1.3	1	04/29/16 16:02	4/25/16	
Bis(2-ethylhexyl) Phthalate	ND U	10	5.0	1.2	1	04/29/16 16:02	4/25/16	
Butyl Benzyl Phthalate	ND U	10	5.0	2.4	1	04/29/16 16:02	4/25/16	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1604387-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	ND U	10	5.0	1.1	1	04/29/16 16:02	4/25/16	
Chrysene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Di-n-butyl Phthalate	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Di-n-octyl Phthalate	ND U	10	5.0	1.2	1	04/29/16 16:02	4/25/16	
Dibenz(a,h)anthracene	ND U	10	5.0	1.3	1	04/29/16 16:02	4/25/16	
Dibenzofuran	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Diethyl Phthalate	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Dimethyl Phthalate	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Fluoranthene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Fluorene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Hexachlorobenzene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Hexachlorobutadiene	ND U	10	5.0	1.3	1	04/29/16 16:02	4/25/16	
Hexachlorocyclopentadiene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Hexachloroethane	ND U	10	5.0	1.2	1	04/29/16 16:02	4/25/16	
Indeno(1,2,3-cd)pyrene	ND U	10	5.0	1.2	1	04/29/16 16:02	4/25/16	
Isophorone	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
N-Nitrosodi-n-propylamine	ND U	10	5.0	1.3	1	04/29/16 16:02	4/25/16	
N-Nitrosodimethylamine	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
N-Nitrosodiphenylamine	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Naphthalene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Nitrobenzene	ND U	10	5.0	1.6	1	04/29/16 16:02	4/25/16	
Pentachlorophenol (PCP)	ND U	50	25	6.9	1	04/29/16 16:02	4/25/16	
Phenanthrene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Phenol	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	
Pyrene	ND U	10	5.0	1.0	1	04/29/16 16:02	4/25/16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	93	40 - 125	04/29/16 16:02	
2-Fluorobiphenyl	76	50 - 110	04/29/16 16:02	
2-Fluorophenol	42	20 - 110	04/29/16 16:02	
Nitrobenzene-d5	77	40 - 110	04/29/16 16:02	
Phenol-d6	33	10 - 115	04/29/16 16:02	
p-Terphenyl-d14	91	50 - 135	04/29/16 16:02	

Tentatively Identified Compounds

CAS#	Compound Identification	RT	Result ug/L	Q
	No Tentatively Identified Compounds Detected			

ALS Group USA, Corp.
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QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1603837
Date Analyzed: 04/29/16

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1604387-02			RQ1604387-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4-Trichlorobenzene	8270D	58.3	100	58	41.6	100	42	35-105	33*	30
1,2-Dichlorobenzene	8270D	64.0	100	64	48.9	100	49	35-100	27	30
1,2-Diphenylhydrazine	8270D	88.4	100	88	88.1	100	88	55-115	<1	30
1,3-Dichlorobenzene	8270D	62.4	100	62	46.4	100	46	30-100	29	30
1,4-Dichlorobenzene	8270D	61.5	100	62	45.1	100	45	30-100	31*	30
2,4,5-Trichlorophenol	8270D	88.0	100	88	86.8	100	87	50-110	1	30
2,4,6-Trichlorophenol	8270D	91.0	100	91	87.9	100	88	50-115	3	30
2,4-Dichlorophenol	8270D	79.4	100	79	78.0	100	78	50-105	2	30
2,4-Dimethylphenol	8270D	78.9	100	79	77.5	100	77	30-110	2	30
2,4-Dinitrophenol	8270D	91.1	100	91	101	100	101	15-140	11	30
2,4-Dinitrotoluene	8270D	95.9	100	96	94.1	100	94	50-120	2	30
2,6-Dinitrotoluene	8270D	95.8	100	96	96.0	100	96	50-115	<1	30
2-Chloronaphthalene	8270D	74.7	100	75	72.0	100	72	50-105	4	30
2-Chlorophenol	8270D	79.5	100	79	79.3	100	79	35-105	<1	30
2-Methylnaphthalene	8270D	63.4	100	63	53.9	100	54	45-105	16	30
2-Methylphenol	8270D	78.4	100	78	76.9	100	77	40-110	2	30
2-Nitroaniline	8270D	93.5	100	93	95.7	100	96	50-115	2	30
2-Nitrophenol	8270D	78.4	100	78	76.3	100	76	40-115	3	30
3,3'-Dichlorobenzidine	8270D	76.1	100	76	79.6	100	80	20-110	4	30
3- and 4-Methylphenol Coelution	8270D	66.7	100	67	64.8	100	65	30-110	3	30
3-Nitroaniline	8270D	83.5	100	84	83.2	100	83	20-125	<1	30
4,6-Dinitro-2-methylphenol	8270D	97.9	100	98	95.6	100	96	40-130	2	30
4-Bromophenyl Phenyl Ether	8270D	85.6	100	86	88.5	100	89	50-115	3	30
4-Chloro-3-methylphenol	8270D	77.9	100	78	77.5	100	78	45-110	<1	30
4-Chloroaniline	8270D	74.5	100	74	74.4	100	74	15-110	<1	30
4-Chlorophenyl Phenyl Ether	8270D	80.2	100	80	83.9	100	84	50-110	5	30
4-Nitroaniline	8270D	93.7	100	94	89.8	100	90	35-120	4	30
4-Nitrophenol	8270D	51.4	100	51	53.8	100	54	0-125	5	30
Acenaphthene	8270D	81.1	100	81	80.3	100	80	45-110	<1	30
Acenaphthylene	8270D	81.5	100	82	81.0	100	81	50-105	<1	30
Anthracene	8270D	92.1	100	92	91.1	100	91	55-110	1	30
Benz(a)anthracene	8270D	93.6	100	94	94.3	100	94	55-110	<1	30
Benzidine	8270D	160	202	79	138	202	69	10-130	14	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1603837
Date Analyzed: 04/29/16

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1604387-02			RQ1604387-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Benzo(a)pyrene	8270D	94.6	100	95	93.5	100	94	55-110	1	30
Benzo(b)fluoranthene	8270D	91.3	100	91	91.2	100	91	45-120	<1	30
Benzo(g,h,i)perylene	8270D	105	100	105	103	100	103	40-125	1	30
Benzo(k)fluoranthene	8270D	98.0	100	98	91.2	100	91	45-125	7	30
Benzyl Alcohol	8270D	85.6	100	86	85.4	100	85	30-110	<1	30
2,2'-Oxybis(1-chloropropane)	8270D	82.4	100	82	74.4	100	74	25-130	10	30
Bis(2-chloroethoxy)methane	8270D	80.3	100	80	79.1	100	79	45-105	2	30
Bis(2-chloroethyl) Ether	8270D	79.5	100	80	76.8	100	77	35-110	3	30
Bis(2-ethylhexyl) Phthalate	8270D	98.3	100	98	98.5	100	98	40-125	<1	30
Butyl Benzyl Phthalate	8270D	97.7	100	98	96.5	100	96	45-115	1	30
Carbazole	8270D	92.8	100	93	92.6	100	93	50-115	<1	30
Chrysene	8270D	92.0	100	92	91.4	100	91	55-110	<1	30
Di-n-butyl Phthalate	8270D	94.3	100	94	92.6	100	93	55-115	2	30
Di-n-octyl Phthalate	8270D	102	100	102	97.6	100	98	35-135	5	30
Dibenz(a,h)anthracene	8270D	96.4	100	96	93.2	100	93	40-125	3	30
Dibenzofuran	8270D	82.2	100	82	84.0	100	84	55-105	2	30
Diethyl Phthalate	8270D	87.9	100	88	87.2	100	87	40-120	<1	30
Dimethyl Phthalate	8270D	90.7	100	91	87.4	100	87	25-125	4	30
Fluoranthene	8270D	93.1	100	93	90.6	100	91	55-115	3	30
Fluorene	8270D	85.4	100	85	84.2	100	84	50-110	1	30
Hexachlorobenzene	8270D	92.2	100	92	90.1	100	90	50-110	2	30
Hexachlorobutadiene	8270D	63.4	100	63	42.2	100	42	25-105	40*	30
Hexachlorocyclopentadiene	8270D	63.8	100	64	54.7	100	55	10-130	15	30
Hexachloroethane	8270D	51.9	100	52	36.4	100	36	30-100	35*	30
Indeno(1,2,3-cd)pyrene	8270D	92.0	100	92	91.3	100	91	45-125	<1	30
Isophorone	8270D	75.3	100	75	75.8	100	76	50-110	<1	30
N-Nitrosodi-n-propylamine	8270D	79.3	100	79	77.0	100	77	35-130	3	30
N-Nitrosodimethylamine	8270D	55.7	100	56	58.2	100	58	25-110	4	30
N-Nitrosodiphenylamine	8270D	99.8	100	100	101	100	101	50-110	1	30
Naphthalene	8270D	64.3	100	64	48.8	100	49	40-110	28	30
Nitrobenzene	8270D	71.2	100	71	68.9	100	69	45-110	3	30
Pentachlorophenol (PCP)	8270D	128	100	128 *	127	100	127 *	40-115	<1	30
Phenanthrene	8270D	91.1	100	91	90.4	100	90	50-115	<1	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1603837
Date Analyzed: 04/29/16

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1604387-02			RQ1604387-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Phenol	8270D	39.9	100	40	39.4	100	39	0-115	1	30
Pyrene	8270D	93.8	100	94	92.5	100	92	50-130	1	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16
Sample Matrix:	Water	**Date Received:**	04/20/16
		Date Analyzed:	05/2/16
		Date Extracted:	04/25/16

Duplicate Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA
Analysis Method:	8270D		
Prep Method:	EPA 3510C		

		Matrix Spike RQ1604387-04			**Duplicate Matrix Spike** RQ1604387-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4-Trichlorobenzene	ND U	51.3	94.3	54	38.9	94.3	41	35-105	27	30
1,2-Dichlorobenzene	ND U	57.7	94.3	61	45.5	94.3	48	35-100	24	30
1,2-Diphenylhydrazine	ND U	72.7	94.3	77	55.7	94.3	59	55-115	26	30
1,3-Dichlorobenzene	ND U	55.3	94.3	59	44.1	94.3	47	30-100	23	30
1,4-Dichlorobenzene	ND U	54.4	94.3	58	43.6	94.3	46	30-100	22	30
2,2'-Oxybis(1-chloropropane)	ND U	69.4	94.3	74	62.4	94.3	66	25-130	11	30
2,4,5-Trichlorophenol	ND U	78.3	94.3	83	71.0	94.3	75	50-110	10	30
2,4,6-Trichlorophenol	ND U	82.3	94.3	87	71.8	94.3	76	50-115	14	30
2,4-Dichlorophenol	ND U	69.4	94.3	74	64.3	94.3	68	50-105	8	30
2,4-Dimethylphenol	ND U	60.0	94.3	64	53.0	94.3	56	30-110	12	30
2,4-Dinitrophenol	ND U	82.6	94.3	88	79.2	94.3	84	15-140	4	30
2,4-Dinitrotoluene	ND U	83.4	94.3	88	69.7	94.3	74	50-120	18	30
2,6-Dinitrotoluene	ND U	83.2	94.3	88	71.7	94.3	76	50-115	15	30
2-Chloronaphthalene	ND U	70.9	94.3	75	52.7	94.3	56	50-105	29	30
2-Chlorophenol	ND U	70.0	94.3	74	66.4	94.3	70	35-105	5	30
2-Methylnaphthalene	ND U	59.0	94.3	62	46.3	94.3	49	45-105	24	30
2-Methylphenol	ND U	67.6	94.3	72	61.4	94.3	65	40-110	10	30
2-Nitroaniline	ND U	83.8	94.3	89	79.2	94.3	84	50-115	6	30
2-Nitrophenol	ND U	67.7	94.3	72	62.6	94.3	66	40-115	8	30
3- and 4-Methylphenol Coelution	ND U	57.7	94.3	61	54.2	94.3	57	30-110	6	30
3,3'-Dichlorobenzidine	ND U	58.3	94.3	62	42.8	94.3	45	20-110	31*	30
3-Nitroaniline	ND U	72.8	94.3	77	68.8	94.3	73	20-125	6	30
4,6-Dinitro-2-methylphenol	ND U	79.7	94.3	85	68.9	94.3	73	40-130	15	30
4-Bromophenyl Phenyl Ether	ND U	66.5	94.3	70	50.0	94.3	53	50-115	28	30
4-Chloro-3-methylphenol	ND U	67.0	94.3	71	65.3	94.3	69	45-110	3	30
4-Chloroaniline	ND U	55.2	94.3	58	50.0	94.3	53	15-110	10	30
4-Chlorophenyl Phenyl Ether	ND U	67.4	94.3	71	49.4	94.3	52	50-110	31*	30
4-Nitroaniline	ND U	73.7	94.3	78	74.8	94.3	79	35-120	2	30
4-Nitrophenol	ND U	43.9	94.3	47	40.1	94.3	43	0-125	9	30
Acenaphthene	ND U	74.8	94.3	79	56.3	94.3	60	45-110	28	30
Acenaphthylene	ND U	74.3	94.3	79	57.0	94.3	60	50-105	26	30
Anthracene	ND U	71.6	94.3	76	53.3	94.3	57	55-110	29	30
Benz(a)anthracene	ND U	72.3	94.3	77	54.3	94.3	58	55-110	28	30
Benzidine	ND U	ND	190	0 *	ND	190	0 *	10-130	NC	30
Benzo(a)pyrene	ND U	70.3	94.3	75	54.9	94.3	58	55-110	25	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Parsons Engineering Science	**Service Request:**	R1603837
Project:	FTMM Baseline/748810-03000	**Date Collected:**	04/19/16
Sample Matrix:	Water	**Date Received:**	04/20/16
		Date Analyzed:	05/2/16
		Date Extracted:	04/25/16

Duplicate Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	ARE-800-TMW06	**Units:**	ug/L
Lab Code:	R1603837-002	**Basis:**	NA
Analysis Method:	8270D		
Prep Method:	EPA 3510C		

		Matrix Spike RQ1604387-04			**Duplicate Matrix Spike** RQ1604387-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Benzo(b)fluoranthene	ND U	68.2	94.3	72	53.5	94.3	57	45-120	24	30
Benzo(g,h,i)perylene	ND U	76.3	94.3	81	60.7	94.3	64	40-125	23	30
Benzo(k)fluoranthene	ND U	69.0	94.3	73	55.5	94.3	59	45-125	22	30
Benzyl Alcohol	ND U	74.2	94.3	79	70.6	94.3	75	30-110	5	30
Bis(2-chloroethoxy)methane	ND U	70.6	94.3	75	65.4	94.3	69	45-105	8	30
Bis(2-chloroethyl) Ether	ND U	70.1	94.3	74	63.4	94.3	67	35-110	10	30
Bis(2-ethylhexyl) Phthalate	ND U	69.6	94.3	74	55.9	94.3	59	40-125	22	30
Butyl Benzyl Phthalate	ND U	75.7	94.3	80	60.3	94.3	64	45-115	23	30
Carbazole	ND U	80.1	94.3	85	64.7	94.3	69	50-115	21	30
Chrysene	ND U	73.4	94.3	78	55.3	94.3	59	55-110	28	30
Dibenz(a,h)anthracene	ND U	69.7	94.3	74	55.9	94.3	59	40-125	22	30
Dibenzofuran	ND U	75.4	94.3	80	56.8	94.3	60	55-105	28	30
Diethyl Phthalate	ND U	79.2	94.3	84	67.3	94.3	71	40-120	16	30
Dimethyl Phthalate	ND U	79.1	94.3	84	73.8	94.3	78	25-125	7	30
Di-n-butyl Phthalate	ND U	72.3	94.3	77	55.1	94.3	58	55-115	27	30
Di-n-octyl Phthalate	ND U	70.1	94.3	74	56.8	94.3	60	35-135	21	30
Fluoranthene	ND U	68.4	94.3	72	52.6	94.3	56	55-115	26	30
Fluorene	ND U	73.1	94.3	77	55.3	94.3	59	50-110	28	30
Hexachlorobenzene	ND U	71.0	94.3	75	51.8	94.3	55	50-110	31*	30
Hexachlorobutadiene	ND U	49.7	94.3	53	37.3	94.3	40	25-105	28	30
Hexachlorocyclopentadiene	ND U	50.6	94.3	54	37.2	94.3	39	10-130	30	30
Hexachloroethane	ND U	46.5	94.3	49	35.5	94.3	38	30-100	27	30
Indeno(1,2,3-cd)pyrene	ND U	66.7	94.3	71	52.6	94.3	56	45-125	24	30
Isophorone	ND U	65.9	94.3	70	61.1	94.3	65	50-110	8	30
Naphthalene	ND U	58.1	94.3	62	47.0	94.3	50	40-110	21	30
Nitrobenzene	ND U	62.6	94.3	66	56.6	94.3	60	45-110	10	30
N-Nitrosodimethylamine	ND U	48.8	94.3	52	46.0	94.3	49	25-110	6	30
N-Nitrosodi-n-propylamine	ND U	69.5	94.3	74	64.9	94.3	69	35-130	7	30
N-Nitrosodiphenylamine	ND U	86.4	94.3	92	69.1	94.3	73	50-110	22	30
Pentachlorophenol (PCP)	ND U	108	94.3	114	87.8	94.3	93	40-115	21	30
Phenanthrene	ND U	70.4	94.3	75	54.4	94.3	58	50-115	26	30
Phenol	ND U	35.5	94.3	38	33.0	94.3	35	0-115	7	30
Pyrene	ND U	70.3	94.3	75	54.0	94.3	57	50-130	26	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Environmental

1565 Jefferson Road
Building 300, Suite 360
Rochester, NY 14623
(585)288-5380

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:

ALS Quote #:

1 of 1

Client Name: Parsons Government Services

Address: 100 High St. 4th Floor
Boston, MA 02110

Contact: Christina Grill/Cory Mahony

Phone#: 617-449-1570

Project Name/#: FTMM GW-Parcel 700 -748810- 07100

Bill To: Parsons Government Services

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [X] -Y cory.mahony@parsons.com

Fax? [ ] -Y No.:

Container Type	P	AN	CG	CG						
Container Size	500mL	1L	40mL	40mL						
Preservative	HNO3	None	HCl	HCl						

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	TAL Metals (6010C)	SVOC (8270D) + TICs	VOC (8260C)+TICs	VOC (8260C): TCE Only						
					Enter Number of Containers Per Sample or Field Results Below.									
1 ARE-800-TMW05	4/19	0945	G	GW		2	3							
2 ARE-800-TMW06	1	0845	G	GW		2	3							
3 ARE-800-TMW06-MS/MSD		0845	G	GW		2	3							
4 ARE-800-EB-04192016		1200	G	GW		2	3							
5 ARE-800-TB-04192016		—	G	GW			3							
6														
7														
8														
9														
10														

Receipt Information (completed by Receiving Lab)

Cooler Temp: _____ Therm ID: _____

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(if present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

Sample/COC Comments

ALS Field Services: __Pickup __Labor __Composite Sampling __Rental Equipment __Other:

Project Comments:

LOGGED BY(signature): [signature] DATE: 4/19 TIME:

REVIEWED BY(signature): DATE: TIME:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] / PARSONS	4/19		2 [signature]	4/19/16	0920
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [ ] Standard [X] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ] [ ]

State Samples Collected In: [ ] NY [X] NJ [ ] PA [ ] NC

Reportable to PADEP? Yes [ ]

Sample Disposal: Lab [ ] Special [ ]

PWSID # _____

EDDS: Format Ty

* G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; V

ALS ENVIRONMENTAL SHIPPING ADDRESS: 1565 Jefferson Road, Building 300, Suite 360 Rochester, NY 14623

R1603837 5
Parsons Engineering Science
FTMM Baseline

Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number _____.

