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

November 11, 2015

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 and 2015 Annual Groundwater Monitoring Report

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 December 1, 2014 – November 30, 2015:

- Attachment 1 – PRR
- Attachment 2 – PRR Certification Form
- Attachment 3 – Annual Monitoring Report

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

Sincerely,

Matthew D. Millias for SPS

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

ecc: Kelly Lewandowski - NYSDEC
Lisa Montesano – NG
Matt Millias – CDM Smith

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 – December 1, 2014 – November 30, 2015

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.

Finally 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 (December 1, 2014, to November 30, 2015), 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, 2016.

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 and gauging 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, 2016.

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: Dewey/Kensington Service Center

Site Address: 144 Kensington Avenue Zip Code: 14214
City/Town: Buffalo
Buffalo County: Erie
Acreage: 23 acres (Dewey/Kensington SC complex)

Reporting Period: December 1, 2014 to November 30, 2015

	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.

_____ _____

SITE NO. 915144 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
	National Grid	Soil Management Plan Monitoring Plan Site Management Plan Ground Water Use Restriction Land-Use Restriction IC/EC Plan

1. Since the remedy resulted in MGP related contamination above unrestricted levels remaining at the site, an Institutional control in the form of a deed restriction was filed for the site. The deed restriction requires: a) restricting the use of the site to commercial or industrial use. Any specific future use of the site must comply with local laws and regulations; b) compliance with the approved site management plan; c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and d) completion of a periodic certification of institutional and engineering controls, submitted to the Department.

2. A site management plan (SMP) was approved which will: a) require that any soil excavated during future activities will be tested and properly handled in a manner acceptable to the Department to protect the health and safety of workers, the school population, and the nearby community; b) require monitoring of groundwater; c) evaluate the potential for vapor intrusion for any buildings developed on the site, including mitigation of any Impacts Identified; and d) completion of a periodic certification of Institutional and engineering controls, to be submitted to the Department.

3. The property owner and/or responsible party will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submission will: a) contain certification that the institutional controls and engineering controls constituting the remedy remain effectively in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; b) allow the Department access to the site; and c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

Box 4

Description of Engineering Controls

None Required

Not Applicable/No ECs

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 2IS 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 Matthew D. Millias (print name) at 6800 Old Collamer Road, East Syracuse, NY 12057 (print business address)

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

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

Matthew D. Millias

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

November 2, 2015

Date

nationalgrid

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

2015 Annual Groundwater Monitoring Report

Prepared by:

CDM Smith

6800 Old Collamer Road, Suite 3
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 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 2015 and October 2015 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 27-28, 2015 and October 7-8, 2015 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).

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 2015 and October 2015 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 2015 and October 2015 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 ppb for total PCBs).

For the April 2015 sampling event, PCBs were detected in two of the eight groundwater samples collected from site groundwater monitoring wells (0.8 parts per billion [ppb] in the sample collected from MW-1, and 6.9 ppb in the sample collected from MW-9). For the October 2015 sampling event, PCBs were detected in **three** of the eight groundwater samples collected from site wells (9.1 ppb in the groundwater sample collected from MW-1, 26 ppb in the groundwater sample collected from MW-9, and 0.053 ppb in the groundwater sample collected from MW-20). This was the first detection of MW-20 since the long-term OM&M program began.

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 2015 or October 2015 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 2016. 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

