nationalgrid

Steven P. Stucker, C.P.G.
Lead Environmental Engineer

November 28, 2016

Mr. David Szymanski
Division of Solid and Hazardous Waste
NYSDEC, Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

Re: National Grid Dewey/Kensington Service Center (Site #915144)
PRR

Dear David:

Enclosed for your review is the Periodic Review Report (PRR) for the National Grid Dewey/Kensington Service Center Site (Site No. 915144).

The PRR includes the following from the period November 1, 2015 – November 1, 2016:

- Attachment 1 – PRR
- Attachment 2 – PRR Certification Form

If you have any questions, please feel free to contact me at 315.428.5652.

Sincerely,

for SPS

Steven P. Stucker, C.P.G.
Lead Environmental Engineer

ecc: Kelly Lewandowski - NYSDEC
Lisa Montesano – NG
Devin Shay- Groundwater & Environmental Services, Inc.

300 Erie Boulevard West, C-1
T: 315-428-5652 ■ F: 315-428-3549 ■ steven.stucker@us.ngrid.com ■ www.nationalgrid.com

Periodic Review Report – National Grid Dewey/Kensington Service Center (Site #915144)

Reporting Period – November 01, 2015 to November 01, 2016

I. Introduction

A. **Brief Site Summary** –
The National Grid Dewey/Kensington Service Center Site (#915144) is located in Buffalo, New York. National Grid owns the property and services its customers from the active facility. Service trucks, equipment, and materials are stored and maintained on-site. A mechanic's shop, several administrative buildings, an above ground fuel island, and an employee parking lot are currently located on-site and are part of the service center.

Prior to 1992, the service center also served as a hazardous waste management facility permitted by the New York State Department of Environmental Conservation (NYSDEC) (Part 373 Permit No. 9-1402-00397/00001-0). National Grid stored spent electrical transformers containing polychlorinated biphenyl- (PCB-) laden oil, various solid wastes, and bulk waste oils on-site. Some liquid wastes were stored within underground storage tanks (USTs). The hazardous waste management facility was closed in December 1992, in accordance with a NYSDEC-approved closure plan.

During excavation activities in the mid 1990s, it was discovered that soil and groundwater were contaminated near a UST identified as Solid Waste Management Unit (SWMU) #7. Multiple USTs were subsequently removed, and an investigation including the advancement of soil borings and the installation of groundwater monitoring wells was completed. A remedial action was completed in 2002 and a long-term groundwater monitoring program was implemented.

On October 3, 2011, National Grid received official notification that the site was deleted from the New York State Registry of Inactive Hazardous Waste Disposal Sites (letter from Ms. Kelly Lewandowski, NYSDEC Chief Site Control Section, to Mr. Chuck Willard, NG SIR Director).

B. **Remedial Program Effectiveness** – During the reporting period (November 01, 2015, to November 01, 2016), the long-term remedial objectives were met for the site.

C. **Remedial Program Compliance** - The major elements within the Institutional Control/Engineering Control(s) (IC/EC) Plan are in compliance. Refer to Attachment 3 for the Annual Monitoring Report for annual groundwater sampling events.

D. **Remedial Program Recommendations** - It is recommended that no changes be made to the IC/EC Plan. It is recommended that the Project Review Report (PRR) submittal frequency (annual) remain the same. The next PRR submittal deadline would be December 1, 2017.

II. Site Overview

A. Site Location and Boundaries –

The Dewey/Kensington Service Center is an active National Grid facility, encompasses approximately 23 acres, and is generally located within the center of Buffalo, New York in a predominantly residential area. To the west are Delaware Park, Canisius College, and Forest Lawn Cemetery; to the east are Fillmore Junior High School and the Erie County Medical Center; immediately to the west are the St. Mary School and Sisters of Charity Hospital; and to the south is a four lane expressway.

The site is bordered to south by Kensington Avenue and to the north by Dewey Avenue. The New York Central Railroad tracks boarder the site to the east. The expressway runs along the western side of the site.

B. Regulatory History and Remedy Features –

In September 1992, excavation activities at the facility, in the vicinity of Building #13, revealed petroleum-impacted gravel and a broken vent line connected to an underground waste oil tank. The former waste oil tank was removed and four groundwater monitoring wells (ESI-1, ESI-2, ESI-3, and ESI-4) were installed in the vicinity of the former tank to supplement an existing monitoring well (MW-1) and to facilitate periodic groundwater monitoring in this area.

In February 1994, National Grid agreed to conduct a focused Resource Conservation and Recovery Act (RCRA) Facility Assessment- (RFA-) type soil and groundwater investigation, and a Focused Risk Assessment/ Corrective Measures Study (FRA/CMS) to address the concerns identified by the RFA.

During Fall 1994, National Grid conducted soil and groundwater investigation activities in accordance with the NYSDEC-approved *Soil and Groundwater Investigation Work Plan* (1994). These investigations showed the presence of several volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs) in groundwater at concentrations above NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 – *Ambient Water Quality Standards and Guidance Values* (NYSDEC, 1998, amended 2000). Based on these results, NYSDEC requested

implementation of the quarterly groundwater monitoring program proposed in the *SWMU #7 Soil/Groundwater Investigation Report (1994*).

The *SWMU #7 Focused Risk Assessment and Corrective Measures Study Report* (FRA/CMS Report) (1995, revised 1996) concluded that the limited action alternative (i.e., implementing a groundwater monitoring program) would adequately meet the corrective measure objective of mitigating the offsite migration of impacted groundwater. Following the initial submittal of the FRA/CMS Report, a *Groundwater Sampling and Analysis Plan* (SAP) (1996) was submitted to NYSDEC in May 1996. The May 1996 SAP was then revised based upon NYSDEC comments, and the revised SAP for the groundwater monitoring program was presented in the revised FRA/CMS Report dated June 1996.

In November 1997, National Grid entered into a Consent Order with NYSDEC to guide future site monitoring and to establish a framework for implementing additional site investigation or remediation. As mandated in the Consent Order, semiannual (spring and fall) groundwater monitoring events are conducted at SWMU #7 monitoring wells. The list of wells sampled during each groundwater monitoring event has been modified through time in response to NYSDEC requirements and the results of investigation/evaluation activities, as agreed to by NYSDEC.

The Consent Order specifies that a contingency plan must be implemented to evaluate additional remedial activities if analytical results from monitoring wells located at the property boundary indicate an exceedance of NYSDEC groundwater quality standards presented in TOGS 1.1.1 for two consecutive monitoring events. The monitoring wells designated as property boundary wells have changed, as new monitoring wells have been installed as part of the contingency plan implementation. For example, monitoring wells MW-7 and MW-9 were designated as property boundary wells in the Consent Order. In 1999, the property boundary wells included monitoring wells MW-6, MW-7, MW-11, MW-12, and MW-14. The current property boundary well arrangement includes monitoring wells MW-6, MW-11, MW-12, MW-20, MW-21, and MW-24 (installed spring 2002).

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

A. **Evaluation of Remedy Performance** - The wells are part of the remedy performance. However, there is no current requirement for a site inspection of the existing facility buildings, fences, or fuel tanks. Based on the well inspections and analytical data, the remedy performance has been effective in protecting facility workers and the public.

IV. IC/EC Plan Compliance Report

A. IC/EC Requirements and Compliance

1. **IC/EC Controls**

   The ICs/ECs included:

   - Semi-annual groundwater monitoring well inspections of the following wells: MW-1, MW-2, MW-5, MW-6, MW-7, MW-9, MW-10, MW-11, MW-12, MW-13, MW-15, MW-16, MW-17, MW-19, MW-20, MW-21, MW-24, MW-25, and ESI-1.
   - Semi-annual groundwater monitoring well sampling and analysis of the following wells: MW-1, MW-6, MW-9, MW-11, MW-12, MW-20, MW-21, MW-24.

2. **IC/EC Goals** - Each goal is being met and/or working effectively.

3. **IC/EC Corrective Measures** – No deficiencies were noted during the quarterly inspections.

4. **IC/EC Conclusions/Recommendations** – The program is in compliance and there are no recommendations at this time.

B. **IC/EC Certification** – Refer to PRR Form - Attachment 2 for the certification.

V. Monitoring Plan Compliance Report – The Annual Monitoring Report is enclosed as Attachment 3.

VI. Operation & Maintenance (O&M) Plan Compliance Report - Not Applicable

VII. Overall PRR Conclusions and Recommendations

A. Compliance with Site Management Plan (SMP)

1. **Requirements** - All IC/EC Plan requirements were met during this reporting period.

2. **Exposure Pathways** – There are no new completed exposure pathways resulting in unacceptable risk.

3. **Proposed Plans and Schedule to Meet Compliance** – No plan proposed.

B. **Performance and Effectiveness of the Remedy –** The remedy as described by the Record of Decision and executed by National Grid has been effective in meeting the program goals.

C. **Future PRR Submittals** – The frequency of PRR Submittals should remain annual. Therefore, the next PRR submittal deadline will be December 1, 2017.

VIII. Additional Guidance - Not Needed

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 915144

Site Name Niagara Mohawk Dewey Ave. Service Sta.

Site Address: 144 Kensington Avenue Zip Code: 14214
City/Town: Buffalo
County: Erie
Site Acreage:

Reporting Period: November 01, 2015 to November 01, 2016

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 915144 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
89.16-1-2	National Grid	Monitoring Plan O&M Plan
89.16-1-5	National Grid	Monitoring Plan O&M Plan

Box 4

Description of Engineering Controls

None Required

Not Applicable/No EC's

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 915144

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

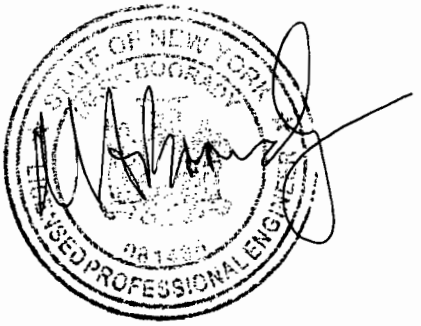
I Mark A. Boorady (print name) at 5 Technology Place, Suite 4, East Syracuse, NY 13057 (print business address),

am certifying as Owner's Representative from National Grid (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

November 21, 2016
Date



NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER ARTICLE 145 SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

Steven P. Stucker, C.P.G.
Lead Environmental Engineer

November 28, 2016

Mr. David Szymanski
Division of Solid and Hazardous Waste
NYSDEC, Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

Re: National Grid Dewey/Kensington Service Center (Site #915144)
2016 Annual Groundwater Monitoring Report

Dear David:

Enclosed for your review is the Annual groundwater Monitoring Report for the National Grid Dewey/Kensington Service Center Site (Site No. 915144).

The Annual Groundwater Report includes the following from the period November 1, 2015- November 1, 2016:

- Figures: Site Location Map, Site Map, and Groundwater Monitoring Map
- Tables: Groundwater Elevations and Groundwater Analytical Results – Total PCBs
- Appendices: Groundwater Monitoring Field Data and Groundwater Monitoring Laboratory Data

If you have any questions, please feel free to contact me at 315.428.5652.

Sincerely,

for SPS

Steven P. Stucker, C.P.G.
Lead Environmental Engineer

cc: Kelly Lewandowski - NYSDEC
Lisa Montesano – NG
Devin T. Shay- Groundwater & Environmental Services, Inc.

300 Erie Boulevard West, C-1
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nationalgrid

Dewey/Kensington Service Center
144 Kensington Avenue, Buffalo, New York

2016 Annual Groundwater Monitoring Report

Prepared by:

GES

5 Technology Place, Suite 4
East Syracuse, New York 13057

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Section 1
Introduction

1.1 Introduction

This annual report presents the results of the groundwater sampling and analysis activities conducted by CDM Smith and Groundwater and Environmental Services, Inc. (GES) at the National Grid, Dewey/Kensington Service Center in Buffalo, New York (the site). These activities were completed as part of ongoing investigations of a former underground storage tank (UST), identified as Solid Waste Management Unit (SWMU) #7. The April 2016 and October 2016 groundwater monitoring events were conducted in conformance with the Order on Consent (Consent Order) Index Number R9-4407-96-09, dated November 19, 1997, between National Grid and the New York State Department of Environmental Conservation (NYSDEC) to monitor the potential migration of impacted groundwater associated with SWMU #7. As further discussed in Section 1.3, the SWMU #7 groundwater monitoring program was modified as identified in NYSDEC's July 22, 2003 letter, which presents comments on the *2002 Soil Investigation and Spring/Fall 2002 Groundwater Monitoring Report*.

1.2 Background and Site Investigation History

The Dewey/Kensington Service Center is an active facility located at 144 Kensington Avenue between Dewey and Kensington Avenues in Buffalo, New York (**Figure 1-1**). The service center previously included a hazardous waste management facility permitted by NYSDEC (Part 373 Permit No. 9-1402-00397/00001-0). The hazardous waste management facility was closed in December 1992 in accordance with a NYSDEC-approved closure plan.

In September 1992, excavation activities at the facility in the vicinity of Building #13 revealed petroleum-impacted gravel and a broken vent line connected to an underground waste oil tank. The waste oil tank was subsequently removed, and four groundwater monitoring wells (ESI-1, ESI-2, ESI-3, and ESI-4) were installed in the vicinity of the former tank to supplement an existing monitoring well (MW-1) and to facilitate periodic groundwater monitoring in this area. **Figure 1-2** illustrates relevant site features and the locations of soil borings and monitoring wells.

In February 1994, National Grid agreed to conduct a focused Resource Conservation and Recovery Act (RCRA) Facility Assessment- (RFA-) type soil and groundwater investigation, and a Focused Risk Assessment/ Corrective Measures Study (FRA/CMS) to address the concerns identified by the RFA.

During Fall 1994, National Grid conducted soil and groundwater investigation activities in accordance with the NYSDEC-approved *Soil and Groundwater Investigation Work Plan* (1994). These investigations showed the presence of several volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs) in groundwater at concentrations above NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 – *Ambient Water Quality Standards and Guidance Values* (NYSDEC, 1998, amended 2000). Based on these results, NYSDEC requested implementation of the quarterly groundwater monitoring program proposed in the *SWMU #7 Soil/Groundwater Investigation Report (1994*).

The *SWMU #7 Focused Risk Assessment and Corrective Measures Study Report* (FRA/CMS Report) (1995, revised 1996) concluded that the limited action alternative (i.e., implementing a groundwater

monitoring program) would adequately meet the corrective measure objective of mitigating the offsite migration of impacted groundwater. Following the initial submittal of the FRA/CMS Report, a *Groundwater Sampling and Analysis Plan* (SAP) (1996) was submitted to NYSDEC in May 1996. The May 1996 SAP was then revised based upon NYSDEC comments, and the revised SAP for the groundwater monitoring program was presented in the revised FRA/CMS Report dated June 1996.