Cooler received on 4/20/16 by: @

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 4/20/16 Time: 0758 ID: (IR#3) IR#5 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	4.1						
Correction Factor (°C)	-0.7						
Corrected Temp (°C)	3.4						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by @ on 4/20/16 at 1003
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 4/20/16 Time: 1332 by: @

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411/1070	1/17				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 5-317-002, 020111G-1BLT

Other Comments:

Trip Blank (1 vial) - headspace

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

August 11, 2016

Ms. Carla Rodman
Parsons
301 Plainfield Rd
Suite 350
Syracuse, NY 13212

Certificate of Analysis

Project Name:	**Ft. Monmouth GW Sampling**	Workorder:	**2164282**
Purchase Order:		Workorder ID:	**PQF017|Ft. Monmouth GW Samplin**

Dear Ms. Rodman:

Enclosed are the analytical results for samples received by the laboratory on Wednesday, August 3, 2016.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Debra J. Musser (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Christina Grill , Ms. Maryanne Kosciewicz , Mr. Cory Mahony

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

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SAMPLE SUMMARY

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2164282001	ARE-800-TMW-04	Water	8/2/2016 09:10	8/3/2016 23:18	Collected by Client
2164282002	ARE-800-TMW-104	Water	8/2/2016 12:00	8/3/2016 23:18	Collected by Client
2164282003	ARE-800-TMW-03	Water	8/2/2016 09:35	8/3/2016 23:18	Collected by Client
2164282004	ARE-800-TMW-02	Water	8/2/2016 10:45	8/3/2016 23:18	Collected by Client
2164282005	ARE-800-TMW-01	Water	8/2/2016 10:30	8/3/2016 23:18	Collected by Client
2164282006	ARE-800-EB-08022016	Water	8/2/2016 14:45	8/3/2016 23:18	Collected by Client
2164282007	ARE-800-TB-08022016	Water	8/2/2016 00:00	8/3/2016 23:18	Collected by Client
2164282008	ARE-800-TMW-08	Water	8/2/2016 13:45	8/3/2016 23:18	Collected by Client

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SAMPLE SUMMARY

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Workorder Comments

ALS Middletown does not currently hold DOD accreditation for Pentachlorophenol by 8270 SIM or Benzidine by 8270.

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282001** Date Collected: 8/2/2016 09:10 Matrix: Water

Sample ID: **ARE-800-TMW-04** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:09	DD	H
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 15:09	DD	H
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Bromomethane	0.75U	U13 9	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:09	DD	H
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 15:09	DD	H
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 15:09	DD	H
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282001** Date Collected: 8/2/2016 09:10 Matrix: Water

Sample ID: **ARE-800-TMW-04** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 15:09	DD	H
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:09	DD	H
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:09	DD	H
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 15:09	DD	H
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:09	DD	H
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 15:09	DD	H

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	107		%	81 - 118	SW846 8260C		8/8/16 15:09	DD	H
4-Bromofluorobenzene (S)	113		%	85 - 114	SW846 8260C		8/8/16 15:09	DD	H
Dibromofluoromethane (S)	96.2		%	80 - 119	SW846 8260C		8/8/16 15:09	DD	H
Toluene-d8 (S)	98.3		%	89 - 112	SW846 8260C		8/8/16 15:09	DD	H

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/8/16 15:09	JAH	H

SEMIVOLATILES

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282001** Date Collected: 8/2/2016 09:10 Matrix: Water

Sample ID: **ARE-800-TMW-04** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Acenaphthene	0.98U	U28 29	ug/L	2.0	0.98	0.15	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Acenaphthylene	0.98U	U26	ug/L	2.0	0.98	0.19	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Anthracene	0.98U	U76 77	ug/L	2.0	0.98	0.15	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzidine	29.4U	U84 85	ug/L	29.4	29.4	3.0	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzidine	7.81		ug/L	7.8	7.8	3.0	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzo(a)anthracene	0.98U	U92 93	ug/L	2.0	0.98	0.13	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzo(a)pyrene	0.98U	U10 410 5	ug/L	2.0	0.98	0.22	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzo(b)fluoranthene	0.98U	U10 010 1	ug/L	2.0	0.98	0.11	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzo(g,h,i)perylene	0.98U	U11 0111	ug/L	2.0	0.98	0.22	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzo(k)fluoranthene	0.98U	U10 210 3	ug/L	2.0	0.98	0.19	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Benzyl Alcohol	2.0U	U62	ug/L	7.8	2.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
4-Bromophenyl-phenylether	0.98U	U50 51	ug/L	7.8	0.98	0.17	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Butylbenzylphthalate	0.98U	U88 89	ug/L	7.8	0.98	0.11	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Carbazole	0.98U	U78 79	ug/L	7.8	0.98	0.12	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
4-Chloro-3-methylphenol	0.98U	U11 12	ug/L	7.8	0.98	0.19	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
4-Chloroaniline	0.98U	U9	ug/L	7.8	0.98	0.21	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
bis(2-Chloroethoxy)methane	0.98U	U3	ug/L	7.8	0.98	0.21	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
bis(2-Chloroethyl)ether	0.98U	U56	ug/L	7.8	0.98	0.17	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
bis(2-Chloroisopropyl)ether	0.98U	U65	ug/L	7.8	0.98	0.27	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Chloronaphthalene	0.98U	U20 21	ug/L	7.8	0.98	0.18	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Chlorophenol	2.0U	U57	ug/L	7.8	2.0	0.32	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
4-Chlorophenyl-phenylether	0.98U	U40 41	ug/L	7.8	0.98	0.14	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Chrysene	0.98U	U94 95	ug/L	2.0	0.98	0.12	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
mp-Cresol	0.98U	U69	ug/L	7.8	0.98	0.15	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
o-Cresol	0.98U	U66	ug/L	7.8	0.98	0.25	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Di-n-Butylphthalate	0.98U	U80 81	ug/L	7.8	0.98	0.14	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282001** Date Collected: 8/2/2016 09:10 Matrix: Water

Sample ID: **ARE-800-TMW-04** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Di-n-Octylphthalate	0.98U	U98 99	ug/L	7.8	0.98	0.098	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Dibenzo(a,h)anthracene	0.98U	U10 810 9	ug/L	2.0	0.98	0.21	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Dibenzofuran	0.98U	U34 35	ug/L	7.8	0.98	0.11	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
1,2-Dichlorobenzene	0.98U	U63 64	ug/L	7.8	0.98	0.20	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
1,3-Dichlorobenzene	0.98U	U58 59	ug/L	7.8	0.98	0.17	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
1,4-Dichlorobenzene	0.98U	U60 61	ug/L	7.8	0.98	0.18	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
3,3-Dichlorobenzidine	2.9U	U90 91	ug/L	15.7	2.9	0.47	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2,4-Dichlorophenol	0.98U	U4	ug/L	7.8	0.98	0.31	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Diethylphthalate	0.98U	U38 39	ug/L	7.8	0.98	0.18	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2,4-Dimethylphenol	4.9U	U2	ug/L	7.8	4.9	0.21	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Dimethylphthalate	0.98U	U23	ug/L	7.8	0.98	0.14	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2,4-Dinitrophenol	7.8U	U30 31	ug/L	15.7	7.8	1.8	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2,4-Dinitrotoluene	0.98U	U36 37	ug/L	7.8	0.98	0.12	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2,6-Dinitrotoluene	0.98U	U24 25	ug/L	7.8	0.98	0.21	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
1,2-Diphenylhydrazine	0.98U	U49	ug/L	7.8	0.98	0.25	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
bis(2-Ethylhexyl)phthalate	0.26J	J96 97	ug/L	7.8	0.98	0.22	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Fluoranthene	0.98U	U82 83	ug/L	2.0	0.98	0.17	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Fluorene	0.98U	U42 43	ug/L	2.0	0.98	0.20	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Hexachlorobenzene	0.98U	U52 53	ug/L	7.8	0.98	0.23	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Hexachlorobutadiene	0.98U	U10	ug/L	7.8	0.98	0.19	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Hexachlorocyclopentadiene	2.0U	U15 16	ug/L	7.8	2.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Hexachloroethane	0.98U	U70	ug/L	7.8	0.98	0.29	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Indeno(1,2,3-cd)pyrene	0.98U	U10 610 7	ug/L	2.0	0.98	0.098	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Isophorone	0.98U	U72	ug/L	7.8	0.98	0.15	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Methyl-4,6-dinitrophenol	4.9U	U46 47	ug/L	7.8	4.9	0.32	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282001** Date Collected: 8/2/2016 09:10 Matrix: Water

Sample ID: **ARE-800-TMW-04** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2-Methylnaphthalene	0.98U	U13 14	ug/L	2.0	0.98	0.16	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Naphthalene	0.98U	U78	ug/L	2.0	0.98	0.12	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Nitroaniline	0.98U	U22	ug/L	7.8	0.98	0.20	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
3-Nitroaniline	2.0U	U27	ug/L	7.8	2.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
4-Nitroaniline	0.98U	U44 45	ug/L	7.8	0.98	0.40	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Nitrobenzene	2.0U	U71	ug/L	7.8	2.0	0.27	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Nitrophenol	2.0U	U1	ug/L	7.8	2.0	0.44	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
4-Nitrophenol	4.9U	U32 33	ug/L	7.8	4.9	1.0	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
N-Nitrosodimethylamine	2.0U	U54	ug/L	7.8	2.0	0.63	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
N-Nitroso-di-n-propylamine	0.98U	U67 68	ug/L	7.8	0.98	0.24	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
N-Nitrosodiphenylamine	2.0U	U48	ug/L	7.8	2.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Pentachlorophenol	7.8U	U73	ug/L	15.7	7.8	1.0	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Phenanthrene	0.98U	U74 75	ug/L	2.0	0.98	0.13	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Phenol	0.98U	U55	ug/L	7.8	0.98	0.23	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Pyrene	0.98U	U86 87	ug/L	2.0	0.98	0.16	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
1,2,4-Trichlorobenzene	0.98U	U56	ug/L	7.8	0.98	0.13	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2,4,5-Trichlorophenol	2.9U	U19	ug/L	7.8	2.9	0.54	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2,4,6-Trichlorophenol	0.98U	U17 18	ug/L	7.8	0.98	0.56	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	55.5		%	47 - 128	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Fluorobiphenyl (S)	38.5	140	%	52 - 118	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Fluorophenol (S)	27		%	20 - 87	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Nitrobenzene-d5 (S)	42.5		%	27 - 139	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Phenol-d5 (S)	19.3		%	10 - 81	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Terphenyl-d14 (S)	21.2	141	%	46 - 133	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	55.5		%	43 - 140	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Fluorobiphenyl (S)	38.5	113	%	44 - 119	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
2-Fluorophenol (S)	27		%	19 - 119	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Nitrobenzene-d5 (S)	42.5	112	%	44 - 120	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Phenol-d5 (S)	19.3		%	13 - 49	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Terphenyl-d14 (S)	21.2	114	%	50 - 134	SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282001** Date Collected: 8/2/2016 09:10 Matrix: Water

Sample ID: **ARE-800-TMW-04** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Library Search - SemiVolatiles												
Diethyltoluamide	34.5	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
Tridecanoic acid	6.4	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 14:40	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	0.039U	U	ug/L	0.049	0.039	0.011	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Acenaphthylene	0.039U	U	ug/L	0.049	0.039	0.011	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Anthracene	0.039U	U	ug/L	0.049	0.039	0.017	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Benzo(a)anthracene	0.017J	J11 811 9	ug/L	0.049	0.039	0.017	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Benzo(a)pyrene	0.039U	U12 712 812 9	ug/L	0.049	0.039	0.020	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Benzo(b)fluoranthene	0.023J	J12 112 212 3	ug/L	0.049	0.039	0.020	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Benzo(g,h,i)perylene	0.039U	U13 613 713 8	ug/L	0.049	0.039	0.037	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Benzo(k)fluoranthene	0.039U	U12 412 512 6	ug/L	0.049	0.039	0.025	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Chrysene	0.028J	J12 0	ug/L	0.049	0.039	0.017	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Dibenzo(a,h)anthracene	0.039U	U13 313 413 5	ug/L	0.049	0.039	0.023	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
2,4-Dinitrotoluene	0.039U	U	ug/L	0.049	0.039	0.021	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
2,6-Dinitrotoluene	0.039U	U	ug/L	0.049	0.039	0.030	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Fluoranthene	0.035J	J11 6	ug/L	0.049	0.039	0.018	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Fluorene	0.021J	J	ug/L	0.049	0.039	0.015	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Indeno(1,2,3-cd)pyrene	0.049U	U13 013 113 2	ug/L	0.049	0.049	0.040	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Naphthalene	0.039U	U	ug/L	0.049	0.039	0.036	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Pentachlorophenol	0.98U	U	ug/L	0.98	0.98	0.18	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Phenanthrene	0.055		ug/L	0.049	0.039	0.020	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282001** Date Collected: 8/2/2016 09:10 Matrix: Water

Sample ID: **ARE-800-TMW-04** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Pyrene	0.047J	J117	ug/L	0.049	0.039	0.015	8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	40.5		%	29 - 112			8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B
Fluoranthene-d10 (S)	32.8	115	%	45 - 130			8270 SIM	8/5/16	JTH	8/10/16 23:46	CGS	B

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282002** Date Collected: 8/2/2016 12:00 Matrix: Water

Sample ID: **ARE-800-TMW-104** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 14:47	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 14:47	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 14:47	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 14:47	DD	D
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 14:47	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282002** Date Collected: 8/2/2016 12:00 Matrix: Water

Sample ID: **ARE-800-TMW-104** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 14:47	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 14:47	DD	D
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 14:47	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 14:47	DD	D
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 14:47	DD	D
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 14:47	DD	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	106		%	81 - 118	SW846 8260C		8/8/16 14:47	DD	D
4-Bromofluorobenzene (S)	110		%	85 - 114	SW846 8260C		8/8/16 14:47	DD	D
Dibromofluoromethane (S)	95.8		%	80 - 119	SW846 8260C		8/8/16 14:47	DD	D
Toluene-d8 (S)	97.8		%	89 - 112	SW846 8260C		8/8/16 14:47	DD	D

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/8/16 14:47	JAH	D

SEMIVOLATILES

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282002** Date Collected: 8/2/2016 12:00 Matrix: Water

Sample ID: **ARE-800-TMW-104** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Acenaphthene	1.0U	U	ug/L	2.1	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Acenaphthylene	1.0U	U	ug/L	2.1	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Anthracene	1.0U	U	ug/L	2.1	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzidine	8.21		ug/L	8.2	8.2	3.2	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzidine	30.8U	U	ug/L	30.8	30.8	3.2	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzo(a)anthracene	1.0U	U	ug/L	2.1	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzo(a)pyrene	1.0U	U	ug/L	2.1	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzo(b)fluoranthene	1.0U	U	ug/L	2.1	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzo(g,h,i)perylene	1.0U	U	ug/L	2.1	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzo(k)fluoranthene	1.0U	U	ug/L	2.1	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Benzyl Alcohol	2.1U	U	ug/L	8.2	2.1	0.24	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
4-Bromophenyl-phenylether	1.0U	U	ug/L	8.2	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Butylbenzylphthalate	1.0U	U	ug/L	8.2	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Carbazole	1.0U	U	ug/L	8.2	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
4-Chloro-3-methylphenol	1.0U	U	ug/L	8.2	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
4-Chloroaniline	1.0U	U	ug/L	8.2	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
bis(2-Chloroethoxy)methane	1.0U	U	ug/L	8.2	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
bis(2-Chloroethyl)ether	1.0U	U	ug/L	8.2	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
bis(2-Chloroisopropyl)ether	1.0U	U	ug/L	8.2	1.0	0.29	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Chloronaphthalene	1.0U	U	ug/L	8.2	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Chlorophenol	2.1U	U	ug/L	8.2	2.1	0.34	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
4-Chlorophenyl-phenylether	1.0U	U	ug/L	8.2	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Chrysene	1.0U	U	ug/L	2.1	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
mp-Cresol	1.0U	U	ug/L	8.2	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
o-Cresol	1.0U	U	ug/L	8.2	1.0	0.26	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Di-n-Butylphthalate	1.0U	U	ug/L	8.2	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Di-n-Octylphthalate	1.0U	U	ug/L	8.2	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Dibenzo(a,h)anthracene	1.0U	U	ug/L	2.1	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Dibenzofuran	1.0U	U	ug/L	8.2	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
1,2-Dichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
1,3-Dichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
1,4-Dichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
3,3-Dichlorobenzidine	3.1U	U	ug/L	16.4	3.1	0.49	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2,4-Dichlorophenol	1.0U	U	ug/L	8.2	1.0	0.33	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Diethylphthalate	1.0U	U	ug/L	8.2	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2,4-Dimethylphenol	5.1U	U	ug/L	8.2	5.1	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Dimethylphthalate	1.0U	U	ug/L	8.2	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2,4-Dinitrophenol	8.2U	U	ug/L	16.4	8.2	1.9	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282002** Date Collected: 8/2/2016 12:00 Matrix: Water

Sample ID: **ARE-800-TMW-104** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2,4-Dinitrotoluene	1.0U	U	ug/L	8.2	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2,6-Dinitrotoluene	1.0U	U	ug/L	8.2	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
1,2-Diphenylhydrazine	1.0U	U	ug/L	8.2	1.0	0.27	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
bis(2-Ethylhexyl)phthalate	1.0U	U	ug/L	8.2	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Fluoranthene	1.0U	U	ug/L	2.1	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Fluorene	1.0U	U	ug/L	2.1	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Hexachlorobenzene	1.0U	U	ug/L	8.2	1.0	0.24	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Hexachlorobutadiene	1.0U	U	ug/L	8.2	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Hexachlorocyclopentadiene	2.1U	U	ug/L	8.2	2.1	0.17	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Hexachloroethane	1.0U	U	ug/L	8.2	1.0	0.31	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Indeno(1,2,3-cd)pyrene	1.0U	U	ug/L	2.1	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Isophorone	1.0U	U	ug/L	8.2	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Methyl-4,6-dinitrophenol	5.1U	U	ug/L	8.2	5.1	0.34	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Methylnaphthalene	1.0U	U	ug/L	2.1	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Naphthalene	1.0U	U	ug/L	2.1	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Nitroaniline	1.0U	U	ug/L	8.2	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
3-Nitroaniline	2.1U	U	ug/L	8.2	2.1	0.18	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
4-Nitroaniline	1.0U	U	ug/L	8.2	1.0	0.42	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Nitrobenzene	2.1U	U	ug/L	8.2	2.1	0.29	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Nitrophenol	2.1U	U	ug/L	8.2	2.1	0.46	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
4-Nitrophenol	5.1U	U	ug/L	8.2	5.1	1.1	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
N-Nitrosodimethylamine	2.1U	U	ug/L	8.2	2.1	0.66	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
N-Nitroso-di-n-propylamine	1.0U	U	ug/L	8.2	1.0	0.25	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
N-Nitrosodiphenylamine	2.1U	U	ug/L	8.2	2.1	0.18	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Pentachlorophenol	8.2U	U	ug/L	16.4	8.2	1.1	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Phenanthrene	1.0U	U	ug/L	2.1	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Phenol	1.0U	U	ug/L	8.2	1.0	0.24	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Pyrene	1.0U	U	ug/L	2.1	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
1,2,4-Trichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2,4,5-Trichlorophenol	3.1U	U	ug/L	8.2	3.1	0.56	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2,4,6-Trichlorophenol	1.0U	U	ug/L	8.2	1.0	0.58	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76		%	47 - 128	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Fluorobiphenyl (S)	60.6		%	52 - 118	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Fluorophenol (S)	47.2		%	20 - 87	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Nitrobenzene-d5 (S)	71.4		%	27 - 139	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Phenol-d5 (S)	29.9		%	10 - 81	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Terphenyl-d14 (S)	49.2		%	46 - 133	SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282002** Date Collected: 8/2/2016 12:00 Matrix: Water