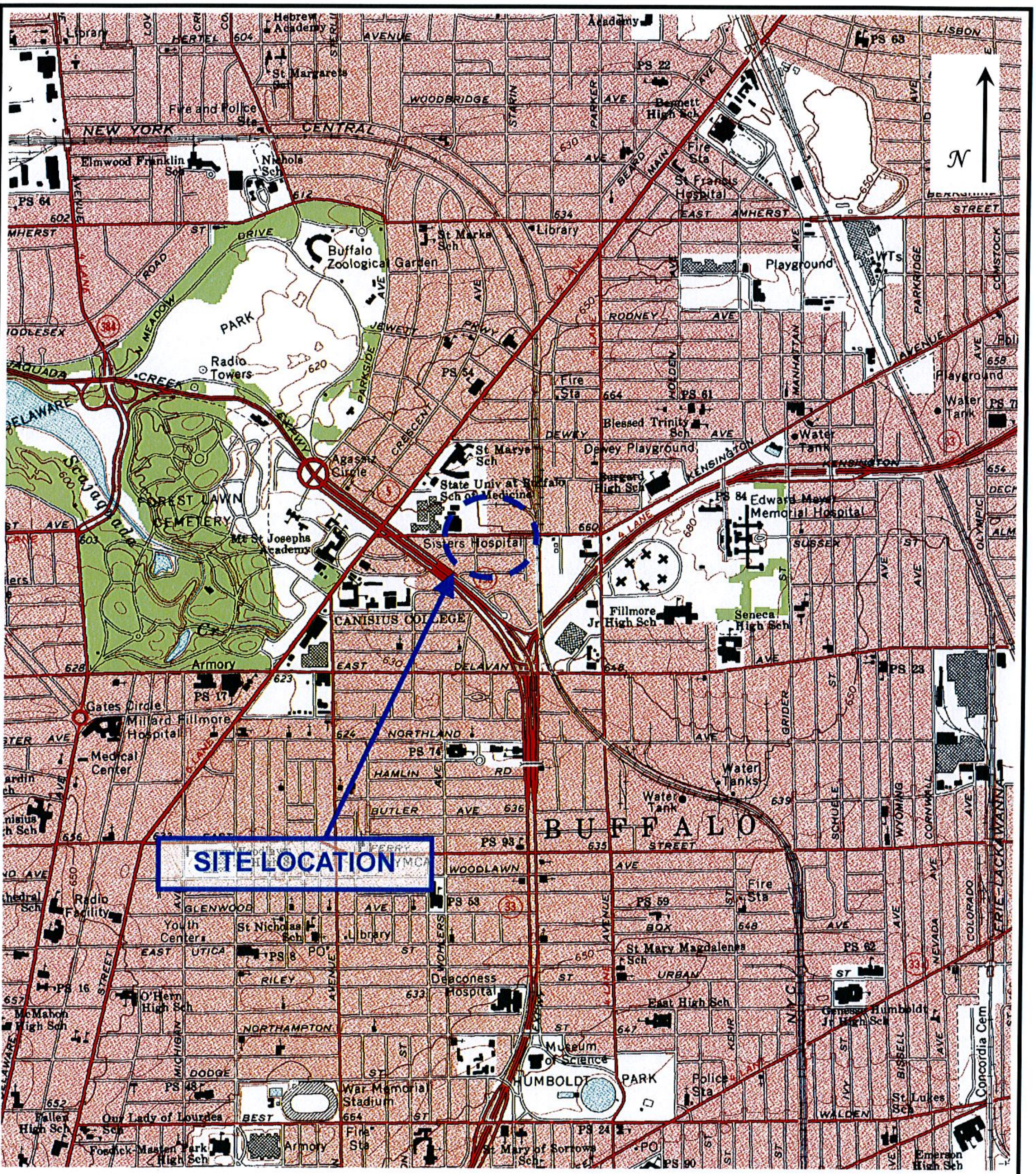
4.1 Conclusions

Eight monitoring wells were sampled and analyzed for PCBs during the April 2015 and October 2015 events (MW-1, MW-6, MW-9, MW-11, MW-12, MW-20, MW-21, and MW-24). For the April 2015 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 2015 sampling event, PCBs were detected in groundwater samples collected from three of the eight site groundwater monitoring wells (MW-1, MW-9, MW-20). It was the first detection of PCBs in the MW-20 groundwater well. This well will be monitored closely in the next sampling event.

4.2 Recommendations

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

Figures



Notes:

USGS Topo. Quad. Buffalo Northeast used to create base map.

0 1000 2000 3000 4000

APPROXIMATE SCALE

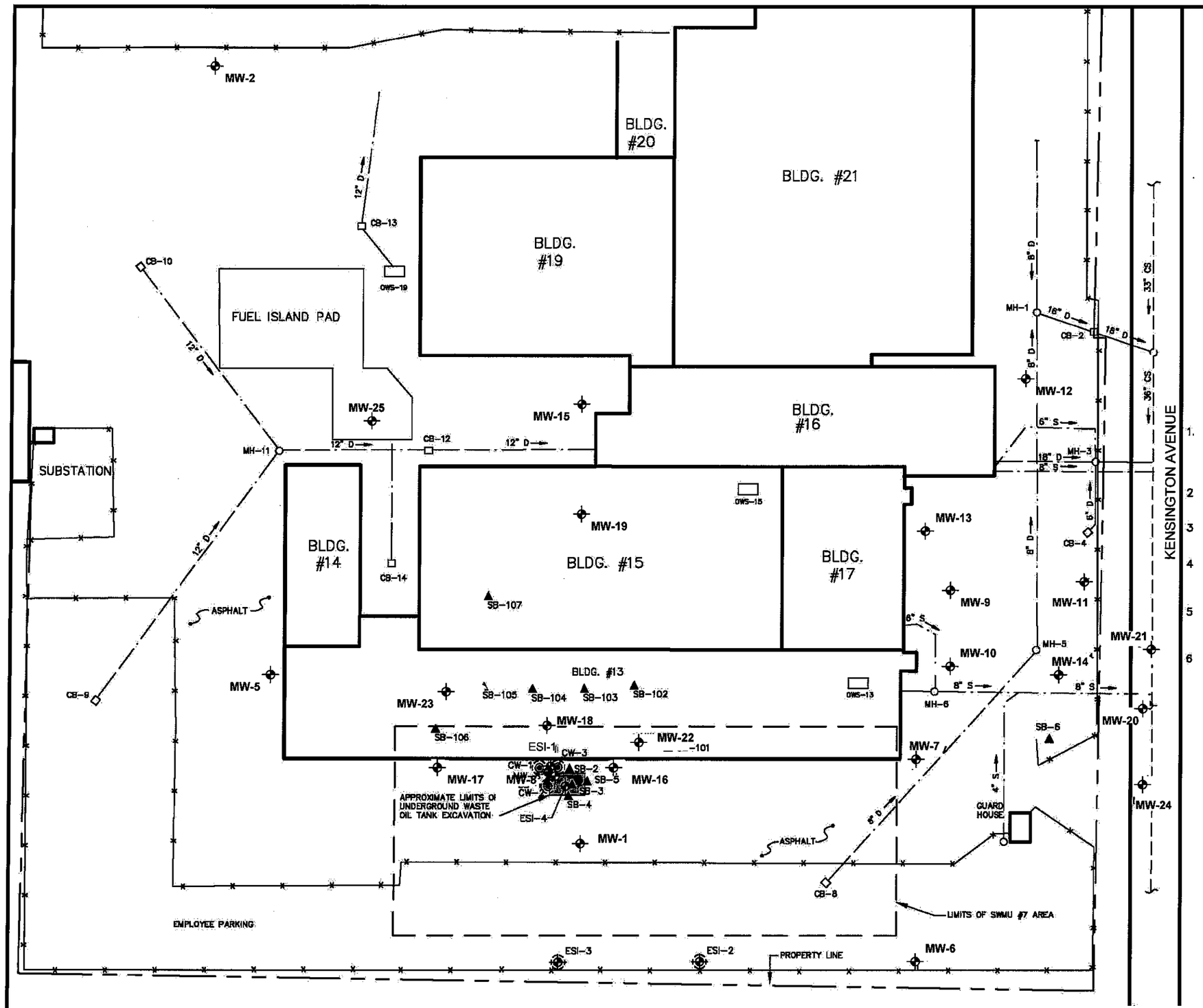
QUADRANGLE LOCATION

NATIONAL GRID
DEWEY AVENUE SERVICE CENTER

SITE LOCATION MAP

CDM Smith

Figure
1-1



LEGEND:

- ▲ SB-5 — APPROXIMATE LOCATION OF SOIL BORING
- MW-1 — APPROXIMATE LOCATION OF MONITORING WELL
- CW-1 — COLLECTION WELL DECOMMISSIONED APRIL 2004
- ESI-2 — MONITORING WELL DECOMMISSIONED APRIL 2004
- CHAIN LINK FENCE
- OWS — OIL/WATER SEPARATOR
- EXISTING SANITARY SEWER AND MANHOLE
- EXISTING STORM SEWER AND CATCH BASIN
- EXISTING COMBINED SANITARY AND STORM SEWER
- APPARENT DIRECTION OF FLOW IN SEWER
- EXCAVATION AREA

NOTES:

1. BASE MAP SUPPLIED BY BBL AND NIAGRA MOHAWK POWER CORPORATION, COMPILED BY FIELD SURVEY METHODS ON 9/6/94, 2/97 AND 10/97 AT AN ORIGINAL SCALE OF 1" = 20'.
2. LIMITS OF WASTE OIL TANK EXCAVATION BASED ON FIELD MEASUREMENTS BY BBL, INC.
3. ALL LOCATIONS ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION.
4. LOCATION OF MONITORING WELLS AND COLLECTION WELLS INSTALLED DURING THE SSI ARE BASED ON NIAGARA MOHAWK FIELD SURVEY IN OCTOBER 2000.
5. SOIL BORING LOCATIONS SB-101 THROUGH SB-107 AND MONITORING WELL LOCATIONS MW-22, MW-23 AND MW-24 BASED ON NIAGARA MOHAWK FIELD SURVEY IN SEPTEMBER 2002.

0 60' 120'