In November 1997, National Grid entered into a Consent Order with NYSDEC to guide future site monitoring and to establish a framework for implementing additional site investigation or remediation. As mandated in the Consent Order, semi-annual (spring and fall) groundwater monitoring events are conducted at SWMU #7 monitoring wells. The list of wells sampled during each groundwater monitoring event has been modified through time in response to NYSDEC requirements and the results of investigation/evaluation activities, as agreed to by NYSDEC.

The Consent Order specifies that a contingency plan must be implemented to evaluate additional remedial activities if analytical results from monitoring wells located at the property boundary indicate an exceedance of NYSDEC groundwater quality standards presented in TOGS 1.1.1 for two consecutive monitoring events. The monitoring wells designated as property boundary wells have changed, as new monitoring wells have been installed as part of the contingency plan implementation. For example, monitoring wells MW-7 and MW-9 were designated as property boundary wells in the Consent Order. In 1999, the property boundary wells included monitoring wells MW-6, MW-7, MW-11, MW-12, and MW-14. The current property boundary well arrangement includes monitoring wells MW-6, MW-11, MW-12, MW-20, MW-21, and MW-24 (installed spring 2002). Refer to Figure 1-2 for well locations. Monitoring well construction details are summarized in **Table 1-1**.

The table below summarizes instances when groundwater samples from two consecutive groundwater sampling events exhibited the presence of constituents in groundwater above TOGS standards and guidance values in the property boundary wells. The table also presents the corresponding NYSDEC-approved contingency plan activities that were conducted in response to such instances.

Consecutive Sampling Events with Property Boundary Well TOGS Standards and Guidance Value Exceedances	**Corresponding Contingency Plan Activity**
Fall 1997 and Spring 1998: PCBs in groundwater samples collected from monitoring well MW-9.	Conducted MW-9 supplemental investigation, including installing additional monitoring wells MW-13, MW-14, and MW-15 in October 1998.
Spring 1999 and Fall 1999: PCBs in groundwater samples collected from monitoring wells MW-9 and MW-14.	Conducted supplemental site investigation, including research of site history and installing additional monitoring wells MW-16, MW-17, MW-18, MW-19, MW-20, and MW-21 in August and September 2000.
Fall 2000 and Spring 2001: PCBs in groundwater samples collected from monitoring wells MW-9 and MW-14.	Conducted 2002 soil investigation, including advancing soil borings (SB-101, MW-22, SB-102, SB-103, SB-104, SB-105, SB-106, MW-23, and SB-107), installing monitoring wells (MW-22, MW-23, and MW-24) and sampling and fingerprint analysis of light non-aqueous phase liquid (LNAPL) in monitoring well ESI-1.

On October 3, 2011, National Grid received official notification that the site was deleted from the New York State Registry of Inactive Hazardous Waste Disposal Sites (letter from Ms. Kelly Lewandowski, NYSDEC Chief Site Control Section, to Mr. Chuck Willard, NG SIR Director).

1.3 Modifications to the Groundwater Monitoring Program

In the 2002 Investigation Report, modifications to the SWMU #7 groundwater monitoring program were recommended. The recommendations were based on the results of the 2002 soil investigation, the 2002 groundwater monitoring events, a review of previous soil and groundwater results, and LNAPL fingerprinting. NYSDEC approved the recommendations presented in the 2002 Report (with select modifications) in a July 22, 2003 letter to National Grid. The recommendations, inclusive of NYSDEC's modifications, were as follows:

- Discontinue VOC analysis except at monitoring wells ESI-1 and MW-16. LNAPL (if present) in monitoring well ESI-1 will be removed. If LNAPL is not present for three consecutive monitoring events in monitoring well ESI-1, groundwater will be sampled and analyzed for VOCs annually. To monitor the conditions downgradient of monitoring well ESI-1, groundwater from monitoring well MW-16 will be sampled and analyzed for VOCs annually. If VOCs are detected in groundwater at MW-16, additional VOC analysis will be required from monitoring wells located downgradient of MW-16.
- Discontinue lead analysis for all monitoring wells.
- Continue PCB analysis at select monitoring wells (i.e., the property boundary wells, MW-1, and MW-9).
- Discontinue data validation (for all groundwater samples collected) for every groundwater monitoring event.
- Continue to sample and measure groundwater levels from the monitoring wells, as summarized in Section 3 - Schedule.

Per NYSDEC's July 27, 2011 letter to National Grid, semi-annual groundwater sampling events will continue. However, both monitoring events will be documented in a single annual report to be submitted in the fall of each year.

Section 2

Groundwater Monitoring Activities

2.1 Groundwater Well Gauging

For the April 19-20, 2016 and October 19-20, 2016 events, static groundwater levels (presented in Table 1-1) were measured prior to groundwater sample collection to evaluate groundwater flow patterns. Groundwater levels were obtained from 18 of the groundwater monitoring wells associated with SWMU #7 (MW-1, MW-2, MW-5, MW-6, MW-7, MW-9, MW-10, MW-11, MW-12, MW-13, MW-15, MW-16, MW-17, MW-19, MW-20, MW-21, MW-24, and ESI-1). During the October 2016 well gauging event, data was not collected at MW-2 due to staged construction materials on top of the well.

The groundwater flow direction is generally toward the south. Refer to **Figure 2-1** for the general groundwater flow direction.

2.2 Groundwater Analytical Results

For the April 2016 and October 2016 events, groundwater samples were analyzed for PCBs. In addition, field measurements of pH, temperature, conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential were obtained prior to sample collection. The groundwater monitoring field data is included in **Appendix A**.

Eight monitoring wells (MW-1, MW-6, MW-9, MW-11, MW-12, MW-20, MW-21, and MW-24) were sampled and analyzed for PCBs during the April 2016 and October 2016 events. Analytical results were compared to the New York State ambient water quality standards and guidance values and groundwater effluent limitations presented in TOGS 1.1.1 (0.09 parts per billion for total PCBs).

For the April 2016 sampling event, PCBs were detected in two of the eight groundwater samples collected from site groundwater monitoring wells (3.2 parts per billion [ppb] in the sample collected from MW-1, and 11 ppb in the sample collected from MW-9). For the October 2016 sampling event, PCBs were detected in one of the eight groundwater samples collected from site wells (37.4 ppb in the groundwater sample collected from MW-9).

Total PCB results from the groundwater monitoring events are presented in **Table 2-1**. **Appendix B** presents the laboratory analytical reports.

2.3 LNAPL Observation

Prior to groundwater purging and sample collection activities, each monitoring well was gauged with an oil/water interface probe to measure the presence or absence of LNAPL. LNAPL was not observed at any of the monitoring wells during the April 2016 or October 2016 events.

2.4 Other Operations Maintenance and Monitoring Activities

During each semi-annual groundwater sampling event, the sorbent boom was checked at monitoring well ESI-1.

Section 3
Schedule

3.1 Schedule

Based on the results of the groundwater monitoring program and the recommendations presented in the 2002 Investigation Report (subsequently modified by the NYSDEC's July 22, 2003 response letter); the modified groundwater monitoring program, consisting of semi-annual (spring and fall) groundwater monitoring events, will be continued. The scope of the monitoring program is summarized in the following table.

Monitoring Wells for Continued Groundwater Sampling	Monitoring Wells for Groundwater Level Measurement Only
ESI-1 (VOC analysis)*	MW-2
MW-1 (PCB analysis) ***	MW-5
MW-6 (PCB analysis) ***	MW-17
MW-9 (PCB analysis) ***	MW-10
MW-11 (PCB analysis) ***	MW-13
MW-12 (PCB analysis) ***	MW-15
MW-20 (PCB analysis) ***	MW-17
MW-21 (PCB analysis) ***	MW-19
MW-24 (PCB analysis) ***	

Notes:

* One groundwater sample will be collected from monitoring well ESI-1 only if LNAPL is not present for three consecutive sampling events.

*** Monitoring well will be sampled twice a year.

The next semi-annual groundwater monitoring event is scheduled for April 2017. The NYSDEC Project Manager will be notified at least one week in advance of the event. Reporting will be annual (submitted after the fall event) as part of the Periodic Review Report.

Section 4
Conclusions and Recommendations

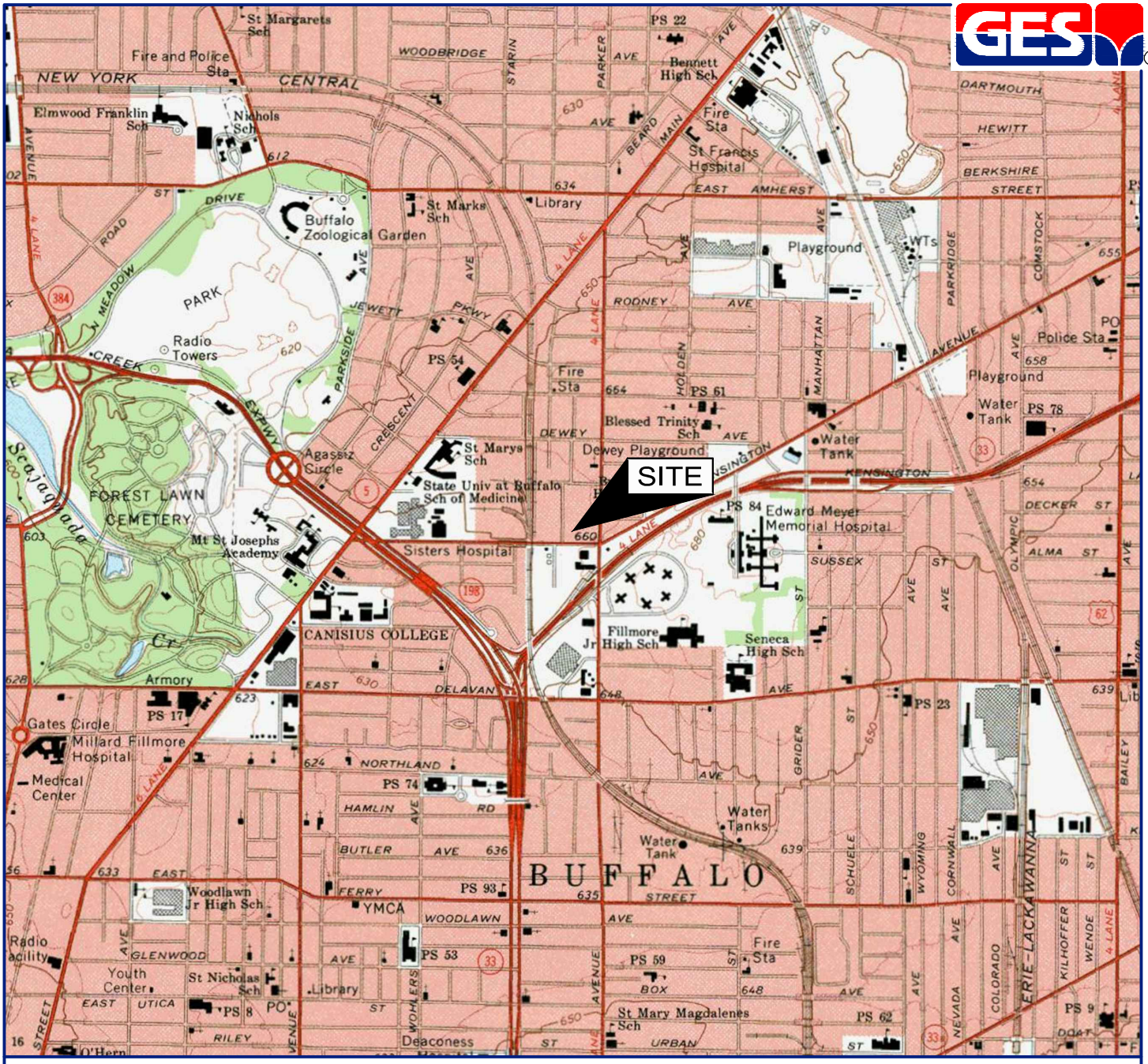
4.1 Conclusions

Eight monitoring wells were sampled and analyzed for PCBs during the April 2016 and October 2016 events (MW-1, MW-6, MW-9, MW-11, MW-12, MW-20, MW-21, and MW-24). For the April 2016 sampling event, PCBs were detected in groundwater samples collected from two of the eight site groundwater monitoring wells (MW-1 and MW-9). For the October 2016 sampling event, PCBs were detected in groundwater samples collected from one of the eight site groundwater monitoring wells (MW-9).

4.2 Recommendations

At this time, no changes to the semi-annual site sampling plan are proposed.