Sample ID: **ARE-800-TMW-104** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76		%	43 - 140			SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Fluorobiphenyl (S)	60.6		%	44 - 119			SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
2-Fluorophenol (S)	47.2		%	19 - 119			SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Nitrobenzene-d5 (S)	71.4		%	44 - 120			SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Phenol-d5 (S)	29.9		%	13 - 49			SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Terphenyl-d14 (S)	49.2	1	%	50 - 134			SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Library Search - SemiVolatiles												
Diethyltoluamide	36.9	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
Heptadecane, 2,6,10,15-tetrame	4.4	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:16	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	0.041U	U	ug/L	0.051	0.041	0.011	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Acenaphthylene	0.041U	U	ug/L	0.051	0.041	0.011	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Anthracene	0.041U	U	ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Benzo(a)anthracene	0.041U	U	ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Benzo(a)pyrene	0.041U	U	ug/L	0.051	0.041	0.021	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Benzo(b)fluoranthene	0.041U	U	ug/L	0.051	0.041	0.021	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Benzo(g,h,i)perylene	0.041U	U	ug/L	0.051	0.041	0.039	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Benzo(k)fluoranthene	0.041U	U	ug/L	0.051	0.041	0.026	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Chrysene	0.041U	U	ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Dibenzo(a,h)anthracene	0.041U	U	ug/L	0.051	0.041	0.024	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
2,4-Dinitrotoluene	0.041U	U	ug/L	0.051	0.041	0.022	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
2,6-Dinitrotoluene	0.041U	U	ug/L	0.051	0.041	0.032	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Fluoranthene	0.041U	U	ug/L	0.051	0.041	0.018	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Fluorene	0.041U	U	ug/L	0.051	0.041	0.015	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Indeno(1,2,3-cd)pyrene	0.051U	U	ug/L	0.051	0.051	0.042	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Naphthalene	0.041U	U	ug/L	0.051	0.041	0.038	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Pentachlorophenol	1.0U	U	ug/L	1.0	1.0	0.18	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Phenanthrene	0.027J	J	ug/L	0.051	0.041	0.021	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Pyrene	0.041U	U	ug/L	0.051	0.041	0.015	8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	67		%	29 - 112			8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B
Fluoranthene-d10 (S)	68		%	45 - 130			8270 SIM	8/5/16	JTH	8/11/16 02:25	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282002** Date Collected: 8/2/2016 12:00 Matrix: Water

Sample ID: **ARE-800-TMW-104** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	*Cntr*

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282003** Date Collected: 8/2/2016 09:35 Matrix: Water

Sample ID: **ARE-800-TMW-03** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	4.1J	J	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:32	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 15:32	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:32	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 15:32	DD	D
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 15:32	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282003** Date Collected: 8/2/2016 09:35 Matrix: Water

Sample ID: **ARE-800-TMW-03** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 15:32	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:32	DD	D
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:32	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 15:32	DD	D
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:32	DD	D
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 15:32	DD	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	107		%	81 - 118	SW846 8260C		8/8/16 15:32	DD	D
4-Bromofluorobenzene (S)	113		%	85 - 114	SW846 8260C		8/8/16 15:32	DD	D
Dibromofluoromethane (S)	98.6		%	80 - 119	SW846 8260C		8/8/16 15:32	DD	D
Toluene-d8 (S)	101		%	89 - 112	SW846 8260C		8/8/16 15:32	DD	D

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/8/16 15:32	JAH	D

SEMIVOLATILES

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282003** Date Collected: 8/2/2016 09:35 Matrix: Water

Sample ID: **ARE-800-TMW-03** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Acenaphthene	1.0U	U	ug/L	2.0	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Acenaphthylene	1.0U	U	ug/L	2.0	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Anthracene	1.0U	U	ug/L	2.0	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzidine	30.0U	U	ug/L	30.0	30.0	3.1	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzidine	8.01		ug/L	8.0	8.0	3.1	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzo(a)anthracene	1.0U	U	ug/L	2.0	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzo(a)pyrene	1.0U	U	ug/L	2.0	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzo(b)fluoranthene	1.0U	U	ug/L	2.0	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzo(g,h,i)perylene	1.0U	U	ug/L	2.0	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzo(k)fluoranthene	1.0U	U	ug/L	2.0	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Benzyl Alcohol	2.0U	U	ug/L	8.0	2.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
4-Bromophenyl-phenylether	1.0U	U	ug/L	8.0	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Butylbenzylphthalate	1.0U	U	ug/L	8.0	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Carbazole	1.0U	U	ug/L	8.0	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
4-Chloro-3-methylphenol	1.0U	U	ug/L	8.0	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
4-Chloroaniline	1.0U	U	ug/L	8.0	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
bis(2-Chloroethoxy)methane	1.0U	U	ug/L	8.0	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
bis(2-Chloroethyl)ether	1.0U	U	ug/L	8.0	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
bis(2-Chloroisopropyl)ether	1.0U	U	ug/L	8.0	1.0	0.28	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Chloronaphthalene	1.0U	U	ug/L	8.0	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Chlorophenol	2.0U	U	ug/L	8.0	2.0	0.33	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
4-Chlorophenyl-phenylether	1.0U	U	ug/L	8.0	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Chrysene	1.0U	U	ug/L	2.0	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
mp-Cresol	1.0U	U	ug/L	8.0	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
o-Cresol	1.0U	U	ug/L	8.0	1.0	0.25	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Di-n-Butylphthalate	1.0U	U	ug/L	8.0	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Di-n-Octylphthalate	1.0U	U	ug/L	8.0	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Dibenzo(a,h)anthracene	1.0U	U	ug/L	2.0	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Dibenzofuran	1.0U	U	ug/L	8.0	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
1,2-Dichlorobenzene	1.0U	U	ug/L	8.0	1.0	0.20	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
1,3-Dichlorobenzene	1.0U	U	ug/L	8.0	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
1,4-Dichlorobenzene	1.0U	U	ug/L	8.0	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
3,3-Dichlorobenzidine	3.0U	U	ug/L	16.0	3.0	0.48	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2,4-Dichlorophenol	1.0U	U	ug/L	8.0	1.0	0.32	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Diethylphthalate	1.0U	U	ug/L	8.0	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2,4-Dimethylphenol	5.0U	U	ug/L	8.0	5.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Dimethylphthalate	1.0U	U	ug/L	8.0	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2,4-Dinitrophenol	8.0U	U	ug/L	16.0	8.0	1.8	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282003** Date Collected: 8/2/2016 09:35 Matrix: Water

Sample ID: **ARE-800-TMW-03** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2,4-Dinitrotoluene	1.0U	U	ug/L	8.0	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2,6-Dinitrotoluene	1.0U	U	ug/L	8.0	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
1,2-Diphenylhydrazine	1.0U	U	ug/L	8.0	1.0	0.26	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
bis(2-Ethylhexyl)phthalate	1.0U	U	ug/L	8.0	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Fluoranthene	1.0U	U	ug/L	2.0	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Fluorene	1.0U	U	ug/L	2.0	1.0	0.20	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Hexachlorobenzene	1.0U	U	ug/L	8.0	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Hexachlorobutadiene	1.0U	U	ug/L	8.0	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Hexachlorocyclopentadiene	2.0U	U	ug/L	8.0	2.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Hexachloroethane	1.0U	U	ug/L	8.0	1.0	0.30	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Indeno(1,2,3-cd)pyrene	1.0U	U	ug/L	2.0	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Isophorone	1.0U	U	ug/L	8.0	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Methyl-4,6-dinitrophenol	5.0U	U	ug/L	8.0	5.0	0.33	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Methylnaphthalene	1.0U	U	ug/L	2.0	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Naphthalene	1.0U	U	ug/L	2.0	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Nitroaniline	1.0U	U	ug/L	8.0	1.0	0.20	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
3-Nitroaniline	2.0U	U	ug/L	8.0	2.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
4-Nitroaniline	1.0U	U	ug/L	8.0	1.0	0.41	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Nitrobenzene	2.0U	U	ug/L	8.0	2.0	0.28	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Nitrophenol	2.0U	U	ug/L	8.0	2.0	0.45	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
4-Nitrophenol	5.0U	U	ug/L	8.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
N-Nitrosodimethylamine	2.0U	U	ug/L	8.0	2.0	0.64	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
N-Nitroso-di-n-propylamine	1.0U	U	ug/L	8.0	1.0	0.24	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
N-Nitrosodiphenylamine	2.0U	U	ug/L	8.0	2.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Pentachlorophenol	8.0U	U	ug/L	16.0	8.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Phenanthrene	1.0U	U	ug/L	2.0	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Phenol	1.0U	U	ug/L	8.0	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Pyrene	1.0U	U	ug/L	2.0	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
1,2,4-Trichlorobenzene	1.0U	U	ug/L	8.0	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2,4,5-Trichlorophenol	3.0U	U	ug/L	8.0	3.0	0.55	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2,4,6-Trichlorophenol	1.0U	U	ug/L	8.0	1.0	0.57	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	72.9		%	47 - 128	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Fluorobiphenyl (S)	60.8		%	52 - 118	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Fluorophenol (S)	45.3		%	20 - 87	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Nitrobenzene-d5 (S)	67.9		%	27 - 139	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Phenol-d5 (S)	29.2		%	10 - 81	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Terphenyl-d14 (S)	33	3	%	46 - 133	SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282003** Date Collected: 8/2/2016 09:35 Matrix: Water

Sample ID: **ARE-800-TMW-03** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	72.9		%	43 - 140			SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Fluorobiphenyl (S)	60.8		%	44 - 119			SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
2-Fluorophenol (S)	45.3		%	19 - 119			SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Nitrobenzene-d5 (S)	67.9		%	44 - 120			SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Phenol-d5 (S)	29.2		%	13 - 49			SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Terphenyl-d14 (S)	33	1	%	50 - 134			SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Library Search - SemiVolatiles												
Diethyltoluamide	4.6	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
Pentadecanoic acid	7.9	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 15:58	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	0.040U	U	ug/L	0.050	0.040	0.011	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Acenaphthylene	0.040U	U	ug/L	0.050	0.040	0.011	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Anthracene	0.040U	U	ug/L	0.050	0.040	0.017	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Benzo(a)anthracene	0.040U	U	ug/L	0.050	0.040	0.017	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Benzo(a)pyrene	0.040U	U	ug/L	0.050	0.040	0.020	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Benzo(b)fluoranthene	0.040U	U	ug/L	0.050	0.040	0.020	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Benzo(g,h,i)perylene	0.040U	U	ug/L	0.050	0.040	0.038	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Benzo(k)fluoranthene	0.040U	U	ug/L	0.050	0.040	0.025	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Chrysene	0.040U	U	ug/L	0.050	0.040	0.017	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Dibenzo(a,h)anthracene	0.040U	U	ug/L	0.050	0.040	0.023	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
2,4-Dinitrotoluene	0.040U	U	ug/L	0.050	0.040	0.021	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
2,6-Dinitrotoluene	0.040U	U	ug/L	0.050	0.040	0.031	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Fluoranthene	0.024J	J	ug/L	0.050	0.040	0.018	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Fluorene	0.015J	J	ug/L	0.050	0.040	0.015	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Indeno(1,2,3-cd)pyrene	0.050U	U	ug/L	0.050	0.050	0.041	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Naphthalene	0.040U	U	ug/L	0.050	0.040	0.037	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Pentachlorophenol	1.0U	U	ug/L	1.0	1.0	0.18	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Phenanthrene	0.042J	J	ug/L	0.050	0.040	0.020	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Pyrene	0.024J	J	ug/L	0.050	0.040	0.015	8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	62.9		%	29 - 112			8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B
Fluoranthene-d10 (S)	43	2	%	45 - 130			8270 SIM	8/5/16	JTH	8/11/16 01:05	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282003** Date Collected: 8/2/2016 09:35 Matrix: Water

Sample ID: **ARE-800-TMW-03** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	*Cntr*

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282004** Date Collected: 8/2/2016 10:45 Matrix: Water

Sample ID: **ARE-800-TMW-02** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	4.0J	J	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:54	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 15:54	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:54	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 15:54	DD	D
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 15:54	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282004** Date Collected: 8/2/2016 10:45 Matrix: Water

Sample ID: **ARE-800-TMW-02** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 15:54	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:54	DD	D
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 15:54	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 15:54	DD	D
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 15:54	DD	D
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 15:54	DD	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	106		%	81 - 118	SW846 8260C		8/8/16 15:54	DD	D
4-Bromofluorobenzene (S)	111		%	85 - 114	SW846 8260C		8/8/16 15:54	DD	D
Dibromofluoromethane (S)	98.2		%	80 - 119	SW846 8260C		8/8/16 15:54	DD	D
Toluene-d8 (S)	98		%	89 - 112	SW846 8260C		8/8/16 15:54	DD	D

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/8/16 15:54	JAH	D

SEMIVOLATILES

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282004** Date Collected: 8/2/2016 10:45 Matrix: Water

Sample ID: **ARE-800-TMW-02** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Acenaphthene	1.0U	U	ug/L	2.1	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Acenaphthylene	1.0U	U	ug/L	2.1	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Anthracene	1.0U	U	ug/L	2.1	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzidine	30.8U	U	ug/L	30.8	30.8	3.2	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzidine	8.21		ug/L	8.2	8.2	3.2	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzo(a)anthracene	0.20J	J	ug/L	2.1	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzo(a)pyrene	1.0U	U	ug/L	2.1	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzo(b)fluoranthene	0.12J	J	ug/L	2.1	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzo(g,h,i)perylene	1.0U	U	ug/L	2.1	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzo(k)fluoranthene	1.0U	U	ug/L	2.1	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Benzyl Alcohol	2.1U	U	ug/L	8.2	2.1	0.24	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
4-Bromophenyl-phenylether	1.0U	U	ug/L	8.2	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Butylbenzylphthalate	1.0U	U	ug/L	8.2	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Carbazole	1.0U	U	ug/L	8.2	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
4-Chloro-3-methylphenol	1.0U	U	ug/L	8.2	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
4-Chloroaniline	1.0U	U	ug/L	8.2	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
bis(2-Chloroethoxy)methane	1.0U	U	ug/L	8.2	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
bis(2-Chloroethyl)ether	1.0U	U	ug/L	8.2	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
bis(2-Chloroisopropyl)ether	1.0U	U	ug/L	8.2	1.0	0.29	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Chloronaphthalene	1.0U	U	ug/L	8.2	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Chlorophenol	2.1U	U	ug/L	8.2	2.1	0.34	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
4-Chlorophenyl-phenylether	1.0U	U	ug/L	8.2	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Chrysene	0.15J	J	ug/L	2.1	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
mp-Cresol	1.0U	U	ug/L	8.2	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
o-Cresol	1.0U	U	ug/L	8.2	1.0	0.26	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Di-n-Butylphthalate	1.0U	U	ug/L	8.2	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Di-n-Octylphthalate	1.0U	U	ug/L	8.2	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Dibenzo(a,h)anthracene	1.0U	U	ug/L	2.1	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Dibenzofuran	1.0U	U	ug/L	8.2	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
1,2-Dichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
1,3-Dichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
1,4-Dichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
3,3-Dichlorobenzidine	3.1U	U	ug/L	16.4	3.1	0.49	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2,4-Dichlorophenol	1.0U	U	ug/L	8.2	1.0	0.33	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Diethylphthalate	1.0U	U	ug/L	8.2	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2,4-Dimethylphenol	5.1U	U	ug/L	8.2	5.1	0.22	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Dimethylphthalate	1.0U	U	ug/L	8.2	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2,4-Dinitrophenol	8.2U	U	ug/L	16.4	8.2	1.9	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282004** Date Collected: 8/2/2016 10:45 Matrix: Water

Sample ID: **ARE-800-TMW-02** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2,4-Dinitrotoluene	1.0U	U	ug/L	8.2	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2,6-Dinitrotoluene	1.0U	U	ug/L	8.2	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
1,2-Diphenylhydrazine	1.0U	U	ug/L	8.2	1.0	0.27	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
bis(2-Ethylhexyl)phthalate	1.0U	U	ug/L	8.2	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Fluoranthene	0.21J	J	ug/L	2.1	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Fluorene	1.0U	U	ug/L	2.1	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Hexachlorobenzene	1.0U	U	ug/L	8.2	1.0	0.24	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Hexachlorobutadiene	1.0U	U	ug/L	8.2	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Hexachlorocyclopentadiene	2.1U	U	ug/L	8.2	2.1	0.17	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Hexachloroethane	1.0U	U	ug/L	8.2	1.0	0.31	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Indeno(1,2,3-cd)pyrene	1.0U	U	ug/L	2.1	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Isophorone	1.0U	U	ug/L	8.2	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Methyl-4,6-dinitrophenol	5.1U	U	ug/L	8.2	5.1	0.34	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Methylnaphthalene	1.0U	U	ug/L	2.1	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Naphthalene	1.0U	U	ug/L	2.1	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Nitroaniline	1.0U	U	ug/L	8.2	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
3-Nitroaniline	2.1U	U	ug/L	8.2	2.1	0.18	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
4-Nitroaniline	1.0U	U	ug/L	8.2	1.0	0.42	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Nitrobenzene	2.1U	U	ug/L	8.2	2.1	0.29	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Nitrophenol	2.1U	U	ug/L	8.2	2.1	0.46	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
4-Nitrophenol	5.1U	U	ug/L	8.2	5.1	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
N-Nitrosodimethylamine	2.1U	U	ug/L	8.2	2.1	0.66	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
N-Nitroso-di-n-propylamine	1.0U	U	ug/L	8.2	1.0	0.25	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
N-Nitrosodiphenylamine	2.1U	U	ug/L	8.2	2.1	0.18	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Pentachlorophenol	8.2U	U	ug/L	16.4	8.2	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Phenanthrene	0.19J	J	ug/L	2.1	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Phenol	1.0U	U	ug/L	8.2	1.0	0.24	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Pyrene	0.26J	J	ug/L	2.1	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
1,2,4-Trichlorobenzene	1.0U	U	ug/L	8.2	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2,4,5-Trichlorophenol	3.1U	U	ug/L	8.2	3.1	0.56	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2,4,6-Trichlorophenol	1.0U	U	ug/L	8.2	1.0	0.58	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	71.7		%	47 - 128	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Fluorobiphenyl (S)	54.2		%	52 - 118	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Fluorophenol (S)	36.7		%	20 - 87	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Nitrobenzene-d5 (S)	65.8		%	27 - 139	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Phenol-d5 (S)	26.4		%	10 - 81	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Terphenyl-d14 (S)	27.9	3	%	46 - 133	SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282004** Date Collected: 8/2/2016 10:45 Matrix: Water