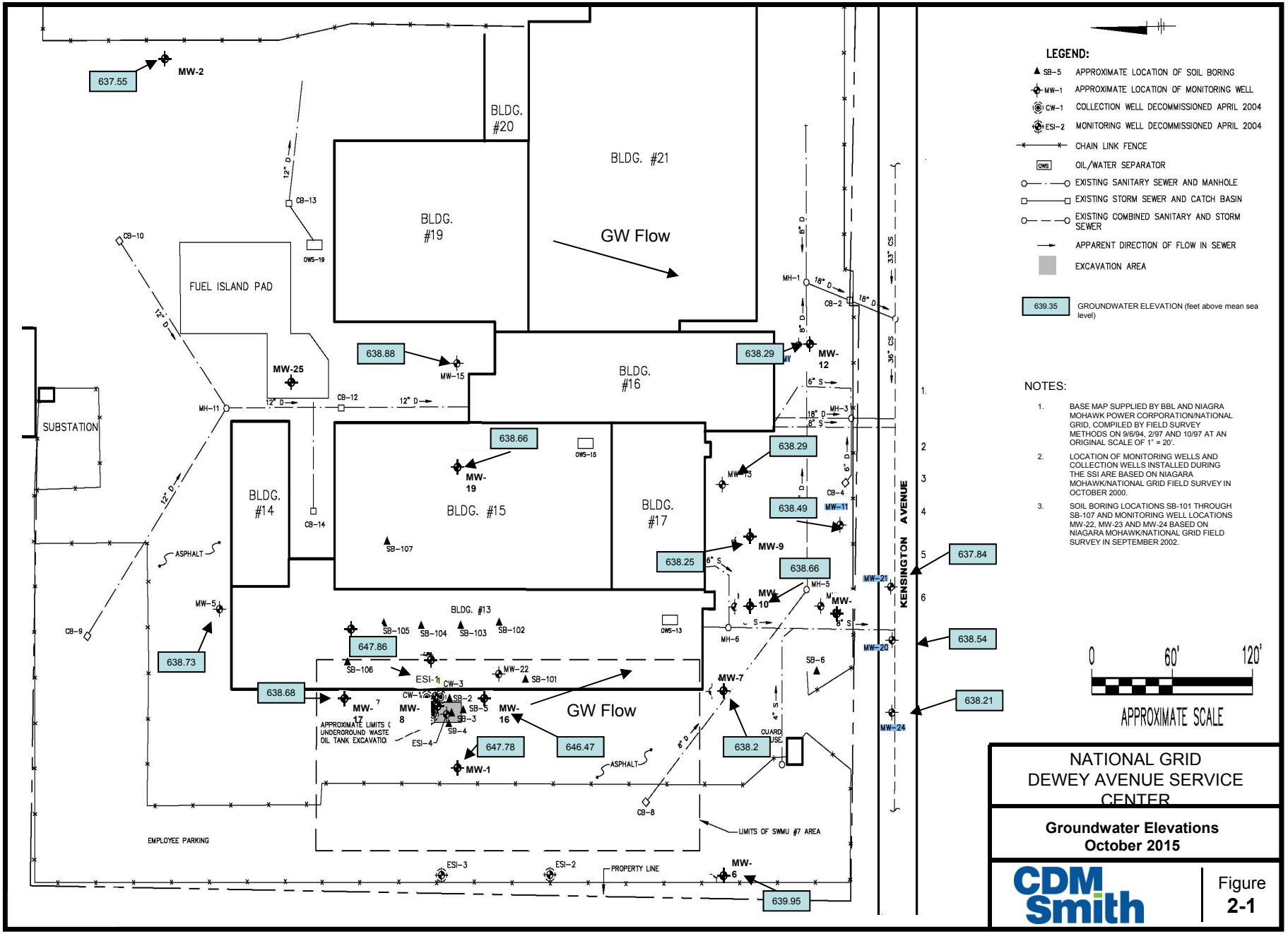
APPROXIMATE SCALE

NATIONAL GRID
DEWEY AVENUE SERVICE CENTER

SITE MAP

CDM Smith

Figure 1-2



NATIONAL GRID
DEWEY AVENUE SERVICE CENTER

Groundwater Elevations
October 2015

CDM Smith

Figure
2-1

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)	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)
MW-1	650.76	29.90	2.85	647.91	3.07	647.69	3.41	647.35	3.30	647.46	3.02	647.74	3.23	647.53
MW-2	650.55	44.17	*	*	15.26	635.29	12.75	637.80	12.20	638.35	11.62	638.93	11.42	639.13
MW-5	651.65	21.40	10.68	640.97	11.55	640.10	11.72	639.93	11.25	640.40	10.89	640.76	11.58	640.07
MW-6	650.25	21.05	6.90	643.35	10.20	640.05	10.10	640.15	9.90	640.35	7.58	642.67	8.25	642.00
MW-7	650.02	21.30	9.46	640.56	11.56	638.46	11.69	638.33	10.88	639.14	10.31	639.71	11.30	638.72
MW-9	648.95	22.05	9.70	639.25	10.76	638.19	11.02	637.93	10.58	638.37	10.07	638.88	10.00	638.95
MW-10	649.46	24.25	9.48	639.98	10.39	639.07	10.88	638.58	10.76	638.70	9.57	639.89	10.51	638.95
MW-11	647.11	20.22	7.80	639.31	8.76	638.35	8.98	638.13	8.14	638.97	8.12	638.99	8.25	638.86
MW-12	646.90	19.55	7.60	639.30	8.42	638.48	8.50	638.40	8.24	638.66	7.91	638.99	8.04	638.86
MW-13	650.05	26.25	10.66	639.39	11.65	638.40	11.95	638.10	11.50	638.55	11.05	639.00	11.31	638.74
MW-15	651.88	23.80	11.58	640.30	12.81	639.07	13.35	638.53	12.47	639.41	12.21	639.67	12.22	639.66
MW-16	651.72	20.36	6.45	645.27	5.40	646.32	6.65	645.07	6.50	645.22	5.75	645.97	4.82	646.90
MW-17	651.76	20.60	11.57	640.19	11.86	639.90	12.80	638.96	12.37	639.39	11.75	640.01	12.45	639.31
MW-19	651.69	24.00	11.08	640.61	12.82	638.87	13.27	638.42	12.63	639.06	12.26	639.43	12.52	639.17
MW-20	646.76	22.60	7.55	639.21	8.48	638.28	8.73	638.03	8.82	637.94	7.80	638.96	8.20	638.56
MW-21	646.70	21.85	7.65	639.05	8.35	638.35	8.80	637.90	8.34	638.36	7.80	638.90	8.20	638.50
MW-24	647.01	24.25	7.60	639.41	8.53	638.48	8.80	638.21	8.40	638.61	7.90	639.11	8.30	638.71
ESI-1	651.66	21.50	3.68	647.98	3.94	647.72	4.18	647.48	4.40	647.26	4.00	647.66	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 ESI-1 only. Numbers in parentheses present depths and elevations to LNAPL.
* = MW-2 is typically inaccessible due to staged equipment.

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 2014 DTW (ft BTOC)	April 2014 Potentiometric Surface Elev. (ft AMSL)	October 2014 DTW (ft BTOC)	October 2014 Potentiometric Surface Elev. (ft AMSL)	April 2015 DTW (ft BTOC)	April 2015 Potentiometric Surface Elev. (ft AMSL)	October 2015 DTW (ft BTOC)	October 2015 Potentiometric Surface Elev. (ft AMSL)
MW-1	650.76	29.90	3.02	647.74	3.82	646.94	2.90	647.86	2.98	647.78
MW-2	650.55	44.17	11.30	639.25	15.40	635.15	14.60	635.95	13.00	637.55
MW-5	651.65	21.40	9.62	642.03	12.53	639.12	9.81	641.84	12.92	638.73
MW-6	650.25	21.05	7.95	642.30	11.15	639.10	8.46	641.79	10.30	639.95
MW-7	650.02	21.30	9.58	640.44	11.98	638.04	10.30	639.72	11.82	638.20
MW-9	648.95	22.05	9.75	639.20	11.16	637.79	10.26	638.69	10.70	638.25
MW-10	649.46	24.25	10.08	639.38	Not Gauged	Not Gauged	10.05	639.41	10.80	638.66
MW-11	647.11	20.22	7.95	639.16	8.80	638.31	8.23	638.88	8.55	638.56
MW-12	646.90	19.55	7.73	639.17	8.90	638.00	8.00	638.90	8.41	638.49
MW-13	650.05	26.25	10.86	639.19	12.17	637.88	11.75	638.30	11.76	638.29
MW-15	651.88	23.80	12.08	639.80	13.62	638.26	12.50	639.38	13.00	638.88
MW-16	651.72	20.36	5.55	646.17	6.06	645.66	5.75	645.97	5.25	646.47
MW-17	651.76	20.60	11.23	640.53	12.19	639.57	10.87	640.89	13.08	638.68
MW-19	651.69	24.00	12.50	639.19	13.56	638.13	12.49	639.20	13.03	638.66
MW-20	646.76	22.60	7.80	638.96	9.00	637.76	8.12	638.64	8.22	638.54
MW-21	646.70	21.85	7.80	638.90	8.72	637.98	8.14	638.56	8.86	637.84
MW-24	647.01	24.25	7.92	639.09	9.13	637.88	8.22	638.79	8.80	638.21
ESI-1	651.66	21.50	3.80	647.86	4.60	647.06	3.66	648.00	3.80	647.86

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) obs
ESI-1 only. Numbers in parentheses pres
and elevations to LNAPL.
* = MW-2 is typically inaccessible due to stag

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**
Oct-15	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
Oct-14	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 27-28, 2015

Well ID.	Sample?	Well Size	DTP	DTW	DTB	Comments
ESI-1	VOC's Fall only	4"	trace on boom	3.66	21.50	checked sorbant boom.
MW-1	yes	4"		2.90	29.90	
MW-2	no	4"		14.60	44.17	
MW-5	no	2"		9.81	21.40	
MW-6	yes	2"		8.46	21.05	MS/MSD
MW-7	no	2"		10.30	21.30	
MW-9	yes	2"		10.26	22.05	
MW-10	no	2"		10.05	24.25	
MW-11	yes	2"		8.23	20.22	
MW-12	yes	2"		8.00	19.55	Duplicate Sample
MW-13	no	2"		11.75	26.25	
MW-15	no	2"		12.50	23.80	
MW-16	VOC's Fall only	2"	trace on probe	5.75	20.36	
MW-17	no	2"		10.87	20.60	
MW-19	no	2"		12.49	24.00	
MW-20	yes	2"		8.12	22.60	
MW-21	yes	2"		8.14	21.85	
MW-24	yes	2"		8.22	24.25	
MW-25	no	2"		6.66	15.36	