Figures



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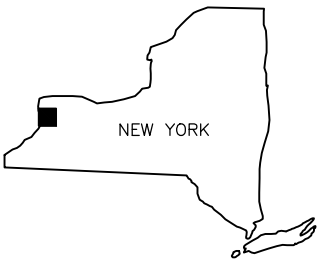
BUFFALO NE, NEW YORK
CONTOUR INTERVAL = 10'



QUADRANGLE LOCATION

DRAFTED BY: W.A.W.	SITE LOCATION MAP
CHECKED BY:	NATIONAL GRID DEWEY AVENUE SERVICE CENTER 93 DEWEY AVENUE BUFFALO, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 5 TECHNOLOGY PLACE, SUITE 4, EAST SYRACUSE, NY 13057
NORTH	SCALE IN FEET: 0 — 2000 / DATE: 11-2-16 / FIGURE: 1-1

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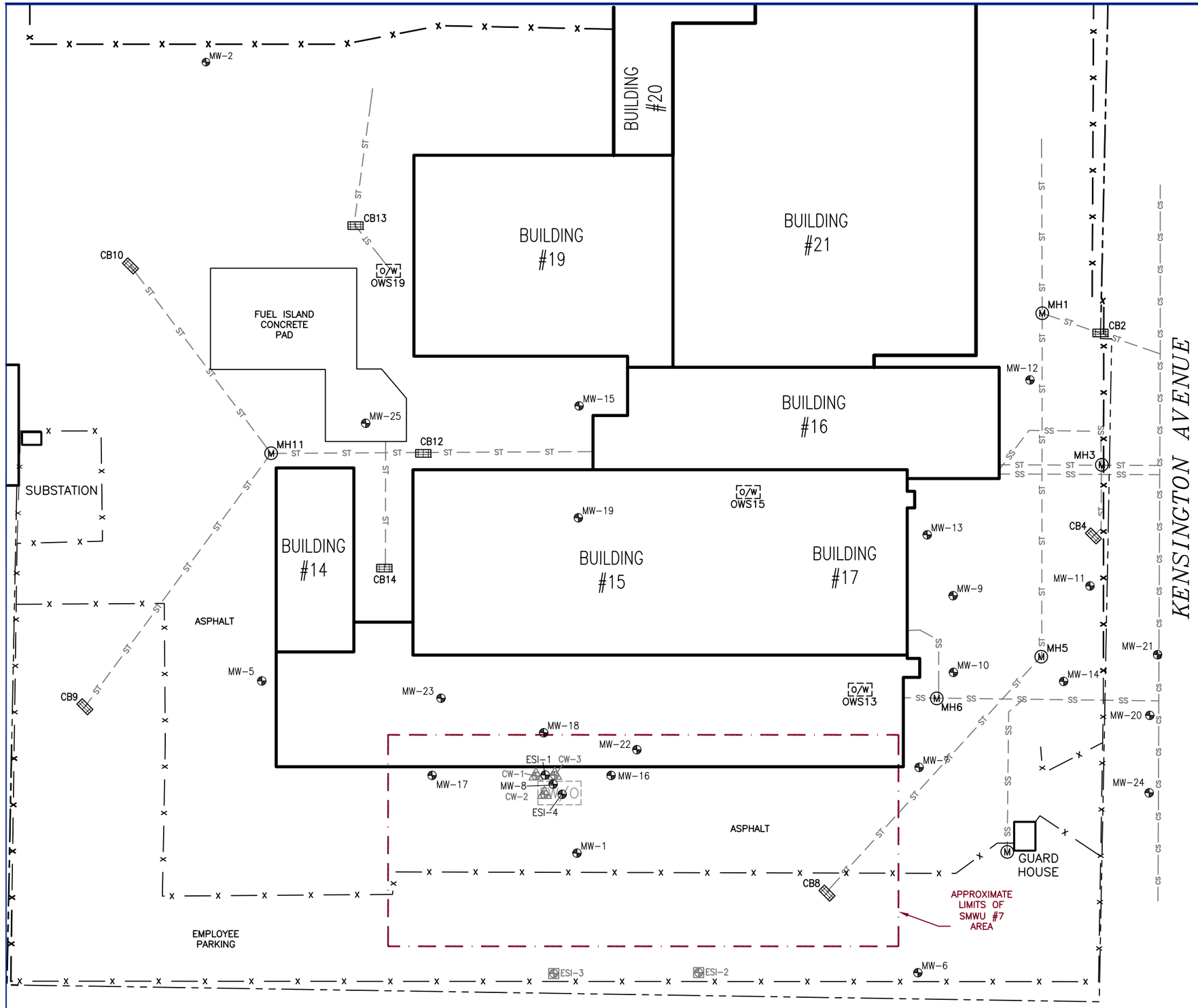

DRAFTED BY: W.G.S.	SITE MAP
CHECKED BY:	NATIONAL GRID DEWEY AVENUE SERVICE CENTER 93 DEWEY AVENUE BUFFALO, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 5 TECHNOLOGY PLACE, SUITE 4, EAST SYRACUSE, NY 13057
NORTH	SCALE IN FEET: 0 APPROXIMATE 60 / DATE: 11-7-16 / FIGURE: 1-2

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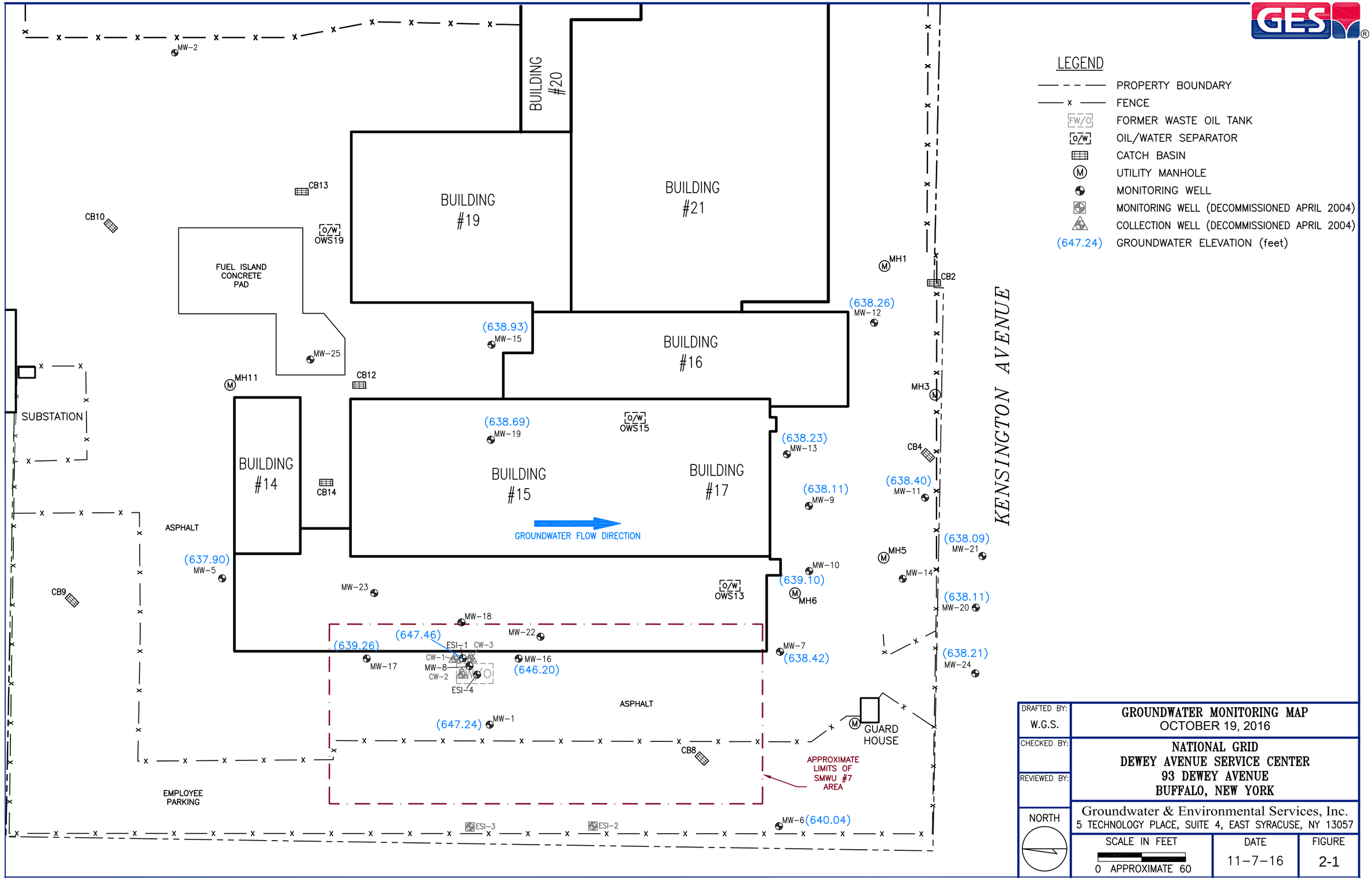

DRAFTED BY: W.G.S.	GROUNDWATER MONITORING MAP OCTOBER 19, 2016
CHECKED BY:	NATIONAL GRID DEWEY AVENUE SERVICE CENTER 93 DEWEY AVENUE BUFFALO, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 5 TECHNOLOGY PLACE, SUITE 4, EAST SYRACUSE, NY 13057
NORTH	SCALE IN FEET: 0 APPROXIMATE 60 / DATE: 11-7-16 / FIGURE: 2-1

M:\Graphics\0600-Syracuse\Misc\National Grid\Buffalo (Dewey ave)\Buffalo (dewey ave) SM.dwg, B-60, WShea

Tables

Table 1-1: Groundwater Elevations
National Grid
Dewey Avenue Service Center
Buffalo, New York

Well ID	TOC Elevation (ft AMSL)	Depth to Well Bottom (ft BTOC)	April 2011 DTW (ft BTOC)	April 2011 Potentiometric Surface Elev. (ft AMSL)	October 2011 DTW (ft BTOC)	October 2011 Potentiometric Surface Elev. (ft AMSL)	April 2012 DTW (ft BTOC)	April 2012 Potentiometric Surface Elev. (ft AMSL)	October 2012 DTW (ft BTOC)
MW-1	650.76	29.90	2.85	647.91	3.07	647.69	3.41	647.35	3.30
MW-2	650.55	44.17	*	*	15.26	635.29	12.75	637.80	12.20
MW-5	651.65	21.40	10.68	640.97	11.55	640.10	11.72	639.93	11.25
MW-6	650.25	21.05	6.90	643.35	10.20	640.05	10.10	640.15	9.90
MW-7	650.02	21.30	9.46	640.56	11.56	638.46	11.69	638.33	10.88
MW-9	648.95	22.05	9.70	639.25	10.76	638.19	11.02	637.93	10.58
MW-10	649.46	24.25	9.48	639.98	10.39	639.07	10.88	638.58	10.76
MW-11	647.11	20.22	7.80	639.31	8.76	638.35	8.98	638.13	8.14
MW-12	646.90	19.55	7.60	639.30	8.42	638.48	8.50	638.40	8.24
MW-13	650.05	26.25	10.66	639.39	11.65	638.40	11.95	638.10	11.50
MW-15	651.88	23.80	11.58	640.30	12.81	639.07	13.35	638.53	12.47
MW-16	651.72	20.36	6.45	645.27	5.40	646.32	6.65	645.07	6.50
MW-17	651.76	20.60	11.57	640.19	11.86	639.90	12.80	638.96	12.37
MW-19	651.69	24.00	11.08	640.61	12.82	638.87	13.27	638.42	12.63
MW-20	646.76	22.60	7.55	639.21	8.48	638.28	8.73	638.03	8.82
MW-21	646.70	21.85	7.65	639.05	8.35	638.35	8.80	637.90	8.34
MW-24	647.01	24.25	7.60	639.41	8.53	638.48	8.80	638.21	8.40
ESI-1	651.66	21.50	3.68	647.98	3.94	647.72	4.18	647.48	4.40

Notes:
TOC = Top of Well Casing
AMSL = Above Mean Sea Level
DTW = Depth to Water
BTOC = Below Top of Casing
Light non-aqueous phase liquid (LNAPL) observed in well ESI-1 only. Numbers in parentheses present depths and elevations to LNAPL.
* = MW-2 is typically inaccessible due to
- = Depth is unknown

Table 1-1: Groundwater Elevations
National Grid
Dewey Avenue Service Center
Buffalo, New York

Well ID	October 2012 Potentiometric Surface Elev. (ft AMSL)	April 2013 DTW (ft BTOC)	April 2013 Potentiometric Surface Elev. (ft AMSL)	October 2013 DTW (ft BTOC)	October 2013 Potentiometric Surface Elev. (ft AMSL)	April 2014 DTW (ft BTOC)	April 2014 Potentiometric Surface Elev. (ft AMSL)	October 2014 DTW (ft BTOC)	October 2014 Potentiometric Surface Elev. (ft AMSL)
MW-1	647.46	3.02	647.74	3.23	647.53	3.02	647.74	3.82	646.94
MW-2	638.35	11.62	638.93	11.42	639.13	11.30	639.25	15.40	635.15
MW-5	640.40	10.89	640.76	11.58	640.07	9.62	642.03	12.53	639.12
MW-6	640.35	7.58	642.67	8.25	642.00	7.95	642.30	11.15	639.10
MW-7	639.14	10.31	639.71	11.30	638.72	9.58	640.44	11.98	638.04
MW-9	638.37	10.07	638.88	10.00	638.95	9.75	639.20	11.16	637.79
MW-10	638.70	9.57	639.89	10.51	638.95	10.08	639.38	Not Gauged	Not Gauged
MW-11	638.97	8.12	638.99	8.25	638.86	7.95	639.16	8.80	638.31
MW-12	638.66	7.91	638.99	8.04	638.86	7.73	639.17	8.90	638.00
MW-13	638.55	11.05	639.00	11.31	638.74	10.86	639.19	12.17	637.88
MW-15	639.41	12.21	639.67	12.22	639.66	12.08	639.80	13.62	638.26
MW-16	645.22	5.75	645.97	4.82	646.90	5.55	646.17	6.06	645.66
MW-17	639.39	11.75	640.01	12.45	639.31	11.23	640.53	12.19	639.57
MW-19	639.06	12.26	639.43	12.52	639.17	12.50	639.19	13.56	638.13
MW-20	637.94	7.80	638.96	8.20	638.56	7.80	638.96	9.00	637.76
MW-21	638.36	7.80	638.90	8.20	638.50	7.80	638.90	8.72	637.98
MW-24	638.61	7.90	639.11	8.30	638.71	7.92	639.09	9.13	637.88
ESI-1	647.26	4.00	647.66	4.20	647.46	3.80	647.86	4.60	647.06

Notes:
TOC = Top of Well Casing
AMSL = Above Mean Sea Level
DTW = Depth to Water
BTOC = Below Top of Casing
Light non-aqueous phase liquid (LNAPL) observed in well ESI-1 only. Numbers in parentheses present depths and elevations to LNAPL.
* = MW-2 is typically inaccessible due to staged
- = Depth is unknown

Table 1-1: Groundwater Elevations
National Grid
Dewey Avenue Service Center
Buffalo, New York

Well ID	April 2015 DTW (ft BTOC)	April 2015 Potentiometric Surface Elev. (ft AMSL)	October 2015 DTW (ft BTOC)	October 2015 Potentiometric Surface Elev. (ft AMSL)	April 2016 DTW (ft BTOC)	April 2016 Potentiometric Surface Elev. (ft AMSL)	October 2016 DTW (ft BTOC)	October 2016 Potentiometric Surface Elev. (ft AMSL)
MW-1	2.90	647.86	2.98	647.78	2.82	647.94	3.52	647.24
MW-2	14.60	635.95	13.00	637.55	12.54	638.01	Not Gauged	Not Gauged
MW-5	9.81	641.84	12.92	638.73	10.60	641.05	13.75	637.90
MW-6	8.46	641.79	10.30	639.95	8.85	641.40	10.21	640.04
MW-7	10.30	639.72	11.82	638.20	10.51	639.51	11.60	638.42
MW-9	10.26	638.69	10.70	638.25	10.45	638.50	10.84	638.11
MW-10	10.05	639.41	10.80	638.66	9.92	639.54	10.36	639.10
MW-11	8.23	638.88	8.55	638.56	8.30	638.81	8.71	638.40
MW-12	8.00	638.90	8.41	638.49	8.24	638.66	8.64	638.26
MW-13	11.75	638.30	11.76	638.29	11.46	638.59	11.82	638.23
MW-15	12.50	639.38	13.00	638.88	12.88	639.00	12.95	638.93
MW-16	5.75	645.97	5.25	646.47	6.00	645.72	5.52	646.20
MW-17	10.87	640.89	13.08	638.68	13.05	638.71	12.50	639.26
MW-19	12.49	639.20	13.03	638.66	12.83	638.86	13.00	638.69
MW-20	8.12	638.64	8.22	638.54	8.40	638.36	8.65	638.11
MW-21	8.14	638.56	8.86	637.84	8.28	638.42	8.61	638.09
MW-24	8.22	638.79	8.80	638.21	8.52	638.49	8.80	638.21
ESI-1	3.66	648.00	3.80	647.86	3.55	648.11	4.20	647.46