Sample ID: **ARE-800-TMW-02** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	71.7		%	43 - 140			SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Fluorobiphenyl (S)	54.2		%	44 - 119			SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
2-Fluorophenol (S)	36.7		%	19 - 119			SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Nitrobenzene-d5 (S)	65.8		%	44 - 120			SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Phenol-d5 (S)	26.4		%	13 - 49			SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Terphenyl-d14 (S)	27.9	1	%	50 - 134			SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Library Search - SemiVolatiles												
Benzamide, N,N-diethyl-3-methy	46.4	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Hexadecanoic acid	16.8	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Octadecanoic acid	45.5	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Unknown	4.6	J	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Unknown	6.8	J	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Nonadecane, 9-methyl-	6.2	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Heptadecane, 2,6,10,15-tetrame	8.5	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Tridecane, 7-hexyl-	10.5	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Eicosane, 10-methyl-	9.8	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
Heptadecane, 9-hexyl-	7.9	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:50	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	0.041U	U	ug/L	0.051	0.041	0.011	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Acenaphthylene	0.024J	J	ug/L	0.051	0.041	0.011	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Anthracene	0.026J	J	ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Benzo(a)anthracene	0.11		ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Benzo(a)pyrene	0.11		ug/L	0.051	0.041	0.021	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Benzo(b)fluoranthene	0.15		ug/L	0.051	0.041	0.021	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Benzo(g,h,i)perylene	0.064		ug/L	0.051	0.041	0.039	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Benzo(k)fluoranthene	0.055		ug/L	0.051	0.041	0.026	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Chrysene	0.16		ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Dibenzo(a,h)anthracene	0.041U	U	ug/L	0.051	0.041	0.024	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
2,4-Dinitrotoluene	0.041U	U	ug/L	0.051	0.041	0.022	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
2,6-Dinitrotoluene	0.041U	U	ug/L	0.051	0.041	0.032	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Fluoranthene	0.22		ug/L	0.051	0.041	0.018	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Fluorene	0.028J	J	ug/L	0.051	0.041	0.015	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Indeno(1,2,3-cd)pyrene	0.067		ug/L	0.051	0.051	0.042	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Naphthalene	0.048J	J	ug/L	0.051	0.041	0.038	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Pentachlorophenol	1.0U	U	ug/L	1.0	1.0	0.18	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282004** Date Collected: 8/2/2016 10:45 Matrix: Water

Sample ID: **ARE-800-TMW-02** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Phenanthrene	0.16		ug/L	0.051	0.041	0.021	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Pyrene	0.23		ug/L	0.051	0.041	0.015	8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	58		%	29 - 112			8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B
Fluoranthene-d10 (S)	37.1	2	%	45 - 130			8270 SIM	8/5/16	JTH	8/11/16 01:58	CGS	B

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282005** Date Collected: 8/2/2016 10:30 Matrix: Water

Sample ID: **ARE-800-TMW-01** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	3.9J	J	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 16:16	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 16:16	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 16:16	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 16:16	DD	D
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 16:16	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282005** Date Collected: 8/2/2016 10:30 Matrix: Water

Sample ID: **ARE-800-TMW-01** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 16:16	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 16:16	DD	D
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 16:16	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 16:16	DD	D
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 16:16	DD	D
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 16:16	DD	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	107		%	81 - 118	SW846 8260C		8/8/16 16:16	DD	D
4-Bromofluorobenzene (S)	114		%	85 - 114	SW846 8260C		8/8/16 16:16	DD	D
Dibromofluoromethane (S)	99.4		%	80 - 119	SW846 8260C		8/8/16 16:16	DD	D
Toluene-d8 (S)	98.7		%	89 - 112	SW846 8260C		8/8/16 16:16	DD	D

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/8/16 16:16	JAH	D

SEMIVOLATILES

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282005** Date Collected: 8/2/2016 10:30 Matrix: Water

Sample ID: **ARE-800-TMW-01** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Acenaphthene	5.0U	U	ug/L	10.0	5.0	0.75	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Acenaphthylene	5.0U	U	ug/L	10.0	5.0	0.95	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Anthracene	5.0U	U	ug/L	10.0	5.0	0.75	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzidine	40.01		ug/L	40.0	40.0	15.5	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzidine	150U	U	ug/L	150	150	15.5	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzo(a)anthracene	5.0U	U	ug/L	10.0	5.0	0.65	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzo(a)pyrene	5.0U	U	ug/L	10.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzo(b)fluoranthene	5.0U	U	ug/L	10.0	5.0	0.55	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzo(g,h,i)perylene	5.0U	U	ug/L	10.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzo(k)fluoranthene	5.0U	U	ug/L	10.0	5.0	0.95	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Benzyl Alcohol	10.0U	U	ug/L	40.0	10.0	1.2	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
4-Bromophenyl-phenylether	5.0U	U	ug/L	40.0	5.0	0.85	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Butylbenzylphthalate	5.0U	U	ug/L	40.0	5.0	0.55	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Carbazole	5.0U	U	ug/L	40.0	5.0	0.60	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
4-Chloro-3-methylphenol	5.0U	U	ug/L	40.0	5.0	0.95	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
4-Chloroaniline	5.0U	U	ug/L	40.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
bis(2-Chloroethoxy)methane	5.0U	U	ug/L	40.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
bis(2-Chloroethyl)ether	5.0U	U	ug/L	40.0	5.0	0.85	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
bis(2-Chloroisopropyl)ether	5.0U	U	ug/L	40.0	5.0	1.4	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Chloronaphthalene	5.0U	U	ug/L	40.0	5.0	0.90	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Chlorophenol	10.0U	U	ug/L	40.0	10.0	1.7	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
4-Chlorophenyl-phenylether	5.0U	U	ug/L	40.0	5.0	0.70	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Chrysene	5.0U	U	ug/L	10.0	5.0	0.60	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
mp-Cresol	5.0U	U	ug/L	40.0	5.0	0.75	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
o-Cresol	5.0U	U	ug/L	40.0	5.0	1.3	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Di-n-Butylphthalate	5.0U	U	ug/L	40.0	5.0	0.70	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Di-n-Octylphthalate	5.0U	U	ug/L	40.0	5.0	0.50	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Dibenzo(a,h)anthracene	5.0U	U	ug/L	10.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Dibenzofuran	5.0U	U	ug/L	40.0	5.0	0.55	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
1,2-Dichlorobenzene	5.0U	U	ug/L	40.0	5.0	1.0	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
1,3-Dichlorobenzene	5.0U	U	ug/L	40.0	5.0	0.85	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
1,4-Dichlorobenzene	5.0U	U	ug/L	40.0	5.0	0.90	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
3,3-Dichlorobenzidine	15.0U	U	ug/L	80.0	15.0	2.4	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2,4-Dichlorophenol	5.0U	U	ug/L	40.0	5.0	1.6	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Diethylphthalate	5.0U	U	ug/L	40.0	5.0	0.90	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2,4-Dimethylphenol	25.0U	U	ug/L	40.0	25.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Dimethylphthalate	5.0U	U	ug/L	40.0	5.0	0.70	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2,4-Dinitrophenol	40.0U	U	ug/L	80.0	40.0	9.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282005** Date Collected: 8/2/2016 10:30 Matrix: Water

Sample ID: **ARE-800-TMW-01** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2,4-Dinitrotoluene	5.0U	U	ug/L	40.0	5.0	0.60	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2,6-Dinitrotoluene	5.0U	U	ug/L	40.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
1,2-Diphenylhydrazine	5.0U	U	ug/L	40.0	5.0	1.3	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
bis(2-Ethylhexyl)phthalate	5.0U	U	ug/L	40.0	5.0	1.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Fluoranthene	5.0U	U	ug/L	10.0	5.0	0.85	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Fluorene	5.0U	U	ug/L	10.0	5.0	1.0	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Hexachlorobenzene	5.0U	U	ug/L	40.0	5.0	1.2	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Hexachlorobutadiene	5.0U	U	ug/L	40.0	5.0	0.95	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Hexachlorocyclopentadiene	10.0U	U	ug/L	40.0	10.0	0.85	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Hexachloroethane	5.0U	U	ug/L	40.0	5.0	1.5	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Indeno(1,2,3-cd)pyrene	5.0U	U	ug/L	10.0	5.0	0.50	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Isophorone	5.0U	U	ug/L	40.0	5.0	0.75	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Methyl-4,6-dinitrophenol	25.0U	U	ug/L	40.0	25.0	1.7	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Methylnaphthalene	5.0U	U	ug/L	10.0	5.0	0.80	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Naphthalene	5.0U	U	ug/L	10.0	5.0	0.60	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Nitroaniline	5.0U	U	ug/L	40.0	5.0	1.0	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
3-Nitroaniline	10.0U	U	ug/L	40.0	10.0	0.90	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
4-Nitroaniline	5.0U	U	ug/L	40.0	5.0	2.1	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Nitrobenzene	10.0U	U	ug/L	40.0	10.0	1.4	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Nitrophenol	10.0U	U	ug/L	40.0	10.0	2.3	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
4-Nitrophenol	25.0U	U	ug/L	40.0	25.0	5.3	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
N-Nitrosodimethylamine	10.0U	U	ug/L	40.0	10.0	3.2	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
N-Nitroso-di-n-propylamine	5.0U	U	ug/L	40.0	5.0	1.2	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
N-Nitrosodiphenylamine	10.0U	U	ug/L	40.0	10.0	0.90	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Pentachlorophenol	40.0U	U	ug/L	80.0	40.0	5.4	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Phenanthrene	5.0U	U	ug/L	10.0	5.0	0.65	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Phenol	5.0U	U	ug/L	40.0	5.0	1.2	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Pyrene	5.0U	U	ug/L	10.0	5.0	0.80	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
1,2,4-Trichlorobenzene	5.0U	U	ug/L	40.0	5.0	0.65	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2,4,5-Trichlorophenol	15.0U	U	ug/L	40.0	15.0	2.8	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2,4,6-Trichlorophenol	5.0U	U	ug/L	40.0	5.0	2.9	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	84		%	47 - 128	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Fluorobiphenyl (S)	68		%	52 - 118	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Fluorophenol (S)	48.9		%	20 - 87	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Nitrobenzene-d5 (S)	75.5		%	27 - 139	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Phenol-d5 (S)	32.3		%	10 - 81	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Terphenyl-d14 (S)	57		%	46 - 133	SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282005** Date Collected: 8/2/2016 10:30 Matrix: Water

Sample ID: **ARE-800-TMW-01** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	84		%	43 - 140			SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Fluorobiphenyl (S)	68		%	44 - 119			SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
2-Fluorophenol (S)	48.9		%	19 - 119			SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Nitrobenzene-d5 (S)	75.5		%	44 - 120			SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Phenol-d5 (S)	32.3		%	13 - 49			SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Terphenyl-d14 (S)	57		%	50 - 134			SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Library Search - SemiVolatiles												
Diethyltoluamide	35.0	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Hexadecanoic acid	40.0	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
Octadecanoic acid	61.3	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 16:24	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	0.20U	U	ug/L	0.25	0.20	0.055	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Acenaphthylene	0.20U	U	ug/L	0.25	0.20	0.055	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Anthracene	0.20U	U	ug/L	0.25	0.20	0.085	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Benzo(a)anthracene	0.20U	U	ug/L	0.25	0.20	0.085	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Benzo(a)pyrene	0.20U	U	ug/L	0.25	0.20	0.10	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Benzo(b)fluoranthene	0.20U	U	ug/L	0.25	0.20	0.10	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Benzo(g,h,i)perylene	0.20U	U	ug/L	0.25	0.20	0.19	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Benzo(k)fluoranthene	0.20U	U	ug/L	0.25	0.20	0.13	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Chrysene	0.20U	U	ug/L	0.25	0.20	0.085	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Dibenzo(a,h)anthracene	0.20U	U	ug/L	0.25	0.20	0.12	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
2,4-Dinitrotoluene	0.20U	U	ug/L	0.25	0.20	0.11	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
2,6-Dinitrotoluene	0.20U	U	ug/L	0.25	0.20	0.16	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Fluoranthene	0.20U	U	ug/L	0.25	0.20	0.090	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Fluorene	0.20U	U	ug/L	0.25	0.20	0.075	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Indeno(1,2,3-cd)pyrene	0.25U	U	ug/L	0.25	0.25	0.21	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Naphthalene	0.20U	U	ug/L	0.25	0.20	0.19	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Pentachlorophenol	5.0U	U	ug/L	5.0	5.0	0.90	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Phenanthrene	0.10J	J	ug/L	0.25	0.20	0.10	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Pyrene	0.20U	U	ug/L	0.25	0.20	0.075	8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	71.6		%	29 - 112			8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B
Fluoranthene-d10 (S)	72		%	45 - 130			8270 SIM	8/5/16	JTH	8/11/16 01:31	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282005** Date Collected: 8/2/2016 10:30 Matrix: Water

Sample ID: **ARE-800-TMW-01** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	*Cntr*

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282006** Date Collected: 8/2/2016 14:45 Matrix: Water

Sample ID: **ARE-800-EB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	3.9J	J	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:58	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 12:58	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:58	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 12:58	DD	D
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 12:58	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282006** Date Collected: 8/2/2016 14:45 Matrix: Water

Sample ID: **ARE-800-EB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 12:58	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:58	DD	D
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:58	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 12:58	DD	D
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:58	DD	D
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 12:58	DD	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	107		%	81 - 118	SW846 8260C		8/8/16 12:58	DD	D
4-Bromofluorobenzene (S)	111		%	85 - 114	SW846 8260C		8/8/16 12:58	DD	D
Dibromofluoromethane (S)	99.3		%	80 - 119	SW846 8260C		8/8/16 12:58	DD	D
Toluene-d8 (S)	99.6		%	89 - 112	SW846 8260C		8/8/16 12:58	DD	D

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/8/16 12:58	JAH	D

SEMIVOLATILES

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282006** Date Collected: 8/2/2016 14:45 Matrix: Water

Sample ID: **ARE-800-EB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Acenaphthene	1.0U	U	ug/L	2.0	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Acenaphthylene	1.0U	U	ug/L	2.0	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Anthracene	1.0U	U	ug/L	2.0	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzidine	30.5U	U	ug/L	30.5	30.5	3.1	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzidine	8.11		ug/L	8.1	8.1	3.1	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzo(a)anthracene	1.0U	U	ug/L	2.0	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzo(a)pyrene	1.0U	U	ug/L	2.0	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzo(b)fluoranthene	1.0U	U	ug/L	2.0	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzo(g,h,i)perylene	1.0U	U	ug/L	2.0	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzo(k)fluoranthene	1.0U	U	ug/L	2.0	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Benzyl Alcohol	2.0U	U	ug/L	8.1	2.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
4-Bromophenyl-phenylether	1.0U	U	ug/L	8.1	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Butylbenzylphthalate	1.0U	U	ug/L	8.1	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Carbazole	1.0U	U	ug/L	8.1	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
4-Chloro-3-methylphenol	1.0U	U	ug/L	8.1	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
4-Chloroaniline	1.0U	U	ug/L	8.1	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
bis(2-Chloroethoxy)methane	1.0U	U	ug/L	8.1	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
bis(2-Chloroethyl)ether	1.0U	U	ug/L	8.1	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
bis(2-Chloroisopropyl)ether	1.0U	U	ug/L	8.1	1.0	0.28	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Chloronaphthalene	1.0U	U	ug/L	8.1	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Chlorophenol	2.0U	U	ug/L	8.1	2.0	0.34	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
4-Chlorophenyl-phenylether	1.0U	U	ug/L	8.1	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Chrysene	1.0U	U	ug/L	2.0	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
mp-Cresol	1.0U	U	ug/L	8.1	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
o-Cresol	1.0U	U	ug/L	8.1	1.0	0.25	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Di-n-Butylphthalate	1.0U	U	ug/L	8.1	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Di-n-Octylphthalate	1.0U	U	ug/L	8.1	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Dibenzo(a,h)anthracene	1.0U	U	ug/L	2.0	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Dibenzofuran	1.0U	U	ug/L	8.1	1.0	0.11	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
1,2-Dichlorobenzene	1.0U	U	ug/L	8.1	1.0	0.20	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
1,3-Dichlorobenzene	1.0U	U	ug/L	8.1	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
1,4-Dichlorobenzene	1.0U	U	ug/L	8.1	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
3,3-Dichlorobenzidine	3.0U	U	ug/L	16.2	3.0	0.49	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2,4-Dichlorophenol	1.0U	U	ug/L	8.1	1.0	0.32	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Diethylphthalate	1.0U	U	ug/L	8.1	1.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2,4-Dimethylphenol	5.1U	U	ug/L	8.1	5.1	0.21	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Dimethylphthalate	1.0U	U	ug/L	8.1	1.0	0.14	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2,4-Dinitrophenol	8.1U	U	ug/L	16.2	8.1	1.8	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282006** Date Collected: 8/2/2016 14:45 Matrix: Water

Sample ID: **ARE-800-EB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2,4-Dinitrotoluene	1.0U	U	ug/L	8.1	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2,6-Dinitrotoluene	1.0U	U	ug/L	8.1	1.0	0.21	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
1,2-Diphenylhydrazine	1.0U	U	ug/L	8.1	1.0	0.26	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
bis(2-Ethylhexyl)phthalate	1.0U	U	ug/L	8.1	1.0	0.22	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Fluoranthene	1.0U	U	ug/L	2.0	1.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Fluorene	1.0U	U	ug/L	2.0	1.0	0.20	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Hexachlorobenzene	1.0U	U	ug/L	8.1	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Hexachlorobutadiene	1.0U	U	ug/L	8.1	1.0	0.19	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Hexachlorocyclopentadiene	2.0U	U	ug/L	8.1	2.0	0.17	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Hexachloroethane	1.0U	U	ug/L	8.1	1.0	0.30	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Indeno(1,2,3-cd)pyrene	1.0U	U	ug/L	2.0	1.0	0.10	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Isophorone	1.0U	U	ug/L	8.1	1.0	0.15	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Methyl-4,6-dinitrophenol	5.1U	U	ug/L	8.1	5.1	0.34	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Methylnaphthalene	1.0U	U	ug/L	2.0	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Naphthalene	1.0U	U	ug/L	2.0	1.0	0.12	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Nitroaniline	1.0U	U	ug/L	8.1	1.0	0.20	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
3-Nitroaniline	2.0U	U	ug/L	8.1	2.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
4-Nitroaniline	1.0U	U	ug/L	8.1	1.0	0.42	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Nitrobenzene	2.0U	U	ug/L	8.1	2.0	0.28	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Nitrophenol	2.0U	U	ug/L	8.1	2.0	0.46	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
4-Nitrophenol	5.1U	U	ug/L	8.1	5.1	1.1	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
N-Nitrosodimethylamine	2.0U	U	ug/L	8.1	2.0	0.65	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
N-Nitroso-di-n-propylamine	1.0U	U	ug/L	8.1	1.0	0.24	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
N-Nitrosodiphenylamine	2.0U	U	ug/L	8.1	2.0	0.18	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Pentachlorophenol	8.1U	U	ug/L	16.2	8.1	1.1	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Phenanthrene	1.0U	U	ug/L	2.0	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Phenol	1.0U	U	ug/L	8.1	1.0	0.23	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Pyrene	1.0U	U	ug/L	2.0	1.0	0.16	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
1,2,4-Trichlorobenzene	1.0U	U	ug/L	8.1	1.0	0.13	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2,4,5-Trichlorophenol	3.0U	U	ug/L	8.1	3.0	0.56	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2,4,6-Trichlorophenol	1.0U	U	ug/L	8.1	1.0	0.58	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	73.5		%	47 - 128	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Fluorobiphenyl (S)	68.7		%	52 - 118	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Fluorophenol (S)	46.9		%	20 - 87	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Nitrobenzene-d5 (S)	78		%	27 - 139	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Phenol-d5 (S)	32		%	10 - 81	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Terphenyl-d14 (S)	75.4		%	46 - 133	SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282006** Date Collected: 8/2/2016 14:45 Matrix: Water