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: 480-64510-16322.1
Client Contact: Timothy Beaumont	Phone: 585 739 2318	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:			
City: East Syracuse	TAT Requested (days):			
State, Zip: NY, 13057				
Phone:	PO #: 36380.105370			
Email: beaumonttj@cdmsmith.com	WO #:			
Project Name: Dewey Ave semi-annual GW Wells	Project #: 48011230			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

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-1-0415	4/27/15	1115	6	Water			2		
MW-6-0415	4/27/15	1200	6	Water			2		
MW-6 MS-0415	4/27/15	1200	6	Water			2		
MW-6 SD-0415	4/27/15	1200	6	Water			2		
MW-9-0415	4/27/15	1030	6	Water			2		
MW-11-0415	4/27/15	945	6	Water			2		
MW-12-0415	4/27/15	900	6	Water			2		
MW-20-0415	4/28/15	850	6	Water			2		
MW-21-0415	4/28/15	830	6	Water			2		
MW-24-0415	4/28/15	815	6	Water			2		
FD-0415	4/27/15	—	6	Water			2		

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, IV, ☑ 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
1		4/28/15	CDMSmith	Cameron Willke	4-28-15 12:30	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

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

Sampling Personnel: Tim Beaumont
Job Number: 36380.105370
Well Id. **MW-1**

Date: 4/27/15
Weather: cloudy drizzle 41
Time In: 1045 Time Out: 1120

Well Information

		TOC	Other
Depth to Water:	(feet)	2.90	
Depth to Bottom:	(feet)	29.90	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	27.00	
Volume of Water in Well:	(gal)	17.82	53.46
Three Well Volumes:	(gal)	53.46	

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 [Y]

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	2.98		8.70	7.07	-112	18.4	12.9	2.44
1050	3.00		8.68	7.10	-117	20.0	9.1	1.42
1055	3.00		8.64	7.11	-123	22.0	6.5	.91
1100	3.00		8.59	7.04	-104	22.6	.9	.73
1105	3.00		8.51	7.00	-101	22.6	0	.67
1110	3.00		8.47	6.99	-98	22.7	0	.61
1115	3.00		8.44	6.96	-97	22.7	0	.55

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-1-0415
Sample Time: 1115
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

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

Comments/Notes: No Sheen slight odor egg 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: 36380.105370
Well Id. **MW-6**

Date: 4/27/15
Weather: Cloudy 43°
Time In: 1130 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	8.46	
Depth to Bottom:	(feet)	21.05	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	12.59	
Volume of Water in Well:	(gal)	2.01	
Three Well Volumes:	(gal)	6.03	

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)
1130	9.30		8.46	7.01	16	17.6	15.2	2.19
1135	9.42		8.40	6.97	-2	17.6	7.6	1.22
1140	9.45		8.35	6.90	-21	17.5	5.5	.78
1145	9.49		8.19	6.90	-28	16.4	4.5	.98
1150	9.54		8.12	6.89	-30	16.6	2.0	1.00
1155	9.60		8.08	6.89	-32	16.9	.9	.94
1200	9.63		8.05	6.90	-33	16.7	.8	.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]

Sample ID: MW-6-0415
Sample Time: 1200
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [X] No [ ]

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: 36380.105370
Well Id. **MW-9**

Date: 4/27/15
Weather: Cloudy Ipprox 41
Time In: 917 Time Out: 1035

Well Information

		TOC	Other
Depth to Water:	(feet)	10.26	
Depth to Bottom:	(feet)	22.05	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	11.79	
Volume of Water in Well:	(gal)	1.89	
Three Well Volumes:	(gal)	5.67	

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)	90			
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)
1000	11.03		8.55	6.91	229	19.7	13.2	1.60
1005	11.05		8.96	6.82	179	20.0	2.9	1.17
1010	11.05		9.17	6.78	127	19.9	0	1.01
1015	11.05		9.41	6.71	92	19.3	0	.93
1020	11.05		9.92	6.70	44	19.1	0	.78
1025	11.05		10.03	6.69	23	19.0	0	.72
1030	11.05		10.07	6.70	12	18.9	0	.64

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-9-0415
Sample Time: 1030
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

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

Comments/Notes:

Laboratory: Test America
Amherst, New York

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

Sampling Personnel: Tim Beaumont
Job Number: 36380.105370
Well Id. **MW-11**

Date: 4/27/15
Weather: Sprinkles Cloudy 41
Time In: 915 Time Out: 950

Well Information

		TOC	Other
Depth to Water:	(feet)	8.23	
Depth to Bottom:	(feet)	20.22	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	11.99	
Volume of Water in Well:	(gal)	1.92	
Three Well Volumes:	(gal)	5.76	

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	9.20		8.76	6.75	268	13.2	9.6	5.57
920	9.64		8.72	6.92	268	13.1	5.2	5.20
925	9.91		8.49	6.95	270	13.3	1.3	5.03
930	10.02		8.26	7.02	270	13.4	0	4.91
935	10.08		8.20	7.04	271	13.4	0	4.88
940	10.15		8.17	7.05	272	13.4	0	4.79
945	10.23		8.15	7.05	272	13.4	0	4.72

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-11-0415
Sample Time: 945
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: 36380.105370
Well Id. **MW-12**

Date: 4/27/15
Weather: Cloudy Sprinkles 40°
Time In: 820 Time Out: 910

Well Information

		TOC	Other
Depth to Water:	(feet)	8.80	
Depth to Bottom:	(feet)	19.55	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	11.55	
Volume of Water in Well:	(gal)	1.85	
Three Well Volumes:	(gal)	5.55	