Notes:
TOC = Top of Well Casing
AMSL = Above Mean Sea Level
DTW = Depth to Water
BTOC = Below Top of Casing
Light non-aqueous phase liquid (LNAPL) observed in well ESI-1 only. Numbers in parentheses present depths and elevations to LNAPL.
* = MW-2 is typically inaccessible due to staged
- = Depth is unknown

Table 2-1: Groundwater Analytical Results - Total PCBs (units in ppb or ug/L)
National Grid
Dewey Avenue Service Center
Buffalo, New York

		Well ID							
Date	**NYSDEC Value [1]**	**MW-1**	**MW-6**	**MW-9**	**MW-11**	**MW-12**	**MW-20**	**MW-21**	**MW-24**
October 2016	0.09	ND	ND	**37.4**	ND	ND	ND	ND	ND
April 2016	0.09	**3.2**	ND	**11**	ND	ND	ND	ND	ND
October 2015	0.09	**9.10**	ND	**26**	ND	ND	0.053	ND	ND
April 2015	0.09	**0.8**	ND	**6.9**	ND	ND	ND	ND	ND
October 2014	0.09	**0.22**	ND	**43**	ND	ND	ND	ND	ND
April 2014	0.09	**2.8**	ND	**9.4**	ND	ND	ND	ND	ND
October 2013	0.09	**0.15**	ND	**16.0**	**0.10**	ND	ND	ND	ND
April 2013	0.09	**5.7**	ND	**24.0**	ND	ND	ND	ND	ND
October 2012	0.09	**4.5**	**0.16**	**11.0**	ND	ND	ND	ND	0.051
April 2012	0.09	**1.4**	ND	**29.0**	ND	ND	ND	ND	ND
October 2011	0.09	**4.9**	ND	**8.7**	ND	ND	ND	ND	ND
April 2011	0.09	**7.0**	ND	**28.0**	ND	ND	ND	ND	ND
October 2010	0.09	**4.1**	ND	**24.0**	ND	ND	ND	ND	ND
April 2010	0.09	**4.6**	ND	**19.0**	ND	ND	ND	ND	ND
October 2009	0.09	1.4 QSU	ND	15 QSU, D08	ND	ND	ND	ND	ND
April 2009	0.09	**4.8**	**1.1**	ND	ND	ND	ND	ND	ND
October 2008	0.09	**0.44**	ND	**13**	**0.44**	ND	ND	ND	ND
April 2008	0.09	**0.54**	ND	**4.5**	ND	0.01	ND	ND	ND
October 2007	0.09	**1.2**	ND	ND	ND	ND	ND	ND	ND
April 2007	0.09	**1.2**	ND	**9.9**	ND	ND	ND	ND	ND
November 2006	0.09	ND	ND	ND	ND	ND	ND	ND	ND
June 2006	0.09	**1.5**	ND	ND	ND	ND	ND	ND	ND
November 2005	0.09	**1.2**	ND	**17**	ND	ND	ND	ND	ND
April 2005	0.09	**1**	ND	**9.5**	ND	ND	ND	ND	ND
November 2004	0.09	1.7 P	ND	**15**	ND	ND	ND	ND	ND
March 2004	0.09	0.87 P	ND	32.3 P	ND	ND	ND	ND	ND
October 2003	0.09	**1.6**	ND	40.3 PJ	ND	ND	ND	ND	ND
December 2002	0.09	**1.2**	ND	**16**	ND	ND	ND	ND	ND
June 2002	0.09	3.2 J	ND	20 J	ND	ND	ND	ND	ND
October 2001	0.09	3.0 J	ND	29 JN	ND	ND	ND	ND	NS
April 2001	0.09	**3.4**	NS	**6.3**	ND	ND	ND	ND	NS
December 2000	0.09	2.9 JN	NS	21 JN	ND	ND	ND	ND	NS
June 2000	0.09	**2.9**	NS	10 J	ND	ND	NS	NS	NS
December 1999	0.09	3.0 J	NS	21 J	ND	ND	NS	NS	NS
July 1999	0.09	5.9 JN	NS	44 JN	ND	ND	NS	NS	NS
November 1998	0.09	**3.6**	NS	ND	ND	ND	NS	NS	NS
May 1998	0.09	**1.2**	NS	**6.7**	NS	NS	NS	NS	NS

Notes:

(1) NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) "Ambient Water Quality Standards and Guidance Values and Ground Water Effluent Limitations," April 2000, Class GA Ground Water Standards and Guidance Values.

Laboratory Qualifier Notes:

J = Analyte was positively identified; however, the associated numerical value is an estimated concentration only.

JN = The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

P = Greater than 25% difference for detected concentration between two GC columns.

QSU = Sulfur (EPA 3660) clean-up performed on extract.

D08 = Dilution required due to high concentration of target analyte(s).

ND = Not Detected above detection limit.

NS = Not Sampled.

Units in parts per billion (ppb) or micrograms per liter (ug/L).

Bolded numbers indicate Guidance Value Exceedences

Appendix A

Groundwater Monitoring Field Data

National Grid
Dewey Avenue Service Center
144 Kensington Avenue
Buffalo, New York

Spring Semi-Annual Event
April 19-20, 2016

Well ID.	Sample?	Well Size	DTP	DTW	DTB	Comments
ESI-1	VOC's Fall only	4"	trace on boom	3.55	21.50	changed sorbant boom.
MW-1	yes	4"		2.82	29.90	
MW-2	no	4"		12.54	44.17	
MW-5	no	2"		10.60	21.40	
MW-6	yes	2"		8.85	21.05	MS/MSD
MW-7	no	2"		10.51	21.30	
MW-9	yes	2"		10.45	22.05	
MW-10	no	2"		9.92	24.25	
MW-11	yes	2"		8.30	20.22	
MW-12	yes	2"		8.24	19.55	Duplicate Sample
MW-13	no	2"		11.46	26.25	
MW-15	no	2"		12.88	23.80	
MW-16	VOC's Fall only	2"	trace on probe	6.00	20.36	
MW-17	no	2"		13.05	20.60	
MW-19	no	2"		12.83	24.00	
MW-20	yes	2"		8.40	22.60	
MW-21	yes	2"		8.28	21.85	
MW-24	yes	2"		8.52	24.25	
MW-25	no	2"		6.71	15.36	

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-1**

Date: 4/19/16
Weather P. Sunny 47
Time In: 1000 Time Out: 1035

Well Information

		TOC	Other
Depth to Water:	(feet)	2.82	
Depth to Bottom:	(feet)	29.90	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	27.08	
Volume of Water in Well:	(gal)	17.87	
Three Well Volumes:	(gal)	53.61	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [ ] SS [ ] Other: steel
Well Diameter: 1" [ ] 2" [ ] Other: 4"
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]			
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Average Pumping Rate:	(ml/min)	~ 250						
Duration of Pumping:	(min)	30						
Total Volume Removed:	(gal)	~2.0						

Did well go dry? Yes [ ] No [6]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1000	3.00		11.53	7.12	-61	24.4	147	.54
1005	3.00		11.52	7.09	-73	24.4	76.2	0
1010	3.00		11.24	7.10	-77	24.5	53.6	0
1015	3.00		11.16	7.09	-81	24.6	32.1	0
1020	3.00		11.13	7.09	-84	24.6	24.6	0
1025	3.00		11.10	7.10	-87	24.7	15.1	0
1030	3.00		11.07	7.09	-91	24.7	9.8	0

Sampling Information:

EPA SW-846 Method 8082	PCB's	Low detection limit of 0.05 ppb	2 - 1 liter amber	Yes [X] No [ ]
EPA SW-846 Method 8260	TCL VOC's	Including Naphthalene	2 - 40 mL vials	Yes [ ] No [X]

Sample ID: MW-1-0416
Sample Time: 1030
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: Test America Amherst, New York

Comments/Notes: No Sheen slight odor rotten egg
orange bio growth

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-6**

Date: 4/19/16
Weather: Partly Sunny 47°
Time In: 1045 Time Out: 1130

Well Information

		TOC	Other
Depth to Water:	(feet)	8.85	
Depth to Bottom:	(feet)	21.05	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	12.20	
Volume of Water in Well:	(gal)	1.95	
Three Well Volumes:	(gal)	5.85	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Average Pumping Rate:	(ml/min)	~250			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	~2.0			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1045	9.20		12.16	7.35	-32	19.1	20.2	1.24
1050	9.26		11.71	7.12	-21	19.6	17.7	3.38
1055	9.28		11.82	7.06	-25	19.7	18.2	4.01
1100	9.28		11.80	7.04	-26	19.7	17.6	3.96
1105	9.28		11.78	7.04	-27	19.7	17.2	3.85
1110	9.28		11.76	7.05	-29	19.7	16.9	3.81
1115	9.28		11.71	7.05	-30	19.6	15.9	3.77

Sampling Information:

EPA SW-846 Method 8082	PCB's	Low detection limit of 0.05 ppb	6 - 1 liter amber	Yes [X] No [ ]
EPA SW-846 Method 8260	TCL VOC's	Including Naphthalene	2 - 40 mL vials	Yes [ ] No [X]

Sample ID: MW-6-0416
Sample Time: 1115
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [X] No [ ]

Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Comments/Notes: No odor or sheen

Laboratory: Test America
Amherst, New York

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-9**

Date: 4/19/16
Weather: cloudy 46
Time In: 915 Time Out: 950

Well Information

		TOC	Other
Depth to Water:	(feet)	10.45	
Depth to Bottom:	(feet)	22.05	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	11.60	
Volume of Water in Well:	(gal)	1.86	
Three Well Volumes:	(gal)	5.58	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]			
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Average Pumping Rate:	(ml/min)	~250						
Duration of Pumping:	(min)	30						
Total Volume Removed:	(gal)	~2.0						

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
915	11.62		12.24	6.93	-60	19.6	12.2	0
920	11.60		12.31	6.89	-74	19.4	6.1	0
925	11.58		12.32	6.89	-79	19.4	3.2	0
930	11.58		12.34	6.88	-80	19.4	1.9	0
935	11.58		12.35	6.89	-81	19.3	.6	0
940	11.56		12.35	6.89	-83	19.3	.1	0
945	11.56		12.37	6.88	-83	19.3	0	0

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: MW-9-041616
Sample Time: 945
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Comments/Notes: w odor w sh

Laboratory: Test America
Amherst, New York

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-11**

Date: 4/19/16
Weather: cloudy 46°
Time In: 835 Time Out: 910

Well Information

		TOC	Other
Depth to Water:	(feet)	8.30	
Depth to Bottom:	(feet)	20.22	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	11.92	
Volume of Water in Well:	(gal)	1.91	
Three Well Volumes:	(gal)	5.73	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Average Pumping Rate:	(ml/min)	~250			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	~2.0			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
835	9.12		11.87	7.35	274	18.6	13.7	3.25
840	9.36		11.46	7.41	273	20.0	12.9	1.96
845	9.49		11.27	7.42	280	20.1	12.8	1.89
850	9.68		11.07	7.42	288	20.3	12.5	1.84
855	9.73		11.02	7.43	292	20.3	12.5	1.80
900	9.80		11.00	7.44	297	20.4	12.1	1.77
905	9.86		10.95	7.44	300	20.5	11.9	1.75

Sampling Information:

EPA SW-846 Method 8082	PCB's	Low detection limit of 0.05 ppb	2 - 1 liter amber	Yes [X] No [ ]
EPA SW-846 Method 8260	TCL VOC's	Including Naphthalene	2 - 40 mL vials	Yes [ ] No [X]

Sample ID: MW-11-0416
Sample Time: 905
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Comments/Notes: no odor no sheen

Laboratory: Test America
Amherst, New York

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-12**

Date: 4/19/16
Weather: Cloudy 46°
Time In: 750 Time Out: 830

Well Information

		TOC	Other
Depth to Water:	(feet)	8.24	
Depth to Bottom:	(feet)	19.55	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	11.31	
Volume of Water in Well:	(gal)	1.81	
Three Well Volumes:	(gal)	5.43	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Average Pumping Rate:	(ml/min)	~ 250			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	~ 2.0			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
750	9.25		17.31	5.58	316	9.78	3.0	2.15
755	9.32		16.14	6.57	275	10.2	2.7	.94
800	9.35		15.18	6.94	270	10.4	2.3	.81
805	9.37		14.27	7.20	268	10.6	3.2	.60
810	9.38		14.15	7.22	268	10.7	3.0	.51
815	9.38		14.12	7.21	268	10.7	3.1	.46
820	9.40		14.10	7.23	267	10.8	3.0	.42

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 4 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: MW-12-0416 Duplicate? Yes [X] No [ ] **FD-0416** Shipped: Drop-off [X] TA Courier [ ]
Sample Time: 820 MS/MSD? Yes [ ] No [X] Fed-Ex [ ] UPS [ ]

Comments/Notes: No Odor

Laboratory: Test America
Amherst, New York

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-20**

Date: 4/20/16
Weather: Sunny 45°
Time In: 825 Time Out: 900

Well Information

		TOC	Other
Depth to Water:	(feet)	8.40	
Depth to Bottom:	(feet)	22.60	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	14.20	
Volume of Water in Well:	(gal)	2.27	
Three Well Volumes:	(gal)	6.81	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]			
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Average Pumping Rate:	(ml/min)	~250						
Duration of Pumping:	(min)	30						
Total Volume Removed:	(gal)	~2.0						

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
825	8.48		11.48	7.13	-180	9.57	96	0
830	8.50		11.26	7.10	-185	10.0	9.5	0
835	8.50		11.01	7.07	-199	10.2	9.2	0
840	8.50		10.86	7.05	-202	10.2	8.7	0
845	8.50		10.74	7.06	-207	10.4	8.1	0
850	8.50		10.72	7.05	-209	10.4	8.0	0
855	8.50		10.69	7.06	-210	10.4	7.8	0

Sampling Information:

EPA SW-846 Method 8082	PCB's	Low detection limit of 0.05 ppb	2 - 1 liter amber	Yes [X] No [ ]
EPA SW-846 Method 8260	TCL VOC's	Including Naphthalene	2 - 40 mL vials	Yes [ ] No [X]

Sample ID: MW-20-04/16
Sample Time: 855
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Comments/Notes: no other notable odor

Laboratory: Test America
Amherst, New York

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-21**

Date: 4/20/16
Weather: Sunny 45
Time In: 905 Time Out: 945

Well Information

		TOC	Other
Depth to Water:	(feet)	8.28	
Depth to Bottom:	(feet)	21.85	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	13.57	
Volume of Water in Well:	(gal)	2.17	
Three Well Volumes:	(gal)	6.51	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]			
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Average Pumping Rate:	(ml/min)	~250 ↓						
Duration of Pumping:	(min)	30						
Total Volume Removed:	(gal)	~2.0						

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors

gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47

1 gallon=3.785L=3785mL=1337cu. feet

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
905	9.40		10.42	7.21	-90	13.0	147	.13
910	9.86		10.19	7.15	-42	13.6	68.2	0
915	10.15		10.12	7.05	-23	13.9	47.6	0
920	10.42		10.02	7.04	14	13.9	32.1	0
925	10.57		9.97	7.04	23	14.0	19.3	0
930	10.69		9.95	7.03	30	14.0	12.5	0
935	10.80		9.90	7.03	35	14.0	9.1	0

Sampling Information:

EPA SW-846 Method 8082	PCB's	Low detection limit of 0.05 ppb	2 - 1 liter amber	Yes [X] No [ ]
EPA SW-846 Method 8260	TCL VOC's	Including Naphthalene	2 - 40 mL vials	Yes [ ] No [X]

Sample ID: MW-21-0416
Sample Time: 935
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Comments/Notes: No sheen no hc esc odr.