Sample ID: **ARE-800-EB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	73.5		%	43 - 140			SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Fluorobiphenyl (S)	68.7		%	44 - 119			SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
2-Fluorophenol (S)	46.9		%	19 - 119			SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Nitrobenzene-d5 (S)	78		%	44 - 120			SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Phenol-d5 (S)	32		%	13 - 49			SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
Terphenyl-d14 (S)	75.4		%	50 - 134			SW846 8270D	8/5/16	JTH	8/10/16 18:08	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	0.041U	U	ug/L	0.051	0.041	0.011	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Acenaphthylene	0.041U	U	ug/L	0.051	0.041	0.011	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Anthracene	0.041U	U	ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Benzo(a)anthracene	0.041U	U	ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Benzo(a)pyrene	0.041U	U	ug/L	0.051	0.041	0.020	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Benzo(b)fluoranthene	0.041U	U	ug/L	0.051	0.041	0.020	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Benzo(g,h,i)perylene	0.041U	U	ug/L	0.051	0.041	0.039	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Benzo(k)fluoranthene	0.041U	U	ug/L	0.051	0.041	0.025	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Chrysene	0.041U	U	ug/L	0.051	0.041	0.017	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Dibenzo(a,h)anthracene	0.041U	U	ug/L	0.051	0.041	0.023	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
2,4-Dinitrotoluene	0.041U	U	ug/L	0.051	0.041	0.021	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
2,6-Dinitrotoluene	0.041U	U	ug/L	0.051	0.041	0.031	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Fluoranthene	0.041U	U	ug/L	0.051	0.041	0.018	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Fluorene	0.041U	U	ug/L	0.051	0.041	0.015	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Indeno(1,2,3-cd)pyrene	0.051U	U	ug/L	0.051	0.051	0.042	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Naphthalene	0.041U	U	ug/L	0.051	0.041	0.038	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Pentachlorophenol	1.0U	U	ug/L	1.0	1.0	0.18	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Phenanthrene	0.041U	U	ug/L	0.051	0.041	0.020	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Pyrene	0.041U	U	ug/L	0.051	0.041	0.015	8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	71.8		%	29 - 112			8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
Fluoranthene-d10 (S)	84.6		%	45 - 130			8270 SIM	8/5/16	JTH	8/11/16 03:18	CGS	B
LIBRARY SEARCH - SEMI-VOLATILE												
No TIC's Detected	.						Lib Search SV			8/10/16 18:08	DRS	B

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282006** Date Collected: 8/2/2016 14:45 Matrix: Water

Sample ID: **ARE-800-EB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	*Cntr*

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282007** Date Collected: 8/2/2016 00:00 Matrix: Water

Sample ID: **ARE-800-TB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	3.6J	J	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:36	DD	B
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 12:36	DD	B
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:36	DD	B
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 12:36	DD	B
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 12:36	DD	B
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B

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ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282007** Date Collected: 8/2/2016 00:00 Matrix: Water

Sample ID: **ARE-800-TB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 12:36	DD	B
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:36	DD	B
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 12:36	DD	B
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 12:36	DD	B
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 12:36	DD	B
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 12:36	DD	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	106		%	81 - 118	SW846 8260C		8/8/16 12:36	DD	B
4-Bromofluorobenzene (S)	114		%	85 - 114	SW846 8260C		8/8/16 12:36	DD	B
Dibromofluoromethane (S)	95.7		%	80 - 119	SW846 8260C		8/8/16 12:36	DD	B
Toluene-d8 (S)	99.7		%	89 - 112	SW846 8260C		8/8/16 12:36	DD	B

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/8/16 12:36	JAH	B

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282007** Date Collected: 8/2/2016 00:00 Matrix: Water

Sample ID: **ARE-800-TB-08022016** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	*Cntr*

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282008** Date Collected: 8/2/2016 13:45 Matrix: Water

Sample ID: **ARE-800-TMW-08** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	4.8J	J	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 17:44	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/8/16 17:44	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 17:44	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/8/16 17:44	DD	D
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
sec-Butylbenzene	6.8		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 17:44	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282008** Date Collected: 8/2/2016 13:45 Matrix: Water

Sample ID: **ARE-800-TMW-08** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Ethylbenzene	2.8		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C		8/8/16 17:44	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 17:44	DD	D
Isopropylbenzene	3.5		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
p-Isopropyltoluene	4.7		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/8/16 17:44	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Naphthalene	46.9		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
n-Propylbenzene	3.6		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,1,2-Trichloroethane	5.5		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/8/16 17:44	DD	D
1,2,4-Trimethylbenzene	14.7		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
1,3,5-Trimethylbenzene	8.4		ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/8/16 17:44	DD	D
mp-Xylene	0.89J	J	ug/L	2.0	1.5	0.66	SW846 8260C		8/8/16 17:44	DD	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	101		%	81 - 118			SW846 8260C		8/8/16 17:44	DD	D
4-Bromofluorobenzene (S)	111		%	85 - 114			SW846 8260C		8/8/16 17:44	DD	D
Dibromofluoromethane (S)	96.3		%	80 - 119			SW846 8260C		8/8/16 17:44	DD	D
Toluene-d8 (S)	101		%	89 - 112			SW846 8260C		8/8/16 17:44	DD	D
Library Search - Volatiles											
Benzene, 2-propenyl-	42.0	J N	ug/L				SW846 8260C		8/8/16 17:44	DD	D
Benzene, 2-ethyl-1,4-dimethyl-	10.2	J N	ug/L				SW846 8260C		8/8/16 17:44	DD	D

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282008** Date Collected: 8/2/2016 13:45 Matrix: Water

Sample ID: **ARE-800-TMW-08** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Benzene, 1-ethyl-2,3-dimethyl-	14.6	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Benzene, 4-ethyl-1,2-dimethyl-	16.0	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
1H-Indene, 2,3-dihydro-1-methy	19.3	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Benzene, 1-methyl-2-(1-methyle	24.1	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
1H-Indene, 2,3-dihydro-5-methy	17.8	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Indan, 1-methyl-	57.0	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Naphthalene, 1,2,3,4-tetrahydr	11.6	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Indan, 5,6-dimethyl-	18.2	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
1H-Indene, 2,3-dihydro-1,2-dim	21.3	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Naphthalene, 1,2,3,4-tetrahydr	11.9	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Naphthalene, 1,2,3,4-tetrahydr	14.4	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
Benzene, 2-ethenyl-1,3,5-trime	10.7	J N	ug/L				SW846 8260C			8/8/16 17:44	DD	D
SEMIVOLATILES												
Acenaphthene	1.1U	U	ug/L	2.2	1.1	0.16	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Acenaphthylene	1.1U	U	ug/L	2.2	1.1	0.21	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Anthracene	2.0J	J	ug/L	2.2	1.1	0.16	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzidine	8.81		ug/L	8.8	8.8	3.4	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzidine	33.0U	U	ug/L	33.0	33.0	3.4	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzo(a)anthracene	2.1J	J	ug/L	2.2	1.1	0.14	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzo(a)pyrene	1.6J	J	ug/L	2.2	1.1	0.24	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzo(b)fluoranthene	2.3		ug/L	2.2	1.1	0.12	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzo(g,h,i)perylene	0.72J	J	ug/L	2.2	1.1	0.24	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzo(k)fluoranthene	0.83J	J	ug/L	2.2	1.1	0.21	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Benzyl Alcohol	2.2U	U	ug/L	8.8	2.2	0.25	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
4-Bromophenyl-phenylether	1.1U	U	ug/L	8.8	1.1	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Butylbenzylphthalate	1.1U	U	ug/L	8.8	1.1	0.12	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Carbazole	1.1U	U	ug/L	8.8	1.1	0.13	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
4-Chloro-3-methylphenol	1.1U	U	ug/L	8.8	1.1	0.21	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
4-Chloroaniline	1.1U	U	ug/L	8.8	1.1	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
bis(2-Chloroethoxy)methane	1.1U	U	ug/L	8.8	1.1	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
bis(2-Chloroethyl)ether	1.1U	U	ug/L	8.8	1.1	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
bis(2-Chloroisopropyl)ether	1.1U	U	ug/L	8.8	1.1	0.31	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282008** Date Collected: 8/2/2016 13:45 Matrix: Water

Sample ID: **ARE-800-TMW-08** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2-Chloronaphthalene	1.1U	U	ug/L	8.8	1.1	0.20	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Chlorophenol	2.2U	U	ug/L	8.8	2.2	0.36	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
4-Chlorophenyl-phenylether	1.1U	U	ug/L	8.8	1.1	0.15	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Chrysene	1.9J	J	ug/L	2.2	1.1	0.13	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
mp-Cresol	1.1U	U	ug/L	8.8	1.1	0.16	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
o-Cresol	1.1U	U	ug/L	8.8	1.1	0.27	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Di-n-Butylphthalate	1.1U	U	ug/L	8.8	1.1	0.15	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Di-n-Octylphthalate	1.1U	U	ug/L	8.8	1.1	0.11	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Dibenzo(a,h)anthracene	0.23J	J	ug/L	2.2	1.1	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Dibenzofuran	6.6J	J	ug/L	8.8	1.1	0.12	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
1,2-Dichlorobenzene	1.1U	U	ug/L	8.8	1.1	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
1,3-Dichlorobenzene	1.1U	U	ug/L	8.8	1.1	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
1,4-Dichlorobenzene	1.1U	U	ug/L	8.8	1.1	0.20	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
3,3-Dichlorobenzidine	3.3U	U	ug/L	17.6	3.3	0.53	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2,4-Dichlorophenol	1.1U	U	ug/L	8.8	1.1	0.35	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Diethylphthalate	1.1U	U	ug/L	8.8	1.1	0.20	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2,4-Dimethylphenol	5.5U	U	ug/L	8.8	5.5	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Dimethylphthalate	1.1U	U	ug/L	8.8	1.1	0.15	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2,4-Dinitrophenol	8.8U	U	ug/L	17.6	8.8	2.0	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2,4-Dinitrotoluene	1.1U	U	ug/L	8.8	1.1	0.13	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2,6-Dinitrotoluene	1.1U	U	ug/L	8.8	1.1	0.23	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
1,2-Diphenylhydrazine	1.1U	U	ug/L	8.8	1.1	0.29	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
bis(2-Ethylhexyl)phthalate	1.1U	U	ug/L	8.8	1.1	0.24	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Fluoranthene	5.6		ug/L	2.2	1.1	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Fluorene	11.2		ug/L	2.2	1.1	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Hexachlorobenzene	1.1U	U	ug/L	8.8	1.1	0.25	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Hexachlorobutadiene	1.1U	U	ug/L	8.8	1.1	0.21	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Hexachlorocyclopentadiene	2.2U	U	ug/L	8.8	2.2	0.19	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Hexachloroethane	1.1U	U	ug/L	8.8	1.1	0.33	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Indeno(1,2,3-cd)pyrene	0.84J	J	ug/L	2.2	1.1	0.11	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Isophorone	1.1U	U	ug/L	8.8	1.1	0.16	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Methyl-4,6-dinitrophenol	5.5U	U	ug/L	8.8	5.5	0.36	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Methylnaphthalene	41.2		ug/L	2.2	1.1	0.18	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Naphthalene	16.2		ug/L	2.2	1.1	0.13	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Nitroaniline	1.1U	U	ug/L	8.8	1.1	0.22	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
3-Nitroaniline	2.2U	U	ug/L	8.8	2.2	0.20	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
4-Nitroaniline	1.1U	U	ug/L	8.8	1.1	0.45	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Nitrobenzene	2.2U	U	ug/L	8.8	2.2	0.31	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282008** Date Collected: 8/2/2016 13:45 Matrix: Water

Sample ID: **ARE-800-TMW-08** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2-Nitrophenol	2.2U	U	ug/L	8.8	2.2	0.49	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
4-Nitrophenol	5.5U	U	ug/L	8.8	5.5	1.2	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
N-Nitrosodimethylamine	2.2U	U	ug/L	8.8	2.2	0.70	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
N-Nitroso-di-n-propylamine	1.1U	U	ug/L	8.8	1.1	0.26	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
N-Nitrosodiphenylamine	2.2U	U	ug/L	8.8	2.2	0.20	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Pentachlorophenol	8.8U	U	ug/L	17.6	8.8	1.2	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Phenanthrene	21.9		ug/L	2.2	1.1	0.14	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Phenol	1.1U	U	ug/L	8.8	1.1	0.25	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Pyrene	5.7		ug/L	2.2	1.1	0.18	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
1,2,4-Trichlorobenzene	1.1U	U	ug/L	8.8	1.1	0.14	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2,4,5-Trichlorophenol	3.3U	U	ug/L	8.8	3.3	0.60	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2,4,6-Trichlorophenol	1.1U	U	ug/L	8.8	1.1	0.63	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	67.7		%	47 - 128	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Fluorobiphenyl (S)	44.9	2	%	52 - 118	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Fluorophenol (S)	37.8		%	20 - 87	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Nitrobenzene-d5 (S)	62.1		%	27 - 139	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Phenol-d5 (S)	26		%	10 - 81	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Terphenyl-d14 (S)	26.1	3	%	46 - 133	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	67.7		%	43 - 140	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Fluorobiphenyl (S)	44.9		%	44 - 119	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
2-Fluorophenol (S)	37.8		%	19 - 119	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Nitrobenzene-d5 (S)	62.1		%	44 - 120	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Phenol-d5 (S)	26		%	13 - 49	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Terphenyl-d14 (S)	26.1	1	%	50 - 134	SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Library Search - SemiVolatiles										
Naphthalene, decahydro-2-methy	44.4	J N	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Unknown	41.1	J	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Dodecane, 6-methyl-	65.8	J N	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Unknown	28.1	J	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Unknown	41.9	J	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Naphthalene, 2,6-dimethyl-	48.8	J N	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Naphthalene, 2,7-dimethyl-	47.9	J N	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Unknown	29.2	J	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Pentadecane	103	J N	ug/L		SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

Lab ID: **2164282008** Date Collected: 8/2/2016 13:45 Matrix: Water

Sample ID: **ARE-800-TMW-08** Date Received: 8/3/2016 23:18

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Naphthalene, 2-(1-methylethyl)	36.4	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Naphthalene, 1,4,6-trimethyl-	27.7	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Unknown	34.8	J	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
Naphthalene, 1,6,7-trimethyl-	27.2	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
PENTADECANE, 2,6,10-TRIMETHYL-	112	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
9H-Fluorene, 9-methyl-	63.8	J N	ug/L				SW846 8270D	8/5/16	JTH	8/10/16 17:42	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	2.9		ug/L	0.055	0.044	0.012	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Acenaphthylene	0.044U	U	ug/L	0.055	0.044	0.012	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Anthracene	0.044U	U	ug/L	0.055	0.044	0.019	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Benzo(a)anthracene	2.2		ug/L	0.055	0.044	0.019	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Benzo(a)pyrene	1.6		ug/L	0.055	0.044	0.022	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Benzo(b)fluoranthene	2.4		ug/L	0.055	0.044	0.022	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Benzo(g,h,i)perylene	0.62		ug/L	0.055	0.044	0.042	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Benzo(k)fluoranthene	0.86		ug/L	0.055	0.044	0.027	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Chrysene	2.0		ug/L	0.055	0.044	0.019	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Dibenzo(a,h)anthracene	0.21		ug/L	0.055	0.044	0.025	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
2,4-Dinitrotoluene	0.044U	U	ug/L	0.055	0.044	0.023	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
2,6-Dinitrotoluene	0.044U	U	ug/L	0.055	0.044	0.034	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Fluoranthene	5.7		ug/L	0.055	0.044	0.020	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Fluorene	6.6		ug/L	0.055	0.044	0.016	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Indeno(1,2,3-cd)pyrene	0.77		ug/L	0.055	0.055	0.045	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Naphthalene	14.8		ug/L	0.055	0.044	0.041	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Pentachlorophenol	1.1U	U	ug/L	1.1	1.1	0.20	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Phenanthrene	18.4		ug/L	0.055	0.044	0.022	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Pyrene	6.5		ug/L	0.055	0.044	0.016	8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	31.2		%	29 - 112			8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B
Fluoranthene-d10 (S)	46.6		%	45 - 130			8270 SIM	8/5/16	JTH	8/11/16 02:51	CGS	B

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2164282001	1	ARE-800-TMW-04	SW846 8270D	2-Nitrophenol
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2-Nitrophenol. The RPD was reported as 54.3 and the upper control limit is 30.				
2164282001	2	ARE-800-TMW-04	SW846 8270D	2,4-Dimethylphenol
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2,4-Dimethylphenol. The RPD was reported as 41.3 and the upper control limit is 30.				
2164282001	3	ARE-800-TMW-04	SW846 8270D	bis(2-Chloroethoxy)methane
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte bis(2-Chloroethoxy)methane. The RPD was reported as 43.9 and the upper control limit is 30.				
2164282001	4	ARE-800-TMW-04	SW846 8270D	2,4-Dichlorophenol
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2,4-Dichlorophenol. The RPD was reported as 47.3 and the upper control limit is 30.				
2164282001	5	ARE-800-TMW-04	SW846 8270D	1,2,4-Trichlorobenzene
The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 1,2,4-Trichlorobenzene. The % Recovery was reported as 26.6 and the control limits were 29 to 116.				
2164282001	6	ARE-800-TMW-04	SW846 8270D	1,2,4-Trichlorobenzene
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 1,2,4-Trichlorobenzene. The RPD was reported as 50.7 and the upper control limit is 30.				
2164282001	7	ARE-800-TMW-04	SW846 8270D	Naphthalene
The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Naphthalene. The % Recovery was reported as 35.1 and the control limits were 40 to 121.				
2164282001	8	ARE-800-TMW-04	SW846 8270D	Naphthalene
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Naphthalene. The RPD was reported as 47.2 and the upper control limit is 30.				
2164282001	9	ARE-800-TMW-04	SW846 8270D	4-Chloroaniline
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 4-Chloroaniline. The RPD was reported as 52.9 and the upper control limit is 30.				
2164282001	10	ARE-800-TMW-04	SW846 8270D	Hexachlorobutadiene
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Hexachlorobutadiene. The RPD was reported as 59.2 and the upper control limit is 30.				
2164282001	11	ARE-800-TMW-04	SW846 8270D	4-Chloro-3-methylphenol
The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 4-Chloro-3-methylphenol. The % Recovery was reported as 51.8 and the control limits were 52 to 119.				
2164282001	12	ARE-800-TMW-04	SW846 8270D	4-Chloro-3-methylphenol
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 4-Chloro-3-methylphenol. The RPD was reported as 33.9 and the upper control limit is 30.				
2164282001	13	ARE-800-TMW-04	SW846 8270D	2-Methylnaphthalene
The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 2-Methylnaphthalene. The % Recovery was reported as 35 and the control limits were 40 to 121.				
2164282001	14	ARE-800-TMW-04	SW846 8270D	2-Methylnaphthalene
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2-Methylnaphthalene. The RPD was reported as 49.6 and the upper control limit is 30.				
2164282001	15	ARE-800-TMW-04	SW846 8270D	Hexachlorocyclopentadiene
The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Hexachlorocyclopentadiene. The % Recovery was reported as 17.7 and the control limits were 26 to 96.				
2164282001	16	ARE-800-TMW-04	SW846 8270D	Hexachlorocyclopentadiene
The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Hexachlorocyclopentadiene. The RPD was reported as 75.8 and the upper control limit is 30.				

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

2164282001	17	ARE-800-TMW-04	SW846 8270D	2,4,6-Trichlorophenol

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 2,4,6-Trichlorophenol. The % Recovery was reported as 41.9 and the control limits were 50 to 125.