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 [Y]

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)
830	8.92		10.45	6.10	283	6.59	56.6	3.58
835	9.12		18.14	6.47	276	6.62	1.3	3.25
840	9.12		10.14	6.61	273	6.64	0	3.10
845	9.12		10.08	6.76	268	6.67	0	2.99
850	9.12		10.15	6.82	264	6.72	0	2.91
855	9.12		10.14	6.87	262	6.73	0	2.69
900	9.12		10.17	6.90	259	6.76	0	2.54

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-12-0415
Sample Time: 900
Duplicate? Yes [X] No [ ] **FD-0415**
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: 36380.105370
Well Id. **MW-20**

Date: 4/28/15
Weather: Sunny 43°
Time In: 820 Time Out: 855

Well Information

		TOC	Other
Depth to Water:	(feet)	8.12	
Depth to Bottom:	(feet)	22.60	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	14.48	
Volume of Water in Well:	(gal)	2.32	
Three Well Volumes:	(gal)	6.96	

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)
820	8.20		8.91	6.87	88	9.11	6.3	2.00
825	8.20		9.15	6.89	-4	9.06	0	.87
830	8.20		9.14	6.90	-27	9.03	0	.80
835	8.20		9.13	6.91	-45	9.01	0	.69
840	8.20		9.16	6.91	-64	8.98	0	.65
845	8.20		9.19	6.92	-76	8.96	0	.62
850	8.20		9.18	6.92	-90	8.94	0	.60

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-20-0415
Sample Time: 850
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 Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.105370
Well Id. **MW-21**

Date: 4/28/15
Weather: Sunny 45°
Time In: 900 Time Out: 940

Well Information

		TOC	Other
Depth to Water:	(feet)	8.14	
Depth to Bottom:	(feet)	21.85	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	13.71	
Volume of Water in Well:	(gal)	2.19	
Three Well Volumes:	(gal)	6.57	

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)
900	9.35		8.14	6.69	-50	20.2	9.2	3.41
905	9.90		8.16	6.76	-59	20.8	1.3	1.10
910	10.55		8.12	6.82	-65	20.8	0	.78
915	10.80		8.07	6.85	-67	20.7	1.1	.69
920	11.03		8.00	6.88	-64	19.9	2.4	.66
925	11.18		7.95	6.90	-59	19.7	3.0	.78
930	11.27		7.92	6.90	-56	19.3	2.7	.87

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-21-0415
Sample Time: 930
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 Ave, Buffalo, New York

Sampling Personnel: Tim Beaumont
Job Number: 36380.105370
Well Id. **MW-24**

Date: 4/28/15
Weather: Sunny 43°
Time In: 745 Time Out: 820

Well Information

		TOC	Other
Depth to Water:	(feet)	8.22	
Depth to Bottom:	(feet)	24.25	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	16.03	
Volume of Water in Well:	(gal)	2.5	
Three Well Volumes:	(gal)	7.68	

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 [Y]

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	8.30		9.88	5.72	248	10.1	6.3	2.54
750	8.30		9.19	6.15	201	10.2	1.6	1.38
755	8.30		9.05	6.27	179	10.0	0	1.12
800	8.30		8.99	6.49	130	9.96	0	1.01
805	8.30		8.98	6.69	60	9.74	0	.75
810	8.30		8.99	6.72	44	9.73	0	.70
815	8.30		9.01	6.74	33	9.70	0	.67

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-24-0415
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 or free prod odor

Laboratory: Test America
Amherst, New York

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

Fall Semi-Annual Event
October 7-8, 2015

Well ID.	Sample?	Well Size	DTP	DTW	DTB	Comments
ESI-1	VOC's Fall only	4"	trace on boom	3.80	21.50	checked sorbant boom.
MW-1	yes	4"		2.98	29.90	
MW-2	no	4"		13.00	44.17	
MW-5	no	2"		12.92	21.40	
MW-6	yes	2"		10.30	21.05	MS/MSD
MW-7	no	2"		11.82	21.30	
MW-9	yes	2"		10.70	22.05	
MW-10	no	2"		10.80	24.25	
MW-11	yes	2"		8.55	20.22	
MW-12	yes	2"		8.41	19.55	Duplicate Sample
MW-13	no	2"		11.76	26.25	
MW-15	no	2"		13.00	23.80	
MW-16	VOC's Fall only	2"	trace on probe	5.25	20.36	
MW-17	no	2"		13.08	20.60	
MW-19	no	2"		13.03	24.00	
MW-20	yes	2"		8.22	22.60	
MW-21	yes	2"		8.86	21.85	
MW-24	yes	2"		8.80	24.25	
MW-25	no	2"		6.86	15.36	

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

Chain of Custody Record

TestAmerica

Client Information	Sampler: Tim Beaumont	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-72277-16322.1
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:			
City: East Syracuse	TAT Requested (days):			
State, Zip: NY, 13057	PO #: 36380.110154			
Phone:	WO #:			
Email: beaumonttj@cdmsmith.com	Project #: 48011230			
Project Name: Dewey Ave semi-annual GW Wells	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

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-1-1015	10-7-15	1010	6	Water			2		
MW-6-1015	10-7-15	1050	6	Water			2		
MW-6 MS-1015	10-7-15	1050	6	Water			2		
MW-6 SD-1015	10-7-15	1050	6	Water			2		
MW-9-1015	10-7-15	930	6	Water			2		
MW-11-1015	10-7-15	845	6	Water			2		
MW-12-1015	10-7-15	800	6	Water			2		
MW-20-1015	10-8-15	900	6	Water			2		
MW-21-1015	10-8-15	940	6	Water			2		
MW-24-1015	10-8-15	820	6	Water			2		
FD-1015	10-7-15	—	6	Water			2		

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, ☑ Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 10/8/15 1045	Company: CDMSmith	Received by:	Date/Time: 10/8/15 1045	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