Laboratory: Test America
Amherst, New York

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.110154
Well Id. **MW-24**

Date: 4/20/16
Weather: Sunny 45°
Time In: 745 Time Out: 820

Well Information

		TOC	Other
Depth to Water:	(feet)	8.52	
Depth to Bottom:	(feet)	24.25	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	15.73	
Volume of Water in Well:	(gal)	2.52	
Three Well Volumes:	(gal)	7.57	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]			
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Average Pumping Rate:	(ml/min)	~ 250						
Duration of Pumping:	(min)	30						
Total Volume Removed:	(gal)	~ 2.0						

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
745	8.55		15.00	6.35	-62	8.61	5.7	.30
750	8.56		14.16	6.76	-157	8.69	4.3	0
755	8.56		13.28	6.93	-174	8.88	3.8	.12
800	8.57		12.86	7.01	-185	9.02	4.0	.03
805	8.57		12.78	7.02	-191	9.18	3.6	.03
810	8.57		12.70	7.03	-198	9.25	3.7	0
815	8.57		12.65	7.03	-201	9.29	3.5	0

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: MW-24-0416
Sample Time: 815
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Comments/Notes: No sheen rotten egg odor

Laboratory: Test America Amherst, New York

National Grid
Dewey Avenue Service Center
144 Kensington Avenue
Buffalo, New York

Fall Semi-Annual Event
Date: 10/19/16
Technician(s): TB

Well ID.	Sample?	Well Size	DTP	DTW	DTB	Comments	
ESI-1	VOC's Fall only	4"		470	21.50	Product-Bearing Well. Sorbent Sock Change Required.	
MW-1	yes	4"		352	29.90		1400
MW-2	no	4"		—	44.17	COVERED	
MW-5	no	2"		13.75	21.40		
MW-6	yes	2"		10.21	21.05	Collect MS/DMS Samples.	1450
MW-7	no	2"		11.60	21.30		
MW-9	yes	2"		10.84	22.05		1355
MW-10	no	2"		1036	24.25		
MW-11	yes	2"		8.71	20.22		1205
MW-12	yes	2"		864	19.55	Collect Field Duplicate Sample.	1215
MW-13	no	2"		1182	26.25		
MW-15	no	2"		1295	23.80		
MW-16	VOC's Fall only	2"		552	20.36	Product-Bearing Well.	
MW-17	no	2"		1250	20.60		
MW-19	no	2"		1308	24.00		
MW-20	yes	2"		865	22.60	Well in roadway. Lane closure required.	1058
MW-21	yes	2"		861	21.85	Well in roadway. Lane closure required.	1105
MW-24	yes	2"		880	24.25	Well in roadway. Lane closure required.	1015
MW-25	no	2"		665	15.36		

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: TJB
Job Number: 06-02882
Well Id. **MW-1**

Date: 10/19/16
Weather: Sunny 64°
Time In: 1330 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	3.52	
Depth to Bottom:	(feet)	29.90	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	26.38	
Volume of Water in Well:	(gal)	17.41	
Three Well Volumes:	(gal)	52.23	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [ ] SS [ ] Other: steel
Well Diameter: 1" [ ] 2" [ ] Other: 4"
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]		
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Average Pumping Rate:	(ml/min)	400					
Duration of Pumping:	(min)	30					
Total Volume Removed:	(gal)	3.5					

Did well go dry? Yes [ ] No [X]

YSI 6920 or Horiba U-52 Water Quality Meter Us Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1330	3.55		22.25	7.11	-171	15.8	46.0	2.10
1335	3.56		21.50	7.23	-187	15.2	42.1	1.39
1340	3.56		21.32	7.31	-190	15.2	36.1	1.17
1345	3.56		21.26	7.37	-191	15.2	31.7	2.01
1350	3.56		21.25	7.38	-190	15.2	25.6	2.20
1355	3.56		21.21	7.38	-189	15.3	16.2	2.46
1400	3.56		21.20	7.38	-190	15.3	12.1	2.32

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: **MW-1-1016**
Sample Time: 1400
Duplicate? Yes [ ] No [X]
MS/DMS? Yes [ ] No [X]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel:

Job Number: 06-02882

Well Id. **MW-6**

Date: 10/19/16

Weather:

Time In: 1420 Time Out: 1450

Well Information

		TOC	Other
Depth to Water:	(feet)	10.21	
Depth to Bottom:	(feet)	21.05	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	10.84	
Volume of Water in Well:	(gal)	~~1.627~~ → 1.734	
Three Well Volumes:	(gal)	~~4.8670~~ → 5.203	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]		
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Average Pumping Rate:	(ml/min)	250					
Duration of Pumping:	(min)	30					
Total Volume Removed:	(gal)	2					

Did well go dry? Yes [ ] No [ ]

YSI 6920 or Horiba U-52 Water Quality Meter Us Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1420	10.21		26.70	7.29	-130	14.3	146	2.37
1425	10.52		20.43	7.03	-115	15.7	124	1.09
1430	10.58		20.33	7.01	-116	15.8	117	0.83
1435	10.86		20.14	7.01	-117	15.8	107	0.81
1440	10.71		20.23	7.00	-118	15.4	109	0.73
1445	10.70		20.24	7.00	-119	15.5	111	0.69
1450	10.70		20.22	7.02	-120	15.5	106	0.92

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 6 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

"MW-6-Matrix Spike-1016" "MW-6-Duplicate Matrix Spike-1016"

Sample ID: **MW-6-1016** Duplicate? Yes [ ] No [X]
Sample Time: 1450 MS/DMS? Yes [X] No [ ]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: NL
Date: 10/19/16
Job Number: 06-02882
Weather:
Well Id. **MW-9**
Time In: 1325 Time Out: 1355

Well Information

		TOC	Other
Depth to Water:	(feet)	10.84	
Depth to Bottom:	(feet)	22.05	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	11.21	
Volume of Water in Well:	(gal)	1.794	
Three Well Volumes:	(gal)	5.381	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]			
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Average Pumping Rate:	(ml/min)	250						
Duration of Pumping:	(min)	30						
Total Volume Removed:	(gal)	2						

Did well go dry? Yes [ ] No [/]

YSI 6920 or Horiba U-52 Water Quality Meter Us Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1325	10.84		26.00	7.41	-172	6.31	6.5	2.94
1330	11.80		21.08	7.35	-217	6.51	2.2	2.31
1335	11.92		20.13	7.33	-264	6.50	0.0	1.35
1340	11.93		19.96	7.34	-272	6.46	0.0	1.29
1345	11.93		19.97	7.34	-278	6.48	0.0	1.21
1350	11.99		19.61	7.33	-280	7.37	0.0	1.14
1355	11.99		19.58	7.35	-285	6.66	0.0	1.13

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: **MW-9-1016** Duplicate? Yes [ ] No [X]
Sample Time: 1355 MS/DMS? Yes [ ] No [X]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: NL
Date: 10-19-16
Job Number: 06-02882
Weather:
Well Id. **MW-11**
Time In: 1135 Time Out: 1205

Well Information

		TOC	Other
Depth to Water:	(feet)	8.71	
Depth to Bottom:	(feet)	20.22	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	11.51	
Volume of Water in Well:	(gal)	1.842	
Three Well Volumes:	(gal)	5.524	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]		
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Average Pumping Rate:	(ml/min)	250 ↓ @ 1045					
Duration of Pumping:	(min)	30					
Total Volume Removed:	(gal)	2					

Did well go dry? Yes [ ] No [/]

YSI 6920 or Horiba U-52 Water Quality Meter Us Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1135	8.71		19.50	7.5	-34	6.15	32.7	3.43
1140	9.95		18.98	7.49	-32	6.06	3.1	2.22
1145	10.75		19.01	7.48	-35	6.05	0.1	1.53
1150	10.85		18.99	7.48	-33	6.04	0.0	1.39
1155	10.87		18.95	7.48	-31	6.03	0.0	1.28
1200	10.91		18.93	7.48	-28	6.02	0.0	1.22
1205	10.83		18.95	7.47	-22	6.01	0.0	1.40

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: **MW-11-1016**
Sample Time: 1205
Duplicate? Yes [ ] No [X]
MS/DMS? Yes [ ] No [X]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: DB
Date: 10/19/16
Job Number: 06-02882
Weather: Sunny 60
Well Id. **MW-12**
Time In: 1145 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	8.64	
Depth to Bottom:	(feet)	19.55	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	10.91	
Volume of Water in Well:	(gal)	1.75	
Three Well Volumes:	(gal)	5.25	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]		
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]		
Average Pumping Rate:	(ml/min)	~250 ↓					
Duration of Pumping:	(min)	30					
Total Volume Removed:	(gal)	2.0					

Did well go dry? Yes [ ] No [6]

YSI 6920 or Horiba U-52 Water Quality Meter Us Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1145	9.60		20.39	7.33	21	3.24	6.2	2.19
1150	9.78		19.75	7.39	24	3.20	1.2	1.16
1155	9.85		19.59	7.41	22	3.19	1.6	1.09
1200	9.86		19.60	7.42	19	3.18	1.6	.97
1205	9.86		19.55	7.43	16	3.18	1.2	.90
1210	9.86		19.51	7.42	15	3.17	.9	.87
1215	9.86		19.48	7.43	13	3.17	1.0	.88

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 4 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

"Field Duplicate-1016"
Sample ID: MW-12-1016 Duplicate? Yes [X] No [ ]
Sample Time: 1215 MS/DMS? Yes [ ] No [X]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: NL
Job Number: 06-02882
Well Id. **MW-20**

Date: 10/19/16
Weather: Sunny 52
Time In: 10:28 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	8.65	
Depth to Bottom:	(feet)	22.60	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	13.95	
Volume of Water in Well:	(gal)	2.232	
Three Well Volumes:	(gal)	6.696	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]			
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]			
Average Pumping Rate:	(ml/min)	250 ml/min						
Duration of Pumping:	(min)	30						
Total Volume Removed:	(gal)	2.0 gal	Did well go dry?	Yes [ ]	No [X]			
YSI 6920 or Horiba U-52 Water Quality Meter Us		Yes [X]	No [ ]					

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1028	8.65		22.01	5.37	56	9.97	>1000	6.41
1033	8.74		12.31	7.06	-173	10.50	122	1.48
1038	8.76		17.22	7.10	-199	10.3	26.0	1.36
1043	8.77		17.15	7.12	-217	10.2	14.7	1.24
1048	8.77		17.11	7.13	-233	10.1	3.2	1.13
1053	8.80		17.12	7.13	-244	10.1	1.0	1.09
1058	8.80		17.09	7.13	-248	10.1	0.4	1.08

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: **MW-20-1016**
Sample Time: 1058
Duplicate? Yes [ ] No [X]
MS/DMS? Yes [ ] No [X]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: TB
Job Number: 06-02882
Well Id. **MW-21**

Date: 10/19/16
Weather: Sunny 56°
Time In: 1035 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	8.61	
Depth to Bottom:	(feet)	21.85	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	13.24	
Volume of Water in Well:	(gal)	2.12	
Three Well Volumes:	(gal)	6.36	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Average Pumping Rate:	(ml/min)	~250			
Duration of Pumping:	(min)				
Total Volume Removed:	(gal)				

Did well go dry? Yes [ ] No [ ]

YSI 6920 or Horiba U-52 Water Quality Meter Us Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
1035	8.62		17.83	7.45	-104	3.84	3.3	2.67
1040	9.91		17.62	7.36	-99	3.76	2.8	1.93
1045	10.22		17.64	7.28	-95	3.65	2.6	1.39
1050	10.52		17.68	7.25	-93	3.63	2.0	1.15
1055	10.60		17.70	7.24	-96	3.61	1.6	1.09
1100	10.64		17.72	7.24	-97	3.60	1.4	1.04
1105	10.67		17.73	7.24	-98	3.60	.9	1.02

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: **MW-21-1016**
Sample Time: 1105
Duplicate? Yes [ ] No [X]
MS/DMS? Yes [ ] No [X]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

National Grid
Dewey Avenue Service Center, 144 Kensington Ave, Buffalo, New York

Sampling Personnel: TB
Date: 10/19/16
Job Number: 06-02882
Weather: Sunny 54°
Well Id. **MW-24**
Time In: 945 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	8.80	
Depth to Bottom:	(feet)	24.25	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	15.45	
Volume of Water in Well:	(gal)	2.472	
Three Well Volumes:	(gal)	7.416	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other:
Well Diameter: 1" [ ] 2" [X] Other:
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	other [ ]
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	other [ ]
Average Pumping Rate:	(ml/min)	250ml/min			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	2.0			

Did well go dry? Yes [ ] No [X]

YSI 6920 or Horiba U-52 Water Quality Meter Us Yes [X] No [ ]

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Amount purged (gal)	Temp °C	pH (S.U.)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)
945	8.88		18.46	6.04	-75	9.55	1.3	3.42
950	8.88		17.42	6.80	-164	10.1	1.5	1.40
~~1005~~ 955	8.88		17.19	6.59	-189	10.2	0.9	1.30
~~1010~~ 1000	8.88		17.12	7.07	-206	10.3	0.6	1.54
1005	8.88		17.08	7.13	-222	10.4	0.5	1.50
1010	8.88		12.08	7.16	-231	10.4	0.4	1.51
1015	8.88		17.00	7.18	-241	10.4	0.4	1.71

Sampling Information:

EPA SW-846 Method 8082 PCB's Low detection limit of 0.05 ppb 2 - 1 liter amber Yes [X] No [ ]
EPA SW-846 Method 8260 TCL VOC's Including Naphthalene 2 - 40 mL vials Yes [ ] No [X]

Sample ID: **MW-24-1016** Duplicate? Yes [ ] No [X]
Sample Time: 1015 MS/DMS? Yes [ ] No [X]

Shipped: Drop-off [ ] Pace Courier [ ] Fed-Ex [ ] UPS [ ]

Laboratory: PACE Analytical Greensburg, PA

Comments/Notes:

Appendix B

Groundwater Monitoring Laboratory Data

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-98672-1
Client Project/Site: Dewey Ave semi-annual GW Wells

For:
CDM Smith, Inc.
6800 Old Collamer Road
Suite 3
East Syracuse, New York 13057

Attn: Matthew Millias

Authorized for release by:
4/22/2016 3:45:25 PM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-98672-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-98672-1

Receipt
The samples were received on 4/20/2016 11:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.6º C and 3.0º C.