2164282001	18	ARE-800-TMW-04	SW846 8270D	2,4,6-Trichlorophenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2,4,6-Trichlorophenol. The RPD was reported as 67 and the upper control limit is 30.

2164282001	19	ARE-800-TMW-04	SW846 8270D	2,4,5-Trichlorophenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2,4,5-Trichlorophenol. The RPD was reported as 46.6 and the upper control limit is 30.

2164282001	20	ARE-800-TMW-04	SW846 8270D	2-Chloronaphthalene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 2-Chloronaphthalene. The % Recovery was reported as 38.1 and the control limits were 40 to 116.

2164282001	21	ARE-800-TMW-04	SW846 8270D	2-Chloronaphthalene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2-Chloronaphthalene. The RPD was reported as 48.5 and the upper control limit is 30.

2164282001	22	ARE-800-TMW-04	SW846 8270D	2-Nitroaniline

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2-Nitroaniline. The RPD was reported as 33.1 and the upper control limit is 30.

2164282001	23	ARE-800-TMW-04	SW846 8270D	Dimethylphthalate

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Dimethylphthalate. The RPD was reported as 34.1 and the upper control limit is 30.

2164282001	24	ARE-800-TMW-04	SW846 8270D	2,6-Dinitrotoluene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 2,6-Dinitrotoluene. The % Recovery was reported as 54.1 and the control limits were 57 to 124.

2164282001	25	ARE-800-TMW-04	SW846 8270D	2,6-Dinitrotoluene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2,6-Dinitrotoluene. The RPD was reported as 36.5 and the upper control limit is 30.

2164282001	26	ARE-800-TMW-04	SW846 8270D	Acenaphthylene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Acenaphthylene. The RPD was reported as 47.2 and the upper control limit is 30.

2164282001	27	ARE-800-TMW-04	SW846 8270D	3-Nitroaniline

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 3-Nitroaniline. The RPD was reported as 44.6 and the upper control limit is 30.

2164282001	28	ARE-800-TMW-04	SW846 8270D	Acenaphthene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Acenaphthene. The % Recovery was reported as 44.3 and the control limits were 47 to 122.

2164282001	29	ARE-800-TMW-04	SW846 8270D	Acenaphthene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Acenaphthene. The RPD was reported as 47.5 and the upper control limit is 30.

2164282001	30	ARE-800-TMW-04	SW846 8270D	2,4-Dinitrophenol

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 2,4-Dinitrophenol. The % Recovery was reported as 10.2 and the control limits were 23 to 143.

2164282001	31	ARE-800-TMW-04	SW846 8270D	2,4-Dinitrophenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2,4-Dinitrophenol. The RPD was reported as 165 and the upper control limit is 30.

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2164282001	32	ARE-800-TMW-04	SW846 8270D	4-Nitrophenol

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 4-Nitrophenol. The % Recovery was reported as 10.8 and the control limits were 19 to 64.

2164282001	33	ARE-800-TMW-04	SW846 8270D	4-Nitrophenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 4-Nitrophenol. The RPD was reported as 109 and the upper control limit is 30.

2164282001	34	ARE-800-TMW-04	SW846 8270D	Dibenzofuran

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Dibenzofuran. The % Recovery was reported as 43.1 and the control limits were 53 to 118.

2164282001	35	ARE-800-TMW-04	SW846 8270D	Dibenzofuran

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Dibenzofuran. The RPD was reported as 48.8 and the upper control limit is 30.

2164282001	36	ARE-800-TMW-04	SW846 8270D	2,4-Dinitrotoluene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 2,4-Dinitrotoluene. The % Recovery was reported as 53.1 and the control limits were 57 to 128.

2164282001	37	ARE-800-TMW-04	SW846 8270D	2,4-Dinitrotoluene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2,4-Dinitrotoluene. The RPD was reported as 36.1 and the upper control limit is 30.

2164282001	38	ARE-800-TMW-04	SW846 8270D	Diethylphthalate

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Diethylphthalate. The % Recovery was reported as 50.9 and the control limits were 56 to 125.

2164282001	39	ARE-800-TMW-04	SW846 8270D	Diethylphthalate

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Diethylphthalate. The RPD was reported as 39.3 and the upper control limit is 30.

2164282001	40	ARE-800-TMW-04	SW846 8270D	4-Chlorophenyl-phenylether

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 4-Chlorophenyl-phenylether. The % Recovery was reported as 39.6 and the control limits were 53 to 121.

2164282001	41	ARE-800-TMW-04	SW846 8270D	4-Chlorophenyl-phenylether

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 4-Chlorophenyl-phenylether. The RPD was reported as 55.1 and the upper control limit is 30.

2164282001	42	ARE-800-TMW-04	SW846 8270D	Fluorene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Fluorene. The % Recovery was reported as 44.4 and the control limits were 52 to 124.

2164282001	43	ARE-800-TMW-04	SW846 8270D	Fluorene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Fluorene. The RPD was reported as 49.9 and the upper control limit is 30.

2164282001	44	ARE-800-TMW-04	SW846 8270D	4-Nitroaniline

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 4-Nitroaniline. The % Recovery was reported as 48.4 and the control limits were 60 to 130.

2164282001	45	ARE-800-TMW-04	SW846 8270D	4-Nitroaniline

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 4-Nitroaniline. The RPD was reported as 33.6 and the upper control limit is 30.

2164282001	46	ARE-800-TMW-04	SW846 8270D	2-Methyl-4,6-dinitrophenol

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 2-Methyl-4,6-dinitrophenol. The % Recovery was reported as 22.9 and the control limits were 44 to 137.

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2164282001	47	ARE-800-TMW-04	SW846 8270D	2-Methyl-4,6-dinitrophenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2-Methyl-4,6-dinitrophenol. The RPD was reported as 118 and the upper control limit is 30.

2164282001	48	ARE-800-TMW-04	SW846 8270D	N-Nitrosodiphenylamine

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte N-Nitrosodiphenylamine. The % Recovery was reported as 45.1 and the control limits were 51 to 123.

2164282001	49	ARE-800-TMW-04	SW846 8270D	1,2-Diphenylhydrazine

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 1,2-Diphenylhydrazine. The RPD was reported as 48.2 and the upper control limit is 30.

2164282001	50	ARE-800-TMW-04	SW846 8270D	4-Bromophenyl-phenylether

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 4-Bromophenyl-phenylether. The % Recovery was reported as 46.4 and the control limits were 55 to 124.

2164282001	51	ARE-800-TMW-04	SW846 8270D	4-Bromophenyl-phenylether

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 4-Bromophenyl-phenylether. The RPD was reported as 51.7 and the upper control limit is 30.

2164282001	52	ARE-800-TMW-04	SW846 8270D	Hexachlorobenzene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Hexachlorobenzene. The % Recovery was reported as 45.9 and the control limits were 53 to 125.

2164282001	53	ARE-800-TMW-04	SW846 8270D	Hexachlorobenzene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Hexachlorobenzene. The RPD was reported as 51.9 and the upper control limit is 30.

2164282001	54	ARE-800-TMW-04	SW846 8270D	N-Nitrosodimethylamine

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte N-Nitrosodimethylamine. The RPD was reported as 44.8 and the upper control limit is 30.

2164282001	55	ARE-800-TMW-04	SW846 8270D	Phenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Phenol. The RPD was reported as 43.3 and the upper control limit is 30.

2164282001	56	ARE-800-TMW-04	SW846 8270D	bis(2-Chloroethyl)ether

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte bis(2-Chloroethyl)ether. The RPD was reported as 45.8 and the upper control limit is 30.

2164282001	57	ARE-800-TMW-04	SW846 8270D	2-Chlorophenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 2-Chlorophenol. The RPD was reported as 49.3 and the upper control limit is 30.

2164282001	58	ARE-800-TMW-04	SW846 8270D	1,3-Dichlorobenzene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 1,3-Dichlorobenzene. The % Recovery was reported as 25.8 and the control limits were 28 to 110.

2164282001	59	ARE-800-TMW-04	SW846 8270D	1,3-Dichlorobenzene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 1,3-Dichlorobenzene. The RPD was reported as 48.9 and the upper control limit is 30.

2164282001	60	ARE-800-TMW-04	SW846 8270D	1,4-Dichlorobenzene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 1,4-Dichlorobenzene. The % Recovery was reported as 26 and the control limits were 29 to 112.

2164282001	61	ARE-800-TMW-04	SW846 8270D	1,4-Dichlorobenzene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 1,4-Dichlorobenzene. The RPD was reported as 50.5 and the upper control limit is 30.

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2164282001	62	ARE-800-TMW-04	SW846 8270D	Benzyl Alcohol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Benzyl Alcohol. The RPD was reported as 40 and the upper control limit is 30.

2164282001	63	ARE-800-TMW-04	SW846 8270D	1,2-Dichlorobenzene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 1,2-Dichlorobenzene. The % Recovery was reported as 27.9 and the control limits were 32 to 111.

2164282001	64	ARE-800-TMW-04	SW846 8270D	1,2-Dichlorobenzene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 1,2-Dichlorobenzene. The RPD was reported as 48.1 and the upper control limit is 30.

2164282001	65	ARE-800-TMW-04	SW846 8270D	bis(2-Chloroisopropyl)ether

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte bis(2-Chloroisopropyl)ether. The RPD was reported as 48.6 and the upper control limit is 30.

2164282001	66	ARE-800-TMW-04	SW846 8270D	o-Cresol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte o-Cresol. The RPD was reported as 42.6 and the upper control limit is 30.

2164282001	67	ARE-800-TMW-04	SW846 8270D	N-Nitroso-di-n-propylamine

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte N-Nitroso-di-n-propylamine. The % Recovery was reported as 47.1 and the control limits were 49 to 119.

2164282001	68	ARE-800-TMW-04	SW846 8270D	N-Nitroso-di-n-propylamine

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte N-Nitroso-di-n-propylamine. The RPD was reported as 44.5 and the upper control limit is 30.

2164282001	69	ARE-800-TMW-04	SW846 8270D	mp-Cresol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte mp-Cresol. The RPD was reported as 41.4 and the upper control limit is 30.

2164282001	70	ARE-800-TMW-04	SW846 8270D	Hexachloroethane

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Hexachloroethane. The RPD was reported as 53.4 and the upper control limit is 30.

2164282001	71	ARE-800-TMW-04	SW846 8270D	Nitrobenzene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Nitrobenzene. The RPD was reported as 45.1 and the upper control limit is 30.

2164282001	72	ARE-800-TMW-04	SW846 8270D	Isophorone

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Isophorone. The RPD was reported as 43.3 and the upper control limit is 30.

2164282001	73	ARE-800-TMW-04	SW846 8270D	Pentachlorophenol

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Pentachlorophenol. The RPD was reported as 90.9 and the upper control limit is 30.

2164282001	74	ARE-800-TMW-04	SW846 8270D	Phenanthrene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Phenanthrene. The % Recovery was reported as 46.4 and the control limits were 59 to 120.

2164282001	75	ARE-800-TMW-04	SW846 8270D	Phenanthrene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Phenanthrene. The RPD was reported as 48.3 and the upper control limit is 30.

2164282001	76	ARE-800-TMW-04	SW846 8270D	Anthracene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Anthracene. The % Recovery was reported as 47.8 and the control limits were 57 to 123.

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2164282001	77	ARE-800-TMW-04	SW846 8270D	Anthracene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Anthracene. The RPD was reported as 49 and the upper control limit is 30.

2164282001	78	ARE-800-TMW-04	SW846 8270D	Carbazole

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Carbazole. The % Recovery was reported as 57.8 and the control limits were 60 to 122.

2164282001	79	ARE-800-TMW-04	SW846 8270D	Carbazole

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Carbazole. The RPD was reported as 35.1 and the upper control limit is 30.

2164282001	80	ARE-800-TMW-04	SW846 8270D	Di-n-Butylphthalate

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Di-n-Butylphthalate. The % Recovery was reported as 48.4 and the control limits were 59 to 127.

2164282001	81	ARE-800-TMW-04	SW846 8270D	Di-n-Butylphthalate

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Di-n-Butylphthalate. The RPD was reported as 51.4 and the upper control limit is 30.

2164282001	82	ARE-800-TMW-04	SW846 8270D	Fluoranthene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Fluoranthene. The % Recovery was reported as 45.4 and the control limits were 57 to 128.

2164282001	83	ARE-800-TMW-04	SW846 8270D	Fluoranthene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Fluoranthene. The RPD was reported as 47.3 and the upper control limit is 30.

2164282001	84	ARE-800-TMW-04	SW846 8270D	Benzidine

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Benzidine. The % Recovery was reported as 0 and the control limits were 1 to 139.

2164282001	85	ARE-800-TMW-04	SW846 8270D	Benzidine

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Benzidine. The % Recovery was reported as 0 and the control limits were 1 to 139.

2164282001	86	ARE-800-TMW-04	SW846 8270D	Pyrene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Pyrene. The % Recovery was reported as 47 and the control limits were 57 to 126.

2164282001	87	ARE-800-TMW-04	SW846 8270D	Pyrene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Pyrene. The RPD was reported as 52.1 and the upper control limit is 30.

2164282001	88	ARE-800-TMW-04	SW846 8270D	Butylbenzylphthalate

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Butylbenzylphthalate. The % Recovery was reported as 51.6 and the control limits were 53 to 134.

2164282001	89	ARE-800-TMW-04	SW846 8270D	Butylbenzylphthalate

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Butylbenzylphthalate. The RPD was reported as 54 and the upper control limit is 30.

2164282001	90	ARE-800-TMW-04	SW846 8270D	3,3-Dichlorobenzidine

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte 3,3-Dichlorobenzidine. The % Recovery was reported as 9.81 and the control limits were 27 to 129.

2164282001	91	ARE-800-TMW-04	SW846 8270D	3,3-Dichlorobenzidine

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte 3,3-Dichlorobenzidine. The RPD was reported as 128 and the upper control limit is 30.

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2164282001	92	ARE-800-TMW-04	SW846 8270D	Benzo(a)anthracene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Benzo(a)anthracene. The % Recovery was reported as 46.6 and the control limits were 58 to 125.

2164282001	93	ARE-800-TMW-04	SW846 8270D	Benzo(a)anthracene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Benzo(a)anthracene. The RPD was reported as 48.9 and the upper control limit is 30.

2164282001	94	ARE-800-TMW-04	SW846 8270D	Chrysene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Chrysene. The % Recovery was reported as 47.3 and the control limits were 59 to 123.

2164282001	95	ARE-800-TMW-04	SW846 8270D	Chrysene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Chrysene. The RPD was reported as 46.2 and the upper control limit is 30.

2164282001	96	ARE-800-TMW-04	SW846 8270D	bis(2-Ethylhexyl)phthalate

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte bis(2-Ethylhexyl)phthalate. The % Recovery was reported as 50.7 and the control limits were 55 to 135.

2164282001	97	ARE-800-TMW-04	SW846 8270D	bis(2-Ethylhexyl)phthalate

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte bis(2-Ethylhexyl)phthalate. The RPD was reported as 44.9 and the upper control limit is 30.

2164282001	98	ARE-800-TMW-04	SW846 8270D	Di-n-Octylphthalate

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Di-n-Octylphthalate. The % Recovery was reported as 47.5 and the control limits were 51 to 140.

2164282001	99	ARE-800-TMW-04	SW846 8270D	Di-n-Octylphthalate

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Di-n-Octylphthalate. The RPD was reported as 45.4 and the upper control limit is 30.

2164282001	100	ARE-800-TMW-04	SW846 8270D	Benzo(b)fluoranthene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Benzo(b)fluoranthene. The % Recovery was reported as 47.4 and the control limits were 53 to 131.

2164282001	101	ARE-800-TMW-04	SW846 8270D	Benzo(b)fluoranthene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Benzo(b)fluoranthene. The RPD was reported as 49.1 and the upper control limit is 30.

2164282001	102	ARE-800-TMW-04	SW846 8270D	Benzo(k)fluoranthene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Benzo(k)fluoranthene. The % Recovery was reported as 47.8 and the control limits were 57 to 129.

2164282001	103	ARE-800-TMW-04	SW846 8270D	Benzo(k)fluoranthene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Benzo(k)fluoranthene. The RPD was reported as 47.2 and the upper control limit is 30.

2164282001	104	ARE-800-TMW-04	SW846 8270D	Benzo(a)pyrene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Benzo(a)pyrene. The % Recovery was reported as 46.3 and the control limits were 54 to 128.

2164282001	105	ARE-800-TMW-04	SW846 8270D	Benzo(a)pyrene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Benzo(a)pyrene. The RPD was reported as 47.8 and the upper control limit is 30.

2164282001	106	ARE-800-TMW-04	SW846 8270D	Indeno(1,2,3-cd)pyrene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Indeno(1,2,3-cd)pyrene. The % Recovery was reported as 47.9 and the control limits were 52 to 134.

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2164282001	107	ARE-800-TMW-04	SW846 8270D	Indeno(1,2,3-cd)pyrene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Indeno(1,2,3-cd)pyrene. The RPD was reported as 48 and the upper control limit is 30.

2164282001	108	ARE-800-TMW-04	SW846 8270D	Dibenzo(a,h)anthracene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Dibenzo(a,h)anthracene. The % Recovery was reported as 49.3 and the control limits were 51 to 134.

2164282001	109	ARE-800-TMW-04	SW846 8270D	Dibenzo(a,h)anthracene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Dibenzo(a,h)anthracene. The RPD was reported as 47.6 and the upper control limit is 30.

2164282001	110	ARE-800-TMW-04	SW846 8270D	Benzo(g,h,i)perylene

The QC sample type MS for method SW846 8270D was outside the control limits for the analyte Benzo(g,h,i)perylene. The % Recovery was reported as 48.7 and the control limits were 50 to 134.

2164282001	111	ARE-800-TMW-04	SW846 8270D	Benzo(g,h,i)perylene

The QC sample type MSD for method SW846 8270D was outside the control limits for the analyte Benzo(g,h,i)perylene. The RPD was reported as 47.2 and the upper control limit is 30.

2164282001	112	ARE-800-TMW-04	SW846 8270D	Nitrobenzene-d5

The surrogate Nitrobenzene-d5 for method SW846 8270D was outside of control limits. The % Recovery was reported as 42.5 and the control limits were 44 to 120. This result was reported at a dilution of 1.

2164282001	113	ARE-800-TMW-04	SW846 8270D	2-Fluorobiphenyl

The surrogate 2-Fluorobiphenyl for method SW846 8270D was outside of control limits. The % Recovery was reported as 38.5 and the control limits were 44 to 119. This result was reported at a dilution of 1.

2164282001	114	ARE-800-TMW-04	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 21.2 and the control limits were 50 to 134. This result was reported at a dilution of 1.

2164282001	115	ARE-800-TMW-04	8270 SIM	Fluoranthene-d10

The surrogate Fluoranthene-d10 for method 8270 SIM was outside of control limits. The % Recovery was reported as 32.8 and the control limits were 45 to 130. This result was reported at a dilution of 1.

2164282001	116	ARE-800-TMW-04	8270 SIM	Fluoranthene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Fluoranthene. The % Recovery was reported as 50.6 and the control limits were 58 to 120.

2164282001	117	ARE-800-TMW-04	8270 SIM	Pyrene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Pyrene. The % Recovery was reported as 46.7 and the control limits were 53 to 121.

2164282001	118	ARE-800-TMW-04	8270 SIM	Benzo(a)anthracene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Benzo(a)anthracene. The % Recovery was reported as 39.6 and the control limits were 59 to 120.