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: 10/7/15
Weather: Sunny 55
Time In: 940 Time Out: 1015

Well Information

		TOC	Other
Depth to Water:	(feet)	2.98	
Depth to Bottom:	(feet)	29.90	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	26.92	
Volume of Water in Well:	(gal)	17.77	
Three Well Volumes:	(gal)	53.31	

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)	500
Duration of Pumping:	(min)	30
Total Volume Removed:	(gal)	~ 4.0

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)
940	3.02		20.15	7.28	-145	19.3	5.4	.73
945	3.03		20.11	7.12	-163	20.1	3.8	0
950	3.03		20.15	7.10	-168	20.2	.9	0
955	3.03		20.17	7.10	-169	20.1	.7	0
1000	3.01		20.20	7.10	-170	20.2	1.0	0
1005	3.03		20.22	7.10	-172	20.2	.8	0
1010	3.03		20.23	7.10	-173	20.1	.6	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-1-1015
Sample Time: 1010
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]
Shipped: Drop-off [X] TA Courier [ ] Fed-Ex [ ] UPS [ ]

Comments/Notes: 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-6**

Date: 10/7/15
Weather: Sunny 55°
Time In: 1020 Time Out: 1100

Well Information

		TOC	Other
Depth to Water:	(feet)	10.30	
Depth to Bottom:	(feet)	21.05	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	10.75	
Volume of Water in Well:	(gal)	1.72	
Three Well Volumes:	(gal)	5.16	

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)
1020	10.78		19.10	7.15	-74	12.6	1.3	.23
1025	10.80		19.02	7.13	-76	12.6	0	0
1030	10.82		18.88	7.09	-79	12.6	0	0
1035	10.85		18.90	7.09	-79	12.6	0	0
1040	10.90		18.94	7.09	-79	12.5	.2	0
1045	10.92		18.98	7.10	-81	12.4	0	0
1050	10.94		18.99	7.10	-81	12.4	0	0

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-6-1015
Sample Time: 1050
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [X] No [ ]

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

Comments/Notes: No Sh slight 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-9**

Date: 10-7-15
Weather: Sunny 55°
Time In: 900 Time Out: 935

Well Information

		TOC	Other
Depth to Water:	(feet)	10.70	
Depth to Bottom:	(feet)	22.05	
Depth to Product:	(feet)	–	
Length of Water Column:	(feet)	11.35	
Volume of Water in Well:	(gal)	1.82	
Three Well Volumes:	(gal)	5.46	

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)
900	11.40		18.53	7.17	-183	8.44	.4	0
905	11.52		18.38	7.16	-211	7.65	0	0
910	11.63		18.49	7.16	-240	7.37	0	0
915	11.70		18.55	7.15	-247	7.38	0	0
920	11.78		18.57	7.15	-254	7.43	0	0
925	11.83		18.54	7.15	-257	7.46	0	0
930	11.89		18.52	7.15	-261	7.47	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-9-1015 Duplicate? Yes [ ] No [X]
Sample Time: 930 MS/MSD? Yes [ ] No [X]

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

Comments/Notes: NO ODR NO SL

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: 10/7/15
Weather: Sunny 55
Time In: 815 Time Out: 850

Well Information

		TOC	Other
Depth to Water:	(feet)	855	
Depth to Bottom:	(feet)	20.22	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	11.67	
Volume of Water in Well:	(gal)	1.87	
Three Well Volumes:	(gal)	5.61	

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)	~ 200 ↓			
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)
815	9.60		17.75	7.79	143	2.70	2.1	.86
820	10.02		17.66	7.79	151	2.67	1.8	0
825	10.30		17.71	7.79	157	2.66	1.2	0
830	10.42		17.68	7.79	159	2.66	1.2	0
835	10.51		17.65	7.79	164	2.66	1.0	0
840	10.60		17.61	7.79	166	2.66	.9	0
845	10.65		17.60	7.79	169	2.66	.2	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-11-1015
Sample Time: 845
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

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

Comments/Notes: no odor no 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-12**

Date: 10/7/15
Weather: Cloudy 54°
Time In: 730 Time Out: 810

Well Information

		TOC	Other
Depth to Water:	(feet)	8.41	
Depth to Bottom:	(feet)	19.55	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	11.14	
Volume of Water in Well:	(gal)	1.78	
Three Well Volumes:	(gal)	5.34	

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)	~ 20

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)
730	9.22		18.83	6.52	224	3.28	1.6	6.96
735	9.47		18.65	7.09	201	3.26	0	6.45
740	9.60		18.31	7.39	184	3.25	1.1	1.72
745	9.62		18.20	7.45	180	3.24	1.2	1.70
750	9.62		18.07	7.48	177	3.24	1.0	1.39
755	9.62		18.00	7.49	169	3.24	0	1.26
800	9.62		17.95	7.51	167	3.24	.6	1.11

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-12-1015
Sample Time: 810
Duplicate? Yes [X] No [ ] FD-1015
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-20**

Date: 10/8/15
Weather: Sunny 50
Time In: 830 Time Out: 905

Well Information

		TOC	Other
Depth to Water:	(feet)	8.86	
Depth to Bottom:	(feet)	22.60	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	13.74	
Volume of Water in Well:	(gal)	2.20	
Three Well Volumes:	(gal)	6.60	

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)	90			
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)
830	8.90		15.97	7.18	-199	9.91	1.6	0
835	8.90		16.05	7.12	-228	9.76	0	0
840	8.90		16.03	7.10	-241	9.59	0	0
845	8.90		15.96	7.11	-246	9.45	0	0
850	8.90		15.96	7.11	-251	9.37	0	0
855	8.90		15.97	7.11	-254	9.35	0	0
900	8.90		16.00	7.11	-257	9.33	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-20-1015
Sample Time: 900
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 Ave, Buffalo, New York

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

Date: 10-8-15
Weather: Sunny 50
Time In: 910 Time Out: 945

Well Information

		TOC	Other
Depth to Water:	(feet)	8.22	
Depth to Bottom:	(feet)	21.85	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	13.63	
Volume of Water in Well:	(gal)	2.18	
Three Well Volumes:	(gal)	6.54	