GC Semi VOA
Method 8082A: The following samples were diluted due to the abundance of target analytes: MW-1-0416 (480-98672-1) and MW-9-0416 (480-98672-3). Elevated reporting limits (RLs) are provided.

Method 8082A: All primary data for analytical batch 297487 was reported from the ZB-35 column.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

Client Sample ID: MW-1-0416 — Lab Sample ID: 480-98672-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1016	3.2		0.094		ug/L	2		8082A	Total/NA
Polychlorinated biphenyls, Total	3.2		0.11		ug/L	2		8082A	Total/NA

Client Sample ID: MW-6-0416 — Lab Sample ID: 480-98672-2

No Detections.

Client Sample ID: MW-9-0416 — Lab Sample ID: 480-98672-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	11		0.24		ug/L	5		8082A	Total/NA
Polychlorinated biphenyls, Total	11		0.28		ug/L	5		8082A	Total/NA

Client Sample ID: MW-11-0416 — Lab Sample ID: 480-98672-4

No Detections.

Client Sample ID: MW-12-0416 — Lab Sample ID: 480-98672-5

No Detections.

Client Sample ID: MW-20-0416 — Lab Sample ID: 480-98672-6

No Detections.

Client Sample ID: MW-21-0416 — Lab Sample ID: 480-98672-7

No Detections.

Client Sample ID: MW-24-0416 — Lab Sample ID: 480-98672-8

No Detections.

Client Sample ID: FD-0416 — Lab Sample ID: 480-98672-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1-0416

Lab Sample ID: 480-98672-1
Date Collected: 04/19/16 10:30
Matrix: Water
Date Received: 04/20/16 11:05

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	**3.2**		0.094		ug/L		04/21/16 07:29	04/21/16 18:33	2
PCB-1221	ND		0.094		ug/L		04/21/16 07:29	04/21/16 18:33	2
PCB-1232	ND		0.094		ug/L		04/21/16 07:29	04/21/16 18:33	2
PCB-1242	ND		0.094		ug/L		04/21/16 07:29	04/21/16 18:33	2
PCB-1248	ND		0.094		ug/L		04/21/16 07:29	04/21/16 18:33	2
PCB-1254	ND		0.094		ug/L		04/21/16 07:29	04/21/16 18:33	2
PCB-1260	ND		0.094		ug/L		04/21/16 07:29	04/21/16 18:33	2
Polychlorinated biphenyls, Total	**3.2**		0.11		ug/L		04/21/16 07:29	04/21/16 18:33	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*25 - 151*	*04/21/16 07:29*	*04/21/16 18:33*	*2*
DCB Decachlorobiphenyl	*49*		*10 - 158*	*04/21/16 07:29*	*04/21/16 18:33*	*2*

Client Sample ID: MW-6-0416

Lab Sample ID: 480-98672-2
Date Collected: 04/19/16 11:15
Matrix: Water
Date Received: 04/20/16 11:05

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/21/16 07:29	04/21/16 18:49	1
PCB-1221	ND		0.047		ug/L		04/21/16 07:29	04/21/16 18:49	1
PCB-1232	ND		0.047		ug/L		04/21/16 07:29	04/21/16 18:49	1
PCB-1242	ND		0.047		ug/L		04/21/16 07:29	04/21/16 18:49	1
PCB-1248	ND		0.047		ug/L		04/21/16 07:29	04/21/16 18:49	1
PCB-1254	ND		0.047		ug/L		04/21/16 07:29	04/21/16 18:49	1
PCB-1260	ND		0.047		ug/L		04/21/16 07:29	04/21/16 18:49	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		04/21/16 07:29	04/21/16 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*25 - 151*	*04/21/16 07:29*	*04/21/16 18:49*	*1*
DCB Decachlorobiphenyl	*72*		*10 - 158*	*04/21/16 07:29*	*04/21/16 18:49*	*1*

Client Sample ID: MW-9-0416

Lab Sample ID: 480-98672-3
Date Collected: 04/19/16 09:45
Matrix: Water
Date Received: 04/20/16 11:05

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24		ug/L		04/21/16 07:29	04/21/16 19:04	5
PCB-1221	ND		0.24		ug/L		04/21/16 07:29	04/21/16 19:04	5
PCB-1232	**11**		0.24		ug/L		04/21/16 07:29	04/21/16 19:04	5
PCB-1242	ND		0.24		ug/L		04/21/16 07:29	04/21/16 19:04	5
PCB-1248	ND		0.24		ug/L		04/21/16 07:29	04/21/16 19:04	5
PCB-1254	ND		0.24		ug/L		04/21/16 07:29	04/21/16 19:04	5
PCB-1260	ND		0.24		ug/L		04/21/16 07:29	04/21/16 19:04	5
Polychlorinated biphenyls, Total	**11**		0.28		ug/L		04/21/16 07:29	04/21/16 19:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*25 - 151*	*04/21/16 07:29*	*04/21/16 19:04*	*5*
DCB Decachlorobiphenyl	*47*		*10 - 158*	*04/21/16 07:29*	*04/21/16 19:04*	*5*

Client Sample ID: MW-11-0416

Date Collected: 04/19/16 09:05
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-4
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:19	1
PCB-1221	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:19	1
PCB-1232	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:19	1
PCB-1242	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:19	1
PCB-1248	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:19	1
PCB-1254	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:19	1
PCB-1260	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:19	1
Polychlorinated biphenyls, Total	ND		0.056		ug/L		04/21/16 07:29	04/21/16 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*25 - 151*	*04/21/16 07:29*	*04/21/16 19:19*	*1*
DCB Decachlorobiphenyl	*68*		*10 - 158*	*04/21/16 07:29*	*04/21/16 19:19*	*1*

Client Sample ID: MW-12-0416

Date Collected: 04/19/16 08:20
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-5
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:35	1
PCB-1221	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:35	1
PCB-1232	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:35	1
PCB-1242	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:35	1
PCB-1248	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:35	1
PCB-1254	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:35	1
PCB-1260	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:35	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		04/21/16 07:29	04/21/16 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*25 - 151*	*04/21/16 07:29*	*04/21/16 19:35*	*1*
DCB Decachlorobiphenyl	*71*		*10 - 158*	*04/21/16 07:29*	*04/21/16 19:35*	*1*

Client Sample ID: MW-20-0416

Date Collected: 04/19/16 08:55
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-6
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:50	1
PCB-1221	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:50	1
PCB-1232	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:50	1
PCB-1242	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:50	1
PCB-1248	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:50	1
PCB-1254	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:50	1
PCB-1260	ND		0.047		ug/L		04/21/16 07:29	04/21/16 19:50	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		04/21/16 07:29	04/21/16 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*25 - 151*	*04/21/16 07:29*	*04/21/16 19:50*	*1*
DCB Decachlorobiphenyl	*68*		*10 - 158*	*04/21/16 07:29*	*04/21/16 19:50*	*1*

Client Sample ID: MW-21-0416

Date Collected: 04/19/16 09:35
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-7
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:36	1
PCB-1221	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:36	1
PCB-1232	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:36	1
PCB-1242	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:36	1
PCB-1248	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:36	1
PCB-1254	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:36	1
PCB-1260	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:36	1
Polychlorinated biphenyls, Total	ND		0.056		ug/L		04/21/16 07:29	04/21/16 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*25 - 151*	*04/21/16 07:29*	*04/21/16 20:36*	*1*
DCB Decachlorobiphenyl	*66*		*10 - 158*	*04/21/16 07:29*	*04/21/16 20:36*	*1*

Client Sample ID: MW-24-0416

Date Collected: 04/19/16 08:15
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-8
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:51	1
PCB-1221	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:51	1
PCB-1232	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:51	1
PCB-1242	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:51	1
PCB-1248	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:51	1
PCB-1254	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:51	1
PCB-1260	ND		0.047		ug/L		04/21/16 07:29	04/21/16 20:51	1
Polychlorinated biphenyls, Total	ND		0.056		ug/L		04/21/16 07:29	04/21/16 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*25 - 151*	*04/21/16 07:29*	*04/21/16 20:51*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 158*	*04/21/16 07:29*	*04/21/16 20:51*	*1*

Client Sample ID: FD-0416

Date Collected: 04/19/16 00:00
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-9
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/21/16 07:29	04/21/16 21:07	1
PCB-1221	ND		0.047		ug/L		04/21/16 07:29	04/21/16 21:07	1
PCB-1232	ND		0.047		ug/L		04/21/16 07:29	04/21/16 21:07	1
PCB-1242	ND		0.047		ug/L		04/21/16 07:29	04/21/16 21:07	1
PCB-1248	ND		0.047		ug/L		04/21/16 07:29	04/21/16 21:07	1
PCB-1254	ND		0.047		ug/L		04/21/16 07:29	04/21/16 21:07	1
PCB-1260	ND		0.047		ug/L		04/21/16 07:29	04/21/16 21:07	1
Polychlorinated biphenyls, Total	ND		0.056		ug/L		04/21/16 07:29	04/21/16 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*25 - 151*	*04/21/16 07:29*	*04/21/16 21:07*	*1*
DCB Decachlorobiphenyl	*75*		*10 - 158*	*04/21/16 07:29*	*04/21/16 21:07*	*1*

Surrogate Summary

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX2 (25-151)	DCB2 (10-158)								
480-98672-1	MW-1-0416	68	49								
480-98672-2	MW-6-0416	76	72								
480-98672-2 MS	MW-6 MS-0416	77	36								
480-98672-2 MSD	MW-6 SD-0416	77	35								
480-98672-3	MW-9-0416	90	47								
480-98672-4	MW-11-0416	76	68								
480-98672-5	MW-12-0416	73	71								
480-98672-6	MW-20-0416	71	68								
480-98672-7	MW-21-0416	76	66								
480-98672-8	MW-24-0416	74	85								
480-98672-9	FD-0416	73	75								
LCS 480-297264/2-A	Lab Control Sample	77	53								
MB 480-297264/1-A	Method Blank	67	61								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-297264/1-A
Matrix: Water
Analysis Batch: 297487

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 297264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.050		ug/L		04/21/16 07:29	04/21/16 17:32	1
PCB-1221	ND		0.050		ug/L		04/21/16 07:29	04/21/16 17:32	1
PCB-1232	ND		0.050		ug/L		04/21/16 07:29	04/21/16 17:32	1
PCB-1242	ND		0.050		ug/L		04/21/16 07:29	04/21/16 17:32	1
PCB-1248	ND		0.050		ug/L		04/21/16 07:29	04/21/16 17:32	1
PCB-1254	ND		0.050		ug/L		04/21/16 07:29	04/21/16 17:32	1
PCB-1260	ND		0.050		ug/L		04/21/16 07:29	04/21/16 17:32	1
Polychlorinated biphenyls, Total	ND		0.060		ug/L		04/21/16 07:29	04/21/16 17:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*25 - 151*	*04/21/16 07:29*	*04/21/16 17:32*	*1*
DCB Decachlorobiphenyl	*61*		*10 - 158*	*04/21/16 07:29*	*04/21/16 17:32*	*1*

Lab Sample ID: LCS 480-297264/2-A
Matrix: Water
Analysis Batch: 297487

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 297264

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.00	0.870		ug/L		87	64 - 129		
PCB-1260			1.00	0.813		ug/L		81	54 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*25 - 151*
DCB Decachlorobiphenyl	*53*		*10 - 158*

Lab Sample ID: 480-98672-2 MS
Matrix: Water
Analysis Batch: 297487

Client Sample ID: MW-6 MS-0416
Prep Type: Total/NA
Prep Batch: 297264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		0.941	0.758		ug/L		81	23 - 160		
PCB-1260	ND		0.941	0.732		ug/L		78	16 - 163		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*25 - 151*
DCB Decachlorobiphenyl	*36*		*10 - 158*

Lab Sample ID: 480-98672-2 MSD
Matrix: Water
Analysis Batch: 297487

Client Sample ID: MW-6 SD-0416
Prep Type: Total/NA
Prep Batch: 297264

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		0.939	0.752		ug/L		80	23 - 160	1	50
PCB-1260	ND		0.939	0.706		ug/L		75	16 - 163	4	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*25 - 151*

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: 480-98672-2 MSD
Matrix: Water
Analysis Batch: 297487

Client Sample ID: MW-6 SD-0416
Prep Type: Total/NA
Prep Batch: 297264

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	*35*		*10 - 158*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