2164282001	119	ARE-800-TMW-04	8270 SIM	Benzo(a)anthracene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(a)anthracene. The RPD was reported as 30.3 and the upper control limit is 30.

2164282001	120	ARE-800-TMW-04	8270 SIM	Chrysene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Chrysene. The % Recovery was reported as 43.3 and the control limits were 57 to 120.

2164282001	121	ARE-800-TMW-04	8270 SIM	Benzo(b)fluoranthene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Benzo(b)fluoranthene. The % Recovery was reported as 26 and the control limits were 53 to 126.

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2164282001	122	ARE-800-TMW-04	8270 SIM	Benzo(b)fluoranthene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(b)fluoranthene. The % Recovery was reported as 42.2 and the control limits were 53 to 126.

2164282001	123	ARE-800-TMW-04	8270 SIM	Benzo(b)fluoranthene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(b)fluoranthene. The RPD was reported as 36.9 and the upper control limit is 30.

2164282001	124	ARE-800-TMW-04	8270 SIM	Benzo(k)fluoranthene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Benzo(k)fluoranthene. The % Recovery was reported as 28.2 and the control limits were 54 to 125.

2164282001	125	ARE-800-TMW-04	8270 SIM	Benzo(k)fluoranthene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(k)fluoranthene. The RPD was reported as 37.7 and the upper control limit is 30.

2164282001	126	ARE-800-TMW-04	8270 SIM	Benzo(k)fluoranthene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(k)fluoranthene. The % Recovery was reported as 45 and the control limits were 54 to 125.

2164282001	127	ARE-800-TMW-04	8270 SIM	Benzo(a)pyrene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Benzo(a)pyrene. The % Recovery was reported as 23.5 and the control limits were 53 to 120.

2164282001	128	ARE-800-TMW-04	8270 SIM	Benzo(a)pyrene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(a)pyrene. The RPD was reported as 37.6 and the upper control limit is 30.

2164282001	129	ARE-800-TMW-04	8270 SIM	Benzo(a)pyrene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(a)pyrene. The % Recovery was reported as 37.4 and the control limits were 53 to 120.

2164282001	130	ARE-800-TMW-04	8270 SIM	Indeno(1,2,3-cd)pyrene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Indeno(1,2,3-cd)pyrene. The % Recovery was reported as 16.8 and the control limits were 48 to 130.

2164282001	131	ARE-800-TMW-04	8270 SIM	Indeno(1,2,3-cd)pyrene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Indeno(1,2,3-cd)pyrene. The RPD was reported as 37 and the upper control limit is 30.

2164282001	132	ARE-800-TMW-04	8270 SIM	Indeno(1,2,3-cd)pyrene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Indeno(1,2,3-cd)pyrene. The % Recovery was reported as 26.5 and the control limits were 48 to 130.

2164282001	133	ARE-800-TMW-04	8270 SIM	Dibenzo(a,h)anthracene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Dibenzo(a,h)anthracene. The % Recovery was reported as 19.6 and the control limits were 44 to 131.

2164282001	134	ARE-800-TMW-04	8270 SIM	Dibenzo(a,h)anthracene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Dibenzo(a,h)anthracene. The RPD was reported as 38.4 and the upper control limit is 30.

2164282001	135	ARE-800-TMW-04	8270 SIM	Dibenzo(a,h)anthracene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Dibenzo(a,h)anthracene. The % Recovery was reported as 31.5 and the control limits were 44 to 131.

2164282001	136	ARE-800-TMW-04	8270 SIM	Benzo(g,h,i)perylene

The QC sample type MS for method 8270 SIM was outside the control limits for the analyte Benzo(g,h,i)perylene. The % Recovery was reported as 16.1 and the control limits were 44 to 128.

ANALYTICAL RESULTS

Workorder: 2164282 PQF017|Ft. Monmouth GW Samplin

2164282001	137	ARE-800-TMW-04	8270 SIM	Benzo(g,h,i)perylene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(g,h,i)perylene. The RPD was reported as 35.7 and the upper control limit is 30.

2164282001	138	ARE-800-TMW-04	8270 SIM	Benzo(g,h,i)perylene

The QC sample type MSD for method 8270 SIM was outside the control limits for the analyte Benzo(g,h,i)perylene. The % Recovery was reported as 25.1 and the control limits were 44 to 128.

2164282001	139	ARE-800-TMW-04	SW846 8260C	Bromomethane

The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 42.5 and the control limits were 53 to 141.

2164282001	140	ARE-800-TMW-04	SW846 8270D	2-Fluorobiphenyl

The surrogate 2-Fluorobiphenyl for method SW846 8270D was outside of control limits. The % Recovery was reported as 38.5 and the control limits were 52 to 118. This result was reported at a dilution of 1.

2164282001	141	ARE-800-TMW-04	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 21.2 and the control limits were 46 to 133. This result was reported at a dilution of 1.

2164282002	1	ARE-800-TMW-104	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 49.2 and the control limits were 50 to 134. This result was reported at a dilution of 1.

2164282003	1	ARE-800-TMW-03	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 33 and the control limits were 50 to 134. This result was reported at a dilution of 1.

2164282003	2	ARE-800-TMW-03	8270 SIM	Fluoranthene-d10

The surrogate Fluoranthene-d10 for method 8270 SIM was outside of control limits. The % Recovery was reported as 43 and the control limits were 45 to 130. This result was reported at a dilution of 1.

2164282003	3	ARE-800-TMW-03	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 33 and the control limits were 46 to 133. This result was reported at a dilution of 1.

2164282004	1	ARE-800-TMW-02	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 27.9 and the control limits were 50 to 134. This result was reported at a dilution of 1.

2164282004	2	ARE-800-TMW-02	8270 SIM	Fluoranthene-d10

The surrogate Fluoranthene-d10 for method 8270 SIM was outside of control limits. The % Recovery was reported as 37.1 and the control limits were 45 to 130. This result was reported at a dilution of 1.

2164282004	3	ARE-800-TMW-02	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 27.9 and the control limits were 46 to 133. This result was reported at a dilution of 1.

2164282008	1	ARE-800-TMW-08	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 26.1 and the control limits were 50 to 134. This result was reported at a dilution of 1.

2164282008	2	ARE-800-TMW-08	SW846 8270D	2-Fluorobiphenyl

The surrogate 2-Fluorobiphenyl for method SW846 8270D was outside of control limits. The % Recovery was reported as 44.9 and the control limits were 52 to 118. This result was reported at a dilution of 1.

2164282008	3	ARE-800-TMW-08	SW846 8270D	Terphenyl-d14

The surrogate Terphenyl-d14 for method SW846 8270D was outside of control limits. The % Recovery was reported as 26.1 and the control limits were 46 to 133. This result was reported at a dilution of 1.

DJM

ALS Environmental
1565 Jefferson Road
Building 300, Suite 360
Rochester, NY 14623
(585)288-5380

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: ARE800 0[illegible]
ALS Quote #:

2164282

Client Name: Parsons Federal
Address: 100 High St. 4th Floor
Boston, MA 02110
Contact: Cory Mahony
Phone#: 617-449-1440
Project Name/#: FTMM
Bill To: Parsons Federal

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y carla.rodman@parsons.com
Fax? [ ] -Y No.:

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	EPH (fractionated)	SVOCs - Naphthalene & 2-methylnaphthalene (8270D)	VOC (8260C)+TICs including 1,2-dichloroethane & 1,2-dibromoethane	Lead (6020)	SVOC (8270D) + TICs (groundwater)	VOC (8260C)+TICs (groundwater)			AUTHORIZED TO RUN	EXTRACT AND HOLD
				Container Type	AN	AN	CG	AN	AN	CG				
				Container Size	4 oz	4 oz	40mL	4 oz	1L	40ml				
				Preservative	4c	4c	4C & MEOH	4c	HCL	HCL				
				ANALYSES/METHOD REQUESTED										
				Enter Number of Containers Per Sample or Field Results Below.										
ARE-800-TMW-04	8/2/16	0910	G	GW				4*	2	3			X	
2 ARE-800-TMW-04-MS	8/2/16	0910	G	GW					2	3			X	
3 ARE-800-TMW-04-MSD	8/2/16	0910	G	GW					2	3			X	
4 ARE-800-TMW-104	8/2/16	1200	G	GW					2	3			X	
5 ARE-800-TMW-03	8/2/16	0935	G	GW					2	3			X	
6 ARE-800-TMW-02	8/2/16	0945	G	GW					2	3			X	
7 ARE-800-TMW-01	8/2/16	1030	G	GW					2	3			X	
8 ARE-800-EB-08022016	8/2/16	1445	G	EB					2	3			X	
9 ARE-800-TB-08022016	8/2/16	—	G	TB						2			X	
10 ARE-800-TMW-08	8/2/16	1345	G	GW					2	3			X	

Receipt Information (completed by Receiving Lab)
Cooler Temp: 1 Therm ID: 352
No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?	✓		MG
(If present) Seals Intact?	✓		
Received on Ice?	✓		
COC/Labels Complete/Accurate?	✓		
Cont. in Good Cond.?	✓		
Correct Containers?	✓		
Correct Sample Volumes?	✓		
Correct Preservation?	✓		
Headspace/Volatiles?		✓	

Courier/Tracking #:

Sample/COC Comments

ALS Field Services: _Pickup _Labor
_Composite Sampling _Rental Equipment
_Other:

Project Comments: 748810
MDL Must Meet NJDEP Soil Cleanup Criteria and/or Groundwater Quality Standards

LOGGED BY(signature): [signature] DATE 8/2/16 TIME 1505
REVIEWED BY(signature): [signature] DATE 8-3-16 TIME 0900

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature]	8-3-16	1125	2 [signature]	8/3	1125
3 [signature]	8/3		4 [signature]	8/3	2041
5 [signature]		11:18	6 [signature]	8/3	2318
7			8		
9			10		

Data Deliverables: [ ] Standard [X] CLP-like [ ] USACE
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [X] NJ [ ] PA [ ] NC
Reportable to PADEP? Yes [ ]
PWSID #
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type- ERPIMS

*G=Grab; C=Composite **Matrix - AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS ENVIRONMENTAL SHIPPING ADDRESS: 1565 Jefferson Road, Building 300, Suite 360 Rochester, NY 14623 USA

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

August 19, 2016

Ms. Carla Rodman
Parsons
301 Plainfield Rd
Suite 350
Syracuse, NY 13212

Certificate of Analysis

Project Name:	**Ft. Monmouth GW Sampling**	Workorder:	**2165198**
Purchase Order:		Workorder ID:	**PQF020|Ft. Monmouth GW Samplin**

Dear Ms. Rodman:

Enclosed are the analytical results for samples received by the laboratory on Friday, August 5, 2016.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Debra J. Musser (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Ms. Christina Grill , Ms. Maryanne Kosciewicz , Mr. Cory Mahony

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2165198001	ARE-800-TMW-09	Water	8/4/2016 08:45	8/5/2016 20:25	Collected by Client
2165198002	ARE-800-TMW-07	Water	8/4/2016 09:15	8/5/2016 20:25	Collected by Client

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SAMPLE SUMMARY

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Workorder Comments

ALS Middletown does not currently hold DOD accreditation for Pentachlorophenol by 8270 SIM or Benzidine by 8270.

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ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198001** Date Collected: 8/4/2016 08:45 Matrix: Water

Sample ID: **ARE-800-TMW-09** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	3.6J	J	ug/L	5.0	3.8	1.6	SW846 8260C		8/15/16 16:35	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/15/16 16:35	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/15/16 16:35	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/15/16 16:35	DD	D
n-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
sec-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/15/16 16:35	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198001** Date Collected: 8/4/2016 08:45 Matrix: Water

Sample ID: **ARE-800-TMW-09** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Hexachlorobutadiene	0.75U	U,4	ug/L	1.0	0.75	0.43	SW846 8260C		8/15/16 16:35	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/15/16 16:35	DD	D
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
p-Isopropyltoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/15/16 16:35	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Naphthalene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
n-Propylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/15/16 16:35	DD	D
1,2,4-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
1,3,5-Trimethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:35	DD	D
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C		8/15/16 16:35	DD	D

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	97.8		%	81 - 118	SW846 8260C		8/15/16 16:35	DD	D
4-Bromofluorobenzene (S)	111		%	85 - 114	SW846 8260C		8/15/16 16:35	DD	D
Dibromofluoromethane (S)	90.4		%	80 - 119	SW846 8260C		8/15/16 16:35	DD	D
Toluene-d8 (S)	93.9		%	89 - 112	SW846 8260C		8/15/16 16:35	DD	D

LIBRARY SEARCH - VOLATILES

No TIC's Detected	.				Lib Search VOC		8/15/16 16:35	CPK	D

SEMIVOLATILES

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198001** Date Collected: 8/4/2016 08:45 Matrix: Water

Sample ID: **ARE-800-TMW-09** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Acenaphthene	1.1U	U	ug/L	2.1	1.1	0.16	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Acenaphthylene	1.1U	U	ug/L	2.1	1.1	0.20	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Anthracene	1.1U	U	ug/L	2.1	1.1	0.16	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzidine	31.9U	U	ug/L	31.9	31.9	3.3	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzidine	8.5U	U	ug/L	8.5	8.5	3.3	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzo(a)anthracene	1.1U	U	ug/L	2.1	1.1	0.14	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzo(a)pyrene	1.1U	U	ug/L	2.1	1.1	0.23	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzo(b)fluoranthene	1.1U	U	ug/L	2.1	1.1	0.12	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzo(g,h,i)perylene	1.1U	U	ug/L	2.1	1.1	0.23	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzo(k)fluoranthene	1.1U	U	ug/L	2.1	1.1	0.20	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Benzyl Alcohol	2.1U	U	ug/L	8.5	2.1	0.24	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
4-Bromophenyl-phenylether	1.1U	U	ug/L	8.5	1.1	0.18	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Butylbenzylphthalate	1.1U	U	ug/L	8.5	1.1	0.12	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Carbazole	1.1U	U	ug/L	8.5	1.1	0.13	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
4-Chloro-3-methylphenol	1.1U	U	ug/L	8.5	1.1	0.20	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
4-Chloroaniline	1.1U	U	ug/L	8.5	1.1	0.22	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
bis(2-Chloroethoxy)methane	1.1U	U	ug/L	8.5	1.1	0.22	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
bis(2-Chloroethyl)ether	1.1U	U	ug/L	8.5	1.1	0.18	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
bis(2-Chloroisopropyl)ether	1.1U	U	ug/L	8.5	1.1	0.30	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Chloronaphthalene	1.1U	U	ug/L	8.5	1.1	0.19	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Chlorophenol	2.1U	U	ug/L	8.5	2.1	0.35	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
4-Chlorophenyl-phenylether	1.1U	U	ug/L	8.5	1.1	0.15	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Chrysene	1.1U	U	ug/L	2.1	1.1	0.13	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
mp-Cresol	1.1U	U	ug/L	8.5	1.1	0.16	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
o-Cresol	1.1U	U	ug/L	8.5	1.1	0.27	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Di-n-Butylphthalate	1.1U	U	ug/L	8.5	1.1	0.15	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Di-n-Octylphthalate	1.1U	U	ug/L	8.5	1.1	0.11	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Dibenzo(a,h)anthracene	1.1U	U	ug/L	2.1	1.1	0.22	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Dibenzofuran	1.1U	U	ug/L	8.5	1.1	0.12	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
1,2-Dichlorobenzene	1.1U	U	ug/L	8.5	1.1	0.21	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
1,3-Dichlorobenzene	1.1U	U	ug/L	8.5	1.1	0.18	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
1,4-Dichlorobenzene	1.1U	U	ug/L	8.5	1.1	0.19	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
3,3-Dichlorobenzidine	3.2U	U	ug/L	17.0	3.2	0.51	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2,4-Dichlorophenol	1.1U	U	ug/L	8.5	1.1	0.34	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Diethylphthalate	1.1U	U	ug/L	8.5	1.1	0.19	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2,4-Dimethylphenol	5.3U	U	ug/L	8.5	5.3	0.22	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Dimethylphthalate	1.1U	U	ug/L	8.5	1.1	0.15	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2,4-Dinitrophenol	8.5U	U	ug/L	17.0	8.5	1.9	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198001** Date Collected: 8/4/2016 08:45 Matrix: Water

Sample ID: **ARE-800-TMW-09** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2,4-Dinitrotoluene	1.1U	U	ug/L	8.5	1.1	0.13	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2,6-Dinitrotoluene	1.1U	U	ug/L	8.5	1.1	0.22	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
1,2-Diphenylhydrazine	1.1U	U	ug/L	8.5	1.1	0.28	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
bis(2-Ethylhexyl)phthalate	1.1U	U	ug/L	8.5	1.1	0.23	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Fluoranthene	1.1U	U	ug/L	2.1	1.1	0.18	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Fluorene	1.1U	U	ug/L	2.1	1.1	0.21	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Hexachlorobenzene	1.1U	U	ug/L	8.5	1.1	0.24	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Hexachlorobutadiene	1.1U	U	ug/L	8.5	1.1	0.20	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Hexachlorocyclopentadiene	2.1U	U	ug/L	8.5	2.1	0.18	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Hexachloroethane	1.1U	U	ug/L	8.5	1.1	0.32	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Indeno(1,2,3-cd)pyrene	1.1U	U	ug/L	2.1	1.1	0.11	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Isophorone	1.1U	U	ug/L	8.5	1.1	0.16	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Methyl-4,6-dinitrophenol	5.3U	U	ug/L	8.5	5.3	0.35	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Methylnaphthalene	1.1U	U	ug/L	2.1	1.1	0.17	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Naphthalene	1.1U	U	ug/L	2.1	1.1	0.13	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Nitroaniline	1.1U	U	ug/L	8.5	1.1	0.21	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
3-Nitroaniline	2.1U	U	ug/L	8.5	2.1	0.19	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
4-Nitroaniline	1.1U	U	ug/L	8.5	1.1	0.44	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Nitrobenzene	2.1U	U	ug/L	8.5	2.1	0.30	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Nitrophenol	2.1U	U	ug/L	8.5	2.1	0.48	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
4-Nitrophenol	5.3U	U	ug/L	8.5	5.3	1.1	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
N-Nitrosodimethylamine	2.1U	U	ug/L	8.5	2.1	0.68	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
N-Nitroso-di-n-propylamine	1.1U	U	ug/L	8.5	1.1	0.26	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
N-Nitrosodiphenylamine	2.1U	U	ug/L	8.5	2.1	0.19	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Pentachlorophenol	8.5U	U	ug/L	17.0	8.5	1.1	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Phenanthrene	1.1U	U	ug/L	2.1	1.1	0.14	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Phenol	1.1U	U	ug/L	8.5	1.1	0.24	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Pyrene	1.1U	U	ug/L	2.1	1.1	0.17	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
1,2,4-Trichlorobenzene	1.1U	U	ug/L	8.5	1.1	0.14	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2,4,5-Trichlorophenol	3.2U	U	ug/L	8.5	3.2	0.59	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2,4,6-Trichlorophenol	1.1U	U	ug/L	8.5	1.1	0.61	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	78.9		%	47 - 128	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Fluorobiphenyl (S)	71.1		%	52 - 118	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Fluorophenol (S)	50.6		%	20 - 87	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Nitrobenzene-d5 (S)	72.4		%	27 - 139	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Phenol-d5 (S)	33.5		%	10 - 81	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Terphenyl-d14 (S)	76.7		%	46 - 133	SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B

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ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198001** Date Collected: 8/4/2016 08:45 Matrix: Water