GC Semi VOA

Prep Batch: 297264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98672-1	MW-1-0416	Total/NA	Water	3510C	
480-98672-2	MW-6-0416	Total/NA	Water	3510C	
480-98672-2 MS	MW-6 MS-0416	Total/NA	Water	3510C	
480-98672-2 MSD	MW-6 SD-0416	Total/NA	Water	3510C	
480-98672-3	MW-9-0416	Total/NA	Water	3510C	
480-98672-4	MW-11-0416	Total/NA	Water	3510C	
480-98672-5	MW-12-0416	Total/NA	Water	3510C	
480-98672-6	MW-20-0416	Total/NA	Water	3510C	
480-98672-7	MW-21-0416	Total/NA	Water	3510C	
480-98672-8	MW-24-0416	Total/NA	Water	3510C	
480-98672-9	FD-0416	Total/NA	Water	3510C	
LCS 480-297264/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-297264/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 297487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-98672-1	MW-1-0416	Total/NA	Water	8082A	297264
480-98672-2	MW-6-0416	Total/NA	Water	8082A	297264
480-98672-2 MS	MW-6 MS-0416	Total/NA	Water	8082A	297264
480-98672-2 MSD	MW-6 SD-0416	Total/NA	Water	8082A	297264
480-98672-3	MW-9-0416	Total/NA	Water	8082A	297264
480-98672-4	MW-11-0416	Total/NA	Water	8082A	297264
480-98672-5	MW-12-0416	Total/NA	Water	8082A	297264
480-98672-6	MW-20-0416	Total/NA	Water	8082A	297264
480-98672-7	MW-21-0416	Total/NA	Water	8082A	297264
480-98672-8	MW-24-0416	Total/NA	Water	8082A	297264
480-98672-9	FD-0416	Total/NA	Water	8082A	297264
LCS 480-297264/2-A	Lab Control Sample	Total/NA	Water	8082A	297264
MB 480-297264/1-A	Method Blank	Total/NA	Water	8082A	297264

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

Client Sample ID: MW-1-0416
Date Collected: 04/19/16 10:30
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		2	297487	04/21/16 18:33	KS	TAL BUF

Client Sample ID: MW-6-0416
Date Collected: 04/19/16 11:15
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		1	297487	04/21/16 18:49	KS	TAL BUF

Client Sample ID: MW-9-0416
Date Collected: 04/19/16 09:45
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		5	297487	04/21/16 19:04	KS	TAL BUF

Client Sample ID: MW-11-0416
Date Collected: 04/19/16 09:05
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		1	297487	04/21/16 19:19	KS	TAL BUF

Client Sample ID: MW-12-0416
Date Collected: 04/19/16 08:20
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		1	297487	04/21/16 19:35	KS	TAL BUF

Client Sample ID: MW-20-0416
Date Collected: 04/19/16 08:55
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		1	297487	04/21/16 19:50	KS	TAL BUF

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

Client Sample ID: MW-21-0416

Date Collected: 04/19/16 09:35
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		1	297487	04/21/16 20:36	KS	TAL BUF

Client Sample ID: MW-24-0416

Date Collected: 04/19/16 08:15
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		1	297487	04/21/16 20:51	KS	TAL BUF

Client Sample ID: FD-0416

Date Collected: 04/19/16 00:00
Date Received: 04/20/16 11:05

Lab Sample ID: 480-98672-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297264	04/21/16 07:29	CPH	TAL BUF
Total/NA	Analysis	8082A		1	297487	04/21/16 21:07	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total

Method Summary

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) (GC)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: CDM Smith, Inc.
Project/Site: Dewey Ave semi-annual GW Wells

TestAmerica Job ID: 480-98672-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-98672-1	MW-1-0416	Water	04/19/16 10:30	04/20/16 11:05
480-98672-2	MW-6-0416	Water	04/19/16 11:15	04/20/16 11:05
480-98672-3	MW-9-0416	Water	04/19/16 09:45	04/20/16 11:05
480-98672-4	MW-11-0416	Water	04/19/16 09:05	04/20/16 11:05
480-98672-5	MW-12-0416	Water	04/19/16 08:20	04/20/16 11:05
480-98672-6	MW-20-0416	Water	04/19/16 08:55	04/20/16 11:05
480-98672-7	MW-21-0416	Water	04/19/16 09:35	04/20/16 11:05
480-98672-8	MW-24-0416	Water	04/19/16 08:15	04/20/16 11:05
480-98672-9	FD-0416	Water	04/19/16 00:00	04/20/16 11:05

Detection Limit Exceptions Summary

Client: CDM Smith, Inc. TestAmerica Job ID: 480-98672-1
Project/Site: Dewey Ave semi-annual GW Wells

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but great than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedure do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8082A	Water	PCB-1016	ug/L	0.050	0.06
8082A	Water	PCB-1221	ug/L	0.050	0.06
8082A	Water	PCB-1232	ug/L	0.050	0.06
8082A	Water	PCB-1242	ug/L	0.050	0.06
8082A	Water	PCB-1248	ug/L	0.050	0.06
8082A	Water	PCB-1254	ug/L	0.050	0.06
8082A	Water	PCB-1260	ug/L	0.050	0.06

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Tim Beaumont	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-81246-16322.1
Client Contact: Timothy Beaumont	Phone: 585 739 2368	E-Mail: becky.mason@testamericainc.com		Page: Page 1 of 1
Company: CDM Smith, Inc.				Job #:

Address: 6800 Old Collamer Road Suite 3	Due Date Requested:	Analysis Requested	Preservation Codes:
City: East Syracuse	TAT Requested (days):		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: NY, 13057			
Phone:	PO #: 36380.110154		
Email: beaumonttj@cdmsmith.com	WO #:		Other:
Project Name: Dewey Ave semi-annual GW Wells	Project #: 48011230		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082A_LL - 8082 LL	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-1-0416	4/19/16	1030	6	Water			2		
MW-6-0416	4/15/16	1115	6	Water			2		
MW-6 MS-0416	4/19/16	1115	6	Water			2		
MW-6 SD-0416	4/19/16	1115	6	Water			2		
MW-9-0416	4/19/16	945	6	Water			2		
MW-11-0416	4/19/16	905	6	Water			2		
MW-12-0416	4/19/16	820	6	Water			2		
MW-20-0416	4/20/16	855	6	Water			2		
MW-21-0416	4/20/16	935	6	Water			2		
MW-24-0416	4/20/16	815	6	Water			2		
FD-0416	4/19/16	—	6	Water			2		

480-98672 Chain of Custody

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

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

Deliverable Requested: I, II, III, (V) Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/20/16 1105	CDMSmith	[signature]	4-20-16 1105	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.6, 3.0 B1

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 480-98672-1

Login Number: 98672
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	CDMS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 07, 2016

Mr. Robert Sickler
Groundwater & Environmental Services, Inc.
5 Technology Place, Suite 4
East Syracuse, NY 13057

RE: Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Dear Mr. Sickler:
Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rachel D Christner

Rachel Christner
rachel.christner@pacelabs.com
Project Manager

Enclosures

cc: GES Reports - Syracuse, Groundwater & Environmental Services, Inc.
Mr. Mark Boorady, Groundwater & Environmental Services, Inc.
Ms. Cheryl Golden-Walts, Groundwater & Environmental Services, Inc.

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Greensburg, PA 15601
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CERTIFICATIONS

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30199999001	**MW-1-1016**	Water	10/19/16 14:00	10/21/16 10:40
30199999002	**MW-6-1016**	Water	10/19/16 14:50	10/21/16 10:40
30199999003	**MW-9-1016**	Water	10/19/16 13:55	10/21/16 10:40
30199999004	**MW-11-1016**	Water	10/19/16 12:05	10/21/16 10:40
30199999005	**MW-12-1016**	Water	10/19/16 12:15	10/21/16 10:40
30199999006	**MW-21-1016**	Water	10/19/16 11:05	10/21/16 10:40
30199999007	**MW-24-1016**	Water	10/19/16 10:15	10/21/16 10:40
30199999008	**MW-20-1016**	Water	10/19/16 10:58	10/21/16 10:40
30199999009	**Field Duplicate-1016**	Water	10/19/16 14:50	10/21/16 10:40
30199999010	**MW-6-Matrix Spike-1016**	Water	10/19/16 14:50	10/21/16 10:40
30199999011	**MW-6-Duplicate Matrix Spike-10**	Water	10/19/16 14:50	10/21/16 10:40

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SAMPLE ANALYTE COUNT

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30199999001	**MW-1-1016**	EPA 608	SJG	9	PASI-PA
30199999002	**MW-6-1016**	EPA 608	SJG	9	PASI-PA
30199999003	**MW-9-1016**	EPA 608	CWB	9	PASI-PA
30199999004	**MW-11-1016**	EPA 608	SJG	9	PASI-PA
30199999005	**MW-12-1016**	EPA 608	SJG	9	PASI-PA
30199999006	**MW-21-1016**	EPA 608	SJG	9	PASI-PA
30199999007	**MW-24-1016**	EPA 608	SJG	9	PASI-PA
30199999008	**MW-20-1016**	EPA 608	SJG	9	PASI-PA
30199999009	**Field Duplicate-1016**	EPA 608	SJG	9	PASI-PA
30199999010	**MW-6-Matrix Spike-1016**	EPA 608	SJG	9	PASI-PA
30199999011	**MW-6-Duplicate Matrix Spike-10**	EPA 608	SJG	9	PASI-PA

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PROJECT NARRATIVE

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Method: **EPA 608**
Description: 608 GCS PCBs
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: November 07, 2016

General Information:
11 samples were analyzed for EPA 608. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 608 SF with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: 238181

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- BLANK (Lab ID: 1170523)
  - Decachlorobiphenyl (S)
- Field Duplicate-1016 (Lab ID: 30199999009)
  - Decachlorobiphenyl (S)
- LCS (Lab ID: 1170524)
  - Decachlorobiphenyl (S)
- MS (Lab ID: 1170525)
  - Decachlorobiphenyl (S)
- MSD (Lab ID: 1170526)
  - Decachlorobiphenyl (S)
- MW-11-1016 (Lab ID: 30199999004)
  - Decachlorobiphenyl (S)
- MW-12-1016 (Lab ID: 30199999005)
  - Decachlorobiphenyl (S)
- MW-20-1016 (Lab ID: 30199999008)
  - Decachlorobiphenyl (S)
- MW-21-1016 (Lab ID: 30199999006)
  - Decachlorobiphenyl (S)
- MW-24-1016 (Lab ID: 30199999007)
  - Decachlorobiphenyl (S)
- MW-6-1016 (Lab ID: 30199999002)
  - Decachlorobiphenyl (S)
- MW-6-Duplicate Matrix Spike-10 (Lab ID: 30199999011)
  - Decachlorobiphenyl (S)
- MW-6-Matrix Spike-1016 (Lab ID: 30199999010)
  - Decachlorobiphenyl (S)

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Method: **EPA 608**
Description: 608 GCS PCBs
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: November 07, 2016

QC Batch: 238410

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 1171556)
  - Decachlorobiphenyl (S)
- MW-1-1016 (Lab ID: 30199999001)
  - Decachlorobiphenyl (S)

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 238181

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- MW-9-1016 (Lab ID: 30199999003)
  - Decachlorobiphenyl (S)
  - Tetrachloro-m-xylene (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238410

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

Analyte Comments:

QC Batch: 238410

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- MW-1-1016 (Lab ID: 30199999001)
  - PCB-1016 (Aroclor 1016)
  - PCB-1221 (Aroclor 1221)
  - PCB-1232 (Aroclor 1232)
  - PCB-1242 (Aroclor 1242)
  - PCB-1248 (Aroclor 1248)
  - PCB-1254 (Aroclor 1254)
  - PCB-1260 (Aroclor 1260)

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Method: **EPA 608**
Description: 608 GCS PCBs
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: November 07, 2016

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Sample: MW-1-1016 **Lab ID: 30199999001** Collected: 10/19/16 14:00 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.021	1	10/30/16 09:27	11/03/16 19:30	12674-11-2	1c
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.065	1	10/30/16 09:27	11/03/16 19:30	11104-28-2	1c
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/30/16 09:27	11/03/16 19:30	11141-16-5	1c
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.030	1	10/30/16 09:27	11/03/16 19:30	53469-21-9	1c
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.025	1	10/30/16 09:27	11/03/16 19:30	12672-29-6	1c
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/30/16 09:27	11/03/16 19:30	11097-69-1	1c
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.010	1	10/30/16 09:27	11/03/16 19:30	11096-82-5	1c
Surrogates									
Tetrachloro-m-xylene (S)	75	%	10-113		1	10/30/16 09:27	11/03/16 19:30	877-09-8	
Decachlorobiphenyl (S)	51	%	10-105		1	10/30/16 09:27	11/03/16 19:30	2051-24-3	CL,SS

Sample: MW-6-1016 **Lab ID: 30199999002** Collected: 10/19/16 14:50 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 19:53	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.064	1	10/27/16 12:10	11/02/16 19:53	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 19:53	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.030	1	10/27/16 12:10	11/02/16 19:53	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 19:53	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/27/16 12:10	11/02/16 19:53	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 19:53	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	72	%	10-113		1	10/27/16 12:10	11/02/16 19:53	877-09-8	
Decachlorobiphenyl (S)	45	%	10-105		1	10/27/16 12:10	11/02/16 19:53	2051-24-3	CL,SS

Sample: MW-9-1016 **Lab ID: 30199999003** Collected: 10/19/16 13:55 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**20.3 U**	ug/L	20.3	0.40	20	10/27/16 12:10	11/05/16 14:58	12674-11-2	
PCB-1221 (Aroclor 1221)	**37.4**	ug/L	20.3	1.3	20	10/27/16 12:10	11/05/16 14:58	11104-28-2	
PCB-1232 (Aroclor 1232)	**20.3 U**	ug/L	20.3	0.20	20	10/27/16 12:10	11/05/16 14:58	11141-16-5	
PCB-1242 (Aroclor 1242)	**20.3 U**	ug/L	20.3	0.59	20	10/27/16 12:10	11/05/16 14:58	53469-21-9	
PCB-1248 (Aroclor 1248)	**20.3 U**	ug/L	20.3	0.48	20	10/27/16 12:10	11/05/16 14:58	12672-29-6	
PCB-1254 (Aroclor 1254)	**20.3 U**	ug/L	20.3	0.51	20	10/27/16 12:10	11/05/16 14:58	11097-69-1	
PCB-1260 (Aroclor 1260)	**20.3 U**	ug/L	20.3	0.20	20	10/27/16 12:10	11/05/16 14:58	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	0	%	10-113		20	10/27/16 12:10	11/05/16 14:58	877-09-8	S4
Decachlorobiphenyl (S)	0	%	10-105		20	10/27/16 12:10	11/05/16 14:58	2051-24-3	S4

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Sample: MW-11-1016 **Lab ID: 30199999004** Collected: 10/19/16 12:05 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 20:24	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.063	1	10/27/16 12:10	11/02/16 20:24	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:24	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.029	1	10/27/16 12:10	11/02/16 20:24	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 20:24	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.025	1	10/27/16 12:10	11/02/16 20:24	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.0099	1	10/27/16 12:10	11/02/16 20:24	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	74	%	10-113		1	10/27/16 12:10	11/02/16 20:24	877-09-8	
Decachlorobiphenyl (S)	50	%	10-105		1	10/27/16 12:10	11/02/16 20:24	2051-24-3	CL,SS

Sample: MW-12-1016 **Lab ID: 30199999005** Collected: 10/19/16 12:15 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 20:32	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.064	1	10/27/16 12:10	11/02/16 20:32	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:32	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.030	1	10/27/16 12:10	11/02/16 20:32	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 20:32	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/27/16 12:10	11/02/16 20:32	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:32	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	73	%	10-113		1	10/27/16 12:10	11/02/16 20:32	877-09-8	
Decachlorobiphenyl (S)	47	%	10-105		1	10/27/16 12:10	11/02/16 20:32	2051-24-3	CL,SS

Sample: MW-21-1016 **Lab ID: 30199999006** Collected: 10/19/16 11:05 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 20:40	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.064	1	10/27/16 12:10	11/02/16 20:40	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:40	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.030	1	10/27/16 12:10	11/02/16 20:40	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 20:40	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/27/16 12:10	11/02/16 20:40	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:40	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	75	%	10-113		1	10/27/16 12:10	11/02/16 20:40	877-09-8	
Decachlorobiphenyl (S)	51	%	10-105		1	10/27/16 12:10	11/02/16 20:40	2051-24-3	CL,SS

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Sample: MW-24-1016 **Lab ID: 30199999007** Collected: 10/19/16 10:15 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 20:47	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.064	1	10/27/16 12:10	11/02/16 20:47	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:47	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.030	1	10/27/16 12:10	11/02/16 20:47	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 20:47	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/27/16 12:10	11/02/16 20:47	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:47	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	60	%	10-113		1	10/27/16 12:10	11/02/16 20:47	877-09-8	
Decachlorobiphenyl (S)	47	%	10-105		1	10/27/16 12:10	11/02/16 20:47	2051-24-3	CL,SS

Sample: MW-20-1016 **Lab ID: 30199999008** Collected: 10/19/16 10:58 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 21:41	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.063	1	10/27/16 12:10	11/02/16 21:41	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 21:41	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.029	1	10/27/16 12:10	11/02/16 21:41	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 21:41	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/27/16 12:10	11/02/16 21:41	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.0099	1	10/27/16 12:10	11/02/16 21:41	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	76	%	10-113		1	10/27/16 12:10	11/02/16 21:41	877-09-8	
Decachlorobiphenyl (S)	44	%	10-105		1	10/27/16 12:10	11/02/16 21:41	2051-24-3	CL,SS

Sample: Field Duplicate-1016 **Lab ID: 30199999009** Collected: 10/19/16 14:50 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0 U**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 21:49	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.064	1	10/27/16 12:10	11/02/16 21:49	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 21:49	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.030	1	10/27/16 12:10	11/02/16 21:49	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 21:49	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/27/16 12:10	11/02/16 21:49	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 21:49	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	72	%	10-113		1	10/27/16 12:10	11/02/16 21:49	877-09-8	
Decachlorobiphenyl (S)	43	%	10-105		1	10/27/16 12:10	11/02/16 21:49	2051-24-3	CL,SS

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Sample: MW-6-Matrix Spike-1016 **Lab ID: 30199999010** Collected: 10/19/16 14:50 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.0**	ug/L	1.0	0.020	1	10/27/16 12:10	11/02/16 20:01	12674-11-2	
PCB-1221 (Aroclor 1221)	**1.0 U**	ug/L	1.0	0.063	1	10/27/16 12:10	11/02/16 20:01	11104-28-2	
PCB-1232 (Aroclor 1232)	**1.0 U**	ug/L	1.0	0.010	1	10/27/16 12:10	11/02/16 20:01	11141-16-5	
PCB-1242 (Aroclor 1242)	**1.0 U**	ug/L	1.0	0.029	1	10/27/16 12:10	11/02/16 20:01	53469-21-9	
PCB-1248 (Aroclor 1248)	**1.0 U**	ug/L	1.0	0.024	1	10/27/16 12:10	11/02/16 20:01	12672-29-6	
PCB-1254 (Aroclor 1254)	**1.0 U**	ug/L	1.0	0.026	1	10/27/16 12:10	11/02/16 20:01	11097-69-1	
PCB-1260 (Aroclor 1260)	**1.0**	ug/L	1.0	0.0099	1	10/27/16 12:10	11/02/16 20:01	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	71	%	10-113		1	10/27/16 12:10	11/02/16 20:01	877-09-8	
Decachlorobiphenyl (S)	38	%	10-105		1	10/27/16 12:10	11/02/16 20:01	2051-24-3	CL,SS

Sample: MW-6-Duplicate Matrix Spike-10 **Lab ID: 30199999011** Collected: 10/19/16 14:50 Received: 10/21/16 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
608 GCS PCBs	Analytical Method: EPA 608 Preparation Method: EPA 608 SF								
PCB-1016 (Aroclor 1016)	**1.1**	ug/L	1.1	0.021	1	10/27/16 12:10	11/02/16 20:09	12674-11-2	A5
PCB-1221 (Aroclor 1221)	**1.1 U**	ug/L	1.1	0.067	1	10/27/16 12:10	11/02/16 20:09	11104-28-2	A5
PCB-1232 (Aroclor 1232)	**1.1 U**	ug/L	1.1	0.011	1	10/27/16 12:10	11/02/16 20:09	11141-16-5	A5
PCB-1242 (Aroclor 1242)	**1.1 U**	ug/L	1.1	0.031	1	10/27/16 12:10	11/02/16 20:09	53469-21-9	A5
PCB-1248 (Aroclor 1248)	**1.1 U**	ug/L	1.1	0.026	1	10/27/16 12:10	11/02/16 20:09	12672-29-6	A5
PCB-1254 (Aroclor 1254)	**1.1 U**	ug/L	1.1	0.027	1	10/27/16 12:10	11/02/16 20:09	11097-69-1	A5
PCB-1260 (Aroclor 1260)	**1.0J**	ug/L	1.1	0.011	1	10/27/16 12:10	11/02/16 20:09	11096-82-5	A5
Surrogates									
Tetrachloro-m-xylene (S)	78	%	10-113		1	10/27/16 12:10	11/02/16 20:09	877-09-8	
Decachlorobiphenyl (S)	49	%	10-105		1	10/27/16 12:10	11/02/16 20:09	2051-24-3	CL,SS

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

QC Batch: 238181 Analysis Method: EPA 608
QC Batch Method: EPA 608 SF Analysis Description: 608 GCS PCB
Associated Lab Samples: 30199999002, 30199999003, 30199999004, 30199999005, 30199999006, 30199999007, 30199999008, 30199999009, 30199999010, 30199999011

METHOD BLANK: 1170523 Matrix: Water
Associated Lab Samples: 30199999002, 30199999003, 30199999004, 30199999005, 30199999006, 30199999007, 30199999008, 30199999009, 30199999010, 30199999011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	1.0 U	1.0	0.020	11/02/16 19:38	
PCB-1221 (Aroclor 1221)	ug/L	1.0 U	1.0	0.062	11/02/16 19:38	
PCB-1232 (Aroclor 1232)	ug/L	1.0 U	1.0	0.0099	11/02/16 19:38	
PCB-1242 (Aroclor 1242)	ug/L	1.0 U	1.0	0.029	11/02/16 19:38	
PCB-1248 (Aroclor 1248)	ug/L	1.0 U	1.0	0.024	11/02/16 19:38	
PCB-1254 (Aroclor 1254)	ug/L	1.0 U	1.0	0.025	11/02/16 19:38	
PCB-1260 (Aroclor 1260)	ug/L	1.0 U	1.0	0.0098	11/02/16 19:38	
Decachlorobiphenyl (S)	%	49	10-105		11/02/16 19:38	CL,SS
Tetrachloro-m-xylene (S)	%	78	10-113		11/02/16 19:38	

LABORATORY CONTROL SAMPLE: 1170524

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	1.2	1.1	88	53-106	
PCB-1260 (Aroclor 1260)	ug/L	1.2	1.1	92	50-112	
Decachlorobiphenyl (S)	%			42	10-105	CL,SS
Tetrachloro-m-xylene (S)	%			76	10-113	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1170525 1170526

Parameter	Units	30199999002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/L	1.0 U	1.3	1.4	1.0	1.1	80	81	53-106	7	25	
PCB-1260 (Aroclor 1260)	ug/L	1.0 U	1.3	1.4	1.0	1.0J	80	77	50-112		25	
Decachlorobiphenyl (S)	%						38	49	10-105			CL,SS
Tetrachloro-m-xylene (S)	%						71	78	10-113			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

QC Batch: 238410 Analysis Method: EPA 608
QC Batch Method: EPA 608 SF Analysis Description: 608 GCS PCB
Associated Lab Samples: 30199999001

METHOD BLANK: 1171555 Matrix: Water
Associated Lab Samples: 30199999001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	1.0 U	1.0	0.020	10/31/16 22:09	
PCB-1221 (Aroclor 1221)	ug/L	1.0 U	1.0	0.062	10/31/16 22:09	
PCB-1232 (Aroclor 1232)	ug/L	1.0 U	1.0	0.0099	10/31/16 22:09	
PCB-1242 (Aroclor 1242)	ug/L	1.0 U	1.0	0.029	10/31/16 22:09	
PCB-1248 (Aroclor 1248)	ug/L	1.0 U	1.0	0.024	10/31/16 22:09	
PCB-1254 (Aroclor 1254)	ug/L	1.0 U	1.0	0.025	10/31/16 22:09	
PCB-1260 (Aroclor 1260)	ug/L	1.0 U	1.0	0.0098	10/31/16 22:09	
Decachlorobiphenyl (S)	%	39	10-105		10/31/16 22:09	CH
Tetrachloro-m-xylene (S)	%	62	10-113		10/31/16 22:09	

LABORATORY CONTROL SAMPLE: 1171556

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2.5	2.1	84	53-106	
PCB-1260 (Aroclor 1260)	ug/L	2.5	2.0	80	50-112	
Decachlorobiphenyl (S)	%			21	10-105	SS
Tetrachloro-m-xylene (S)	%			74	10-113	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-PA	Pace Analytical Services - Greensburg

BATCH QUALIFIERS

Batch: 238410

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
A5	Greater than 5% sediment in sample determined by visual observation. Aqueous portion decanted from the sediment and extracted.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: National Grid - Buffalo Dewey
Pace Project No.: 30199999

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30199999001	**MW-1-1016**	EPA 608 SF	238410	EPA 608	238596
30199999002	**MW-6-1016**	EPA 608 SF	238181	EPA 608	238927
30199999003	**MW-9-1016**	EPA 608 SF	238181	EPA 608	238927
30199999004	**MW-11-1016**	EPA 608 SF	238181	EPA 608	238927
30199999005	**MW-12-1016**	EPA 608 SF	238181	EPA 608	238927
30199999006	**MW-21-1016**	EPA 608 SF	238181	EPA 608	238927
30199999007	**MW-24-1016**	EPA 608 SF	238181	EPA 608	238927
30199999008	**MW-20-1016**	EPA 608 SF	238181	EPA 608	238927
30199999009	**Field Duplicate-1016**	EPA 608 SF	238181	EPA 608	238927
30199999010	**MW-6-Matrix Spike-1016**	EPA 608 SF	238181	EPA 608	238927
30199999011	**MW-6-Duplicate Matrix Spike-10**	EPA 608 SF	238181	EPA 608	238927

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

30199999

Section A **Required** Client Information:	Section B **Required** Project Information:	Section C Invoice Information:
Company: GES - Syracuse	Report To: Robert N. Sickler (GES) rsickler@gesonline.com	Attention: Accounts Payable via email at NERegion@gesonline.com
Address: 5 Technology Place, Suite 4	Copy To:	Company Name: Groundwater & Environmental Services, Inc.
East Syracuse, New York 13057		Address: 5 Technology Place, Suite 4, East Syracuse, NY 13057
Email To: rsickler@gesonline.com	Purchase Order No.:	Pace Quote Reference:
Phone : 800.220.3069, x4052 | Fax: None	Project Name: National Grid - Buffalo Dewey Avenue Site, Buffalo, NY	Pace Project Manager: Rachel Christner
Requested Due Date/TAT: Standard	Project Number: 06-02882-142140-160	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER ____

SITE LOCATION: ☐ GA ☐ IL ☐ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER ____

Section D **Required** Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB, C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED GRAB DATE	COLLECTED GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis: PCBs (8082 Lab)	Pace Project Number Lab I.D.
1	MW-1-1016	WT	G			10/19/16	1400		2	2								2	001
2	MW-6-1016	WT	G				1450		2	2								2	002
3	MW-9-1016	WT	G				1355		2	2								2	003
4	MW-11-1016	WT	G				1207		2	2								2	004
5	MW-12-1016	WT	G				1215		2	2								2	005
6	MW-20-1016	WT	G				1058		2	2								2	008
7	MW-21-1016	WT	G				1105		2	2								2	006
8	MW-24-1016	WT	G				1015		2	2								2	007
9	Field Duplicate-1016	WT	G				—		2	2								2	009
10	MW-6-Matrix Spike-1016	WT	G				1450		2	2								2	010
11	MW-6-Duplicate Matrix Spike-1016	WT	G				1450		2	2								2	011
12	---END OF RECORD---																		

WO#:30199999

Additional Comments:

SAMPLES WILL ARRIVE IN # 2 COOLERS.

ltuovila@gesonline.com

Please send reports to: rsickler@gesonline.com, cgoldenwalts@gesonline.com, Syracuselabs@gesonline.com, ges@equisonline.com

SPECIFIC EDD NAME:

NGBuffaloDeweyAve-labnumber.28351.EQEDD.zip

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fleming Pace	10/19/16	1630	Phil Fleming/Pace	10/20/16	1050
Phil Fleming/Pace	10/20/16	1700	Michael Lombardo	10/21/16	1040

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
1.4	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: TIM BEAUMONT

SIGNATURE of SAMPLER: _____ DATE Signed (MM / DD / YY): 10/19/16

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: GES Syracuse

Project # 30199999

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7775 1997 9754

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 8 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.3 °C Correction Factor: +0.1 °C Final Temp: 1.4 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: ML 10-21-16

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:	X			4.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WA	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used: -Pace Containers Used:	X			10.
Containers Intact:	X			11.
Filtered volume received for Dissolved tests			X	12.
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, Phenolics			X	13. Initial when completed: ML Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):			X	14.
Trip Blank Present:		X		15.
Trip Blank Custody Seals Present			X	
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		Initial when completed: ML Date: 10-21-16

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

***PM review** is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.