Sample ID: **ARE-800-TMW-09** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	78.9		%	43 - 140			SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Fluorobiphenyl (S)	71.1		%	44 - 119			SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
2-Fluorophenol (S)	50.6		%	19 - 119			SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Nitrobenzene-d5 (S)	72.4		%	44 - 120			SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Phenol-d5 (S)	33.5		%	13 - 49			SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Terphenyl-d14 (S)	76.7		%	50 - 134			SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
Library Search - SemiVolatiles												
Diethyltoluamide	4.3	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 20:34	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	0.043U	U	ug/L	0.053	0.043	0.012	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Acenaphthylene	0.043U	U	ug/L	0.053	0.043	0.012	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Anthracene	0.043U	U	ug/L	0.053	0.043	0.018	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Benzo(a)anthracene	0.043U	U	ug/L	0.053	0.043	0.018	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Benzo(a)pyrene	0.043U	U	ug/L	0.053	0.043	0.021	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Benzo(b)fluoranthene	0.043U	U	ug/L	0.053	0.043	0.021	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Benzo(g,h,i)perylene	0.043U	U,1	ug/L	0.053	0.043	0.040	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Benzo(k)fluoranthene	0.043U	U	ug/L	0.053	0.043	0.027	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Chrysene	0.043U	U	ug/L	0.053	0.043	0.018	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Dibenzo(a,h)anthracene	0.043U	U	ug/L	0.053	0.043	0.024	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
2,4-Dinitrotoluene	0.043U	U	ug/L	0.053	0.043	0.022	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
2,6-Dinitrotoluene	0.043U	U	ug/L	0.053	0.043	0.033	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Fluoranthene	0.043U	U	ug/L	0.053	0.043	0.019	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Fluorene	0.043U	U	ug/L	0.053	0.043	0.016	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Indeno(1,2,3-cd)pyrene	0.053U	U	ug/L	0.053	0.053	0.044	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Naphthalene	0.043U	U	ug/L	0.053	0.043	0.039	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Pentachlorophenol	1.1U	U	ug/L	1.1	1.1	0.19	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Phenanthrene	0.043U	U	ug/L	0.053	0.043	0.021	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Pyrene	0.043U	U	ug/L	0.053	0.043	0.016	8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	66.8		%	29 - 112			8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B
Fluoranthene-d10 (S)	72.6		%	45 - 130			8270 SIM	8/9/16	JTH	8/11/16 17:11	CGS	B

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ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198001** Date Collected: 8/4/2016 08:45 Matrix: Water

Sample ID: **ARE-800-TMW-09** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	*Cntr*

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198002** Date Collected: 8/4/2016 09:15 Matrix: Water

Sample ID: **ARE-800-TMW-07** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared By	Analyzed	By	Cntr
VOLATILE ORGANICS											
Acetone	6.3		ug/L	5.0	3.8	1.6	SW846 8260C		8/15/16 16:57	DD	D
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Bromobenzene	0.75U	U	ug/L	1.0	0.75	0.20	SW846 8260C		8/15/16 16:57	DD	D
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C		8/15/16 16:57	DD	D
tert-Butyl Alcohol	12.5U	U	ug/L	25.0	12.5	8.3	SW846 8260C		8/15/16 16:57	DD	D
n-Butylbenzene	18.1		ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
tert-Butylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
sec-Butylbenzene	25.6		ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
o-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
p-Chlorotoluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C		8/15/16 16:57	DD	D
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,3-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
2,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
1,1-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D
cis-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C		8/15/16 16:57	DD	D

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198002** Date Collected: 8/4/2016 09:15 Matrix: Water

Sample ID: **ARE-800-TMW-07** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
trans-1,3-Dichloropropene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Ethylbenzene	0.55J	J	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Hexachlorobutadiene	0.75U	U	ug/L	1.0	0.75	0.43	SW846 8260C			8/15/16 16:57	DD	D
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C			8/15/16 16:57	DD	D
Isopropylbenzene	10.3		ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
p-Isopropyltoluene	22.3		ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C			8/15/16 16:57	DD	D
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Naphthalene	68.7		ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
n-Propylbenzene	12.9		ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,1,1,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,2,3-Trichloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C			8/15/16 16:57	DD	D
1,2,4-Trimethylbenzene	73.9		ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
1,3,5-Trimethylbenzene	10.9		ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
o-Xylene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C			8/15/16 16:57	DD	D
mp-Xylene	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C			8/15/16 16:57	DD	D
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	102		%	81 - 118			SW846 8260C			8/15/16 16:57	DD	D
4-Bromofluorobenzene (S)	105		%	85 - 114			SW846 8260C			8/15/16 16:57	DD	D
Dibromofluoromethane (S)	96.2		%	80 - 119			SW846 8260C			8/15/16 16:57	DD	D
Toluene-d8 (S)	95.6		%	89 - 112			SW846 8260C			8/15/16 16:57	DD	D
SEMIVOLATILES												
Acenaphthene	1.0U	U	ug/L	2.1	1.0	0.16	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Acenaphthylene	1.0U	U	ug/L	2.1	1.0	0.20	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Anthracene	1.8J	J	ug/L	2.1	1.0	0.16	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B

ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198002** Date Collected: 8/4/2016 09:15 Matrix: Water

Sample ID: **ARE-800-TMW-07** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Benzidine	8.31		ug/L	8.3	8.3	3.2	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzidine	31.3U	U	ug/L	31.3	31.3	3.2	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzo(a)anthracene	0.20J	J	ug/L	2.1	1.0	0.14	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzo(a)pyrene	1.0U	U	ug/L	2.1	1.0	0.23	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzo(b)fluoranthene	1.0U	U	ug/L	2.1	1.0	0.11	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzo(g,h,i)perylene	1.0U	U	ug/L	2.1	1.0	0.23	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzo(k)fluoranthene	1.0U	U	ug/L	2.1	1.0	0.20	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzyl Alcohol	2.1U	U	ug/L	8.3	2.1	0.24	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
4-Bromophenyl-phenylether	1.0U	U	ug/L	8.3	1.0	0.18	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Butylbenzylphthalate	1.0U	U	ug/L	8.3	1.0	0.11	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Carbazole	1.0U	U	ug/L	8.3	1.0	0.13	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
4-Chloro-3-methylphenol	1.0U	U	ug/L	8.3	1.0	0.20	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
4-Chloroaniline	1.0U	U	ug/L	8.3	1.0	0.22	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
bis(2-Chloroethoxy)methane	1.0U	U	ug/L	8.3	1.0	0.22	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
bis(2-Chloroethyl)ether	1.0U	U	ug/L	8.3	1.0	0.18	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
bis(2-Chloroisopropyl)ether	1.0U	U	ug/L	8.3	1.0	0.29	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Chloronaphthalene	1.0U	U	ug/L	8.3	1.0	0.19	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Chlorophenol	2.1U	U	ug/L	8.3	2.1	0.34	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
4-Chlorophenyl-phenylether	1.0U	U	ug/L	8.3	1.0	0.15	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Chrysene	1.0U	U	ug/L	2.1	1.0	0.13	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
mp-Cresol	1.0U	U	ug/L	8.3	1.0	0.16	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
o-Cresol	1.0U	U	ug/L	8.3	1.0	0.26	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Di-n-Butylphthalate	1.0U	U	ug/L	8.3	1.0	0.15	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Di-n-Octylphthalate	1.0U	U	ug/L	8.3	1.0	0.10	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Dibenzo(a,h)anthracene	1.0U	U	ug/L	2.1	1.0	0.22	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Dibenzofuran	4.5J	J	ug/L	8.3	1.0	0.11	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
1,2-Dichlorobenzene	1.0U	U	ug/L	8.3	1.0	0.21	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
1,3-Dichlorobenzene	1.0U	U	ug/L	8.3	1.0	0.18	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
1,4-Dichlorobenzene	1.0U	U	ug/L	8.3	1.0	0.19	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
3,3-Dichlorobenzidine	3.1U	U	ug/L	16.7	3.1	0.50	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2,4-Dichlorophenol	1.0U	U	ug/L	8.3	1.0	0.33	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Diethylphthalate	1.0U	U	ug/L	8.3	1.0	0.19	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2,4-Dimethylphenol	5.2U	U	ug/L	8.3	5.2	0.22	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Dimethylphthalate	1.0U	U	ug/L	8.3	1.0	0.15	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2,4-Dinitrophenol	8.3U	U	ug/L	16.7	8.3	1.9	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2,4-Dinitrotoluene	1.0U	U	ug/L	8.3	1.0	0.13	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2,6-Dinitrotoluene	1.0U	U	ug/L	8.3	1.0	0.22	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
1,2-Diphenylhydrazine	1.0U	U	ug/L	8.3	1.0	0.27	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B

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ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198002** Date Collected: 8/4/2016 09:15 Matrix: Water

Sample ID: **ARE-800-TMW-07** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
bis(2-Ethylhexyl)phthalate	1.0U	U	ug/L	8.3	1.0	0.23	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Fluoranthene	1.0U	U	ug/L	2.1	1.0	0.18	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Fluorene	1.0U	U	ug/L	2.1	1.0	0.21	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Hexachlorobenzene	1.0U	U	ug/L	8.3	1.0	0.24	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Hexachlorobutadiene	1.0U	U	ug/L	8.3	1.0	0.20	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Hexachlorocyclopentadiene	2.1U	U	ug/L	8.3	2.1	0.18	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Hexachloroethane	1.0U	U	ug/L	8.3	1.0	0.31	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Indeno(1,2,3-cd)pyrene	1.0U	U	ug/L	2.1	1.0	0.10	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Isophorone	1.0U	U	ug/L	8.3	1.0	0.16	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Methyl-4,6-dinitrophenol	5.2U	U	ug/L	8.3	5.2	0.34	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Methylnaphthalene	148		ug/L	10.4	5.2	0.83	SW846 8270D	8/9/16	JTH	8/11/16 21:26	CGS	B
Naphthalene	15.5		ug/L	2.1	1.0	0.13	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Nitroaniline	1.0U	U	ug/L	8.3	1.0	0.21	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
3-Nitroaniline	2.1U	U	ug/L	8.3	2.1	0.19	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
4-Nitroaniline	1.0U	U	ug/L	8.3	1.0	0.43	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Nitrobenzene	2.1U	U	ug/L	8.3	2.1	0.29	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Nitrophenol	2.1U	U	ug/L	8.3	2.1	0.47	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
4-Nitrophenol	5.2U	U	ug/L	8.3	5.2	1.1	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
N-Nitrosodimethylamine	2.1U	U	ug/L	8.3	2.1	0.67	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
N-Nitroso-di-n-propylamine	1.0U	U	ug/L	8.3	1.0	0.25	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
N-Nitrosodiphenylamine	2.1U	U	ug/L	8.3	2.1	0.19	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Pentachlorophenol	8.3U	U	ug/L	16.7	8.3	1.1	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Phenanthrene	20.5		ug/L	2.1	1.0	0.14	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Phenol	1.0U	U	ug/L	8.3	1.0	0.24	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Pyrene	3.3		ug/L	2.1	1.0	0.17	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
1,2,4-Trichlorobenzene	1.0U	U	ug/L	8.3	1.0	0.14	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2,4,5-Trichlorophenol	3.1U	U	ug/L	8.3	3.1	0.57	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2,4,6-Trichlorophenol	1.0U	U	ug/L	8.3	1.0	0.59	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76.6		%	47 - 128	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Fluorobiphenyl (S)	65.7		%	52 - 118	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Fluorophenol (S)	43.8		%	20 - 87	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Nitrobenzene-d5 (S)	79.8		%	27 - 139	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Phenol-d5 (S)	28.3		%	10 - 81	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Terphenyl-d14 (S)	62.9		%	46 - 133	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B

Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	76.6		%	43 - 140	SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198002** Date Collected: 8/4/2016 09:15 Matrix: Water

Sample ID: **ARE-800-TMW-07** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
2,4,6-Tribromophenol (S)	65.3		%	43 - 140			SW846 8270D	8/9/16	JTH	8/11/16 21:26	CGS	B
2-Fluorobiphenyl (S)	76		%	44 - 119			SW846 8270D	8/9/16	JTH	8/11/16 21:26	CGS	B
2-Fluorobiphenyl (S)	65.7		%	44 - 119			SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
2-Fluorophenol (S)	44.1		%	19 - 119			SW846 8270D	8/9/16	JTH	8/11/16 21:26	CGS	B
2-Fluorophenol (S)	43.8		%	19 - 119			SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Nitrobenzene-d5 (S)	79.8		%	44 - 120			SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Nitrobenzene-d5 (S)	81.1		%	44 - 120			SW846 8270D	8/9/16	JTH	8/11/16 21:26	CGS	B
Phenol-d5 (S)	30.6		%	13 - 49			SW846 8270D	8/9/16	JTH	8/11/16 21:26	CGS	B
Phenol-d5 (S)	28.3		%	13 - 49			SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Terphenyl-d14 (S)	63.8		%	50 - 134			SW846 8270D	8/9/16	JTH	8/11/16 21:26	CGS	B
Terphenyl-d14 (S)	62.9		%	50 - 134			SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Library Search - SemiVolatiles												
Unknown	76.5	J	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzene, 1,3-diethyl-	77.0	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzene, 1,2,3,4-tetramethyl-	21.9	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Unknown	24.2	J	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzene, 2-ethenyl-1,4-dimethy	21.6	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Naphthalene, 1,2,3,4-tetrahydr	25.6	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Benzene, (2-methyl-1-butenyl)-	19.9	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Dodecane, 6-methyl-	23.1	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Unknown	36.6	J	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Unknown	23.4	J	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Naphthalene, 2,6-dimethyl-	23.5	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Naphthalene, 1,3-dimethyl-	25.0	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Unknown	26.9	J	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Heptadecane	50.1	J N	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
Unknown	35.2	J	ug/L				SW846 8270D	8/9/16	JTH	8/10/16 21:00	CGS	B
SEMIVOLATILE SIM												
Acenaphthene	1.2		ug/L	0.052	0.042	0.011	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Acenaphthylene	0.042U	U	ug/L	0.052	0.042	0.011	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Anthracene	0.042U	U	ug/L	0.052	0.042	0.018	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Benzo(a)anthracene	0.037J	J	ug/L	0.052	0.042	0.018	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Benzo(a)pyrene	0.042U	U	ug/L	0.052	0.042	0.021	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Benzo(b)fluoranthene	0.042U	U	ug/L	0.052	0.042	0.021	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Benzo(g,h,i)perylene	0.042U	U,1	ug/L	0.052	0.042	0.040	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2165198 PQF020|Ft. Monmouth GW Samplin

Lab ID: **2165198002** Date Collected: 8/4/2016 09:15 Matrix: Water

Sample ID: **ARE-800-TMW-07** Date Received: 8/5/2016 20:25

Parameters	Results	Flag	Units	LOQ	LOD	DL	Method	Prepared	By	Analyzed	By	Cntr
Benzo(k)fluoranthene	0.042U	U	ug/L	0.052	0.042	0.026	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Chrysene	0.14		ug/L	0.052	0.042	0.018	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Dibenzo(a,h)anthracene	0.042U	U	ug/L	0.052	0.042	0.024	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
2,4-Dinitrotoluene	0.042U	U	ug/L	0.052	0.042	0.022	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
2,6-Dinitrotoluene	0.042U	U	ug/L	0.052	0.042	0.032	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Fluoranthene	0.77		ug/L	0.052	0.042	0.019	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Fluorene	4.5	E,E	ug/L	0.052	0.042	0.016	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Indeno(1,2,3-cd)pyrene	0.052U	U	ug/L	0.052	0.052	0.043	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Naphthalene	24.5	E,E	ug/L	0.052	0.042	0.039	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Pentachlorophenol	1.0U	U	ug/L	1.0	1.0	0.19	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Phenanthrene	20.5	E,E	ug/L	0.052	0.042	0.021	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Pyrene	3.0		ug/L	0.052	0.042	0.016	8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*			*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2-Methylnapthalene-d10 (S)	54		%	29 - 112			8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B
Fluoranthene-d10 (S)	86.5		%	45 - 130			8270 SIM	8/9/16	JTH	8/11/16 17:36	CGS	B

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2165198001	1	ARE-800-TMW-09	8270 SIM	Benzo(g,h,i)perylene
The Method Blank for method 8270 SIM reported a value greater than the reporting level for the analyte Benzo(g,h,i)perylene.				
2165198001	4	ARE-800-TMW-09	SW846 8260C	Hexachlorobutadiene
The Method Blank for method SW846 8260C reported a value greater than the reporting level for the analyte Hexachlorobutadiene.				
2165198002	1	ARE-800-TMW-07	8270 SIM	Benzo(g,h,i)perylene
The Method Blank for method 8270 SIM reported a value greater than the reporting level for the analyte Benzo(g,h,i)perylene.				
2165198002	E	ARE-800-TMW-07	8270 SIM	Fluorene
Result reported exceeds instrument calibration				
2165198002	E	ARE-800-TMW-07	8270 SIM	Naphthalene
Result reported exceeds instrument calibration				
2165198002	E	ARE-800-TMW-07	8270 SIM	Phenanthrene
Result reported exceeds instrument calibration				

DJM

ALS Environmental
1565 Jefferson Road
Building 300, Suite 360
Rochester, NY 14623
(585)288-5380

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: ARE800-0
ALS Quote #:

21651198

Client Name: Parsons Federal
Address: 100 High St. 4th Floor
Boston, MA 02110
Contact: Cory Mahony
Phone#: 617-449-1440
Project Name/#: FTMM
Bill To: Parsons Federal

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] -Y carla.rodman@parsons.com
Fax? [ ] -Y No.:

Container Type	AN	AN	CG	AN	AN	CG				
Container Size	4 oz	4 oz	40mL	4 oz	1L	40ml				
Preservative	4c	4c	4C & MEOH	4c	HCL	HCL				

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	EPH (fractionated)	SVOCs - Naphthalene & 2-methylnaphthalene (8270D)	VOC (8260C)+TICs including 1,2-dichloroethane & 1,2-dibromoethane	Lead (6020)	SVOC (8270D) + TICs (groundwater)	VOC (8260C)+TICs (groundwater)			AUTHORIZED TO RUN	EXTRACT AND HOLD
					Enter Number of Containers Per Sample or Field Results Below.									
1 ARE-800-TMW-09	8/4/16	0845	G	GW					2	3			X	
2 ARE-800-TMW-07	8/4/16	0915	G	GW					2	3			X	
3														
4														
5														
6														
7														
8														
9														
10														

Receipt Information (completed by Receiving Lab)
Cooler Temp: 1 Therm ID: 352
No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?		X	SES
(If present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:
Sample/COC Comments

ALS Field Services: [ ] Pickup [ ] Labor
[ ] Composite Sampling [ ] Rental Equipment
[ ] Other:

Project Comments: 748810
MDL Must Meet NJDEP Soil Cleanup Criteria and/or Groundwater Quality Standards

LOGGED BY(signature): [signature] DATE 8/4/16 TIME 1720
REVIEWED BY(signature): [signature] DATE 8-5-16 TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] PARSONS	8-5-16	1500	2 [signature] RCS	8-5-16	1500
3 [signature]	8-5-16		4 [signature]	8-5	1815
5 [signature]	8-5	2025	6 [signature]	8/5	2025
7			8		
9			10		

Data Deliverables: [ ] Standard [X] CLP-like [ ] USACE
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [X] NJ [ ] PA [ ] NC
Reportable to PADEP? Yes [ ]
PWSID #
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type- ERPIMS

*G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

ALS ENVIRONMENTAL SHIPPING ADDRESS: 1565 Jefferson Road, Building 300, Suite 360 Rochester, NY 14623 USA

UMW 08/06/16 0615