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)
910	9.25		16.82	7.67	-152	1.57	1.6	0
915	9.80		16.57	7.60	-169	1.57	0	0
920	10.10		16.85	7.59	-168	1.57	0	0
925	10.22		16.92	7.60	-164	1.51	0	0
930	10.25		16.96	7.61	-158	1.50	0	0
935	10.26		16.98	7.61	-152	1.49	0	0
940	10.27		17.00	7.61	-150	1.49		

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-21-1015
Sample Time: 940
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

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

Comments/Notes: No sheen / no HCA 695 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-24**

Date: 10/8/15
Weather: Sunny 50
Time In: 750 Time Out: 825

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)	2.47	
Three Well Volumes:	(gal)	7.41	

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	8.85		16.06	6.98	-87	9.21	3.6	.61
755	8.82		16.04	6.96	-213	9.27	0	0
800	8.82		16.02	7.02	-221	9.30	0	0
805	8.82		16.00	7.07	-233	9.32	0	0
810	8.82		16.04	7.09	-239	9.37	0	0
815	8.82		16.07	7.10	-244	9.37	0	0
820	8.82		16.05	7.10	-247	9.37	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-24-1015
Sample Time: 820
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

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

Comments/Notes: No sheen in the egg odor

Laboratory: Test America
Amherst, New York

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: 480-79276-1
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:
5/11/2015 3:06:48 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

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)

Case Narrative

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

TestAmerica Job ID: 480-79276-1

Job ID: 480-79276-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-79276-1

Receipt
The samples were received on 4/28/2015 12:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.0º C, 3.1º C and 3.2º C.

GC Semi VOA
Method(s) 8082A: The following samples were diluted due to the abundance of target analytes and/or due to the nature of the sample matrix: MW-1-0415 (480-79276-1) and MW-9-0415 (480-79276-3). Elevated reporting limits (RLs) are provided.

Method(s) 8082A: All primary data for analytical batch 239603 is reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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: 480-79276-1

Client Sample ID: MW-1-0415 — Lab Sample ID: 480-79276-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1016	0.80		0.092		ug/L	2		8082A	Total/NA
Polychlorinated biphenyls, Total	0.80		0.11		ug/L	2		8082A	Total/NA

Client Sample ID: MW-6-0415 — Lab Sample ID: 480-79276-2

No Detections.

Client Sample ID: MW-9-0415 — Lab Sample ID: 480-79276-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	6.9		0.22		ug/L	5		8082A	Total/NA
Polychlorinated biphenyls, Total	6.9		0.27		ug/L	5		8082A	Total/NA

Client Sample ID: MW-11-0415 — Lab Sample ID: 480-79276-4

No Detections.

Client Sample ID: MW-12-0415 — Lab Sample ID: 480-79276-5

No Detections.

Client Sample ID: MW-20-0415 — Lab Sample ID: 480-79276-6

No Detections.

Client Sample ID: MW-21-0415 — Lab Sample ID: 480-79276-7

No Detections.

Client Sample ID: MW-24-0415 — Lab Sample ID: 480-79276-8

No Detections.

Client Sample ID: FD-0415 — Lab Sample ID: 480-79276-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1-0415

Lab Sample ID: 480-79276-1

Date Collected: 04/27/15 11:15

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	**0.80**		0.092		ug/L		04/29/15 08:07	04/30/15 10:20	2
PCB-1221	ND		0.092		ug/L		04/29/15 08:07	04/30/15 10:20	2
PCB-1232	ND		0.092		ug/L		04/29/15 08:07	04/30/15 10:20	2
PCB-1242	ND		0.092		ug/L		04/29/15 08:07	04/30/15 10:20	2
PCB-1248	ND		0.092		ug/L		04/29/15 08:07	04/30/15 10:20	2
PCB-1254	ND		0.092		ug/L		04/29/15 08:07	04/30/15 10:20	2
PCB-1260	ND		0.092		ug/L		04/29/15 08:07	04/30/15 10:20	2
Polychlorinated biphenyls, Total	**0.80**		0.11		ug/L		04/29/15 08:07	04/30/15 10:20	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*25 - 151*	*04/29/15 08:07*	*04/30/15 10:20*	*2*
DCB Decachlorobiphenyl	*56*		*10 - 158*	*04/29/15 08:07*	*04/30/15 10:20*	*2*

Client Sample ID: MW-6-0415

Lab Sample ID: 480-79276-2

Date Collected: 04/27/15 12:00

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.048		ug/L		04/29/15 08:07	04/30/15 10:35	1
PCB-1221	ND		0.048		ug/L		04/29/15 08:07	04/30/15 10:35	1
PCB-1232	ND		0.048		ug/L		04/29/15 08:07	04/30/15 10:35	1
PCB-1242	ND		0.048		ug/L		04/29/15 08:07	04/30/15 10:35	1
PCB-1248	ND		0.048		ug/L		04/29/15 08:07	04/30/15 10:35	1
PCB-1254	ND		0.048		ug/L		04/29/15 08:07	04/30/15 10:35	1
PCB-1260	ND		0.048		ug/L		04/29/15 08:07	04/30/15 10:35	1
Polychlorinated biphenyls, Total	ND		0.058		ug/L		04/29/15 08:07	04/30/15 10:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*25 - 151*	*04/29/15 08:07*	*04/30/15 10:35*	*1*
DCB Decachlorobiphenyl	*76*		*10 - 158*	*04/29/15 08:07*	*04/30/15 10:35*	*1*

Client Sample ID: MW-9-0415

Lab Sample ID: 480-79276-3

Date Collected: 04/27/15 10:30

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22		ug/L		04/29/15 08:07	04/30/15 10:50	5
PCB-1221	ND		0.22		ug/L		04/29/15 08:07	04/30/15 10:50	5
PCB-1232	**6.9**		0.22		ug/L		04/29/15 08:07	04/30/15 10:50	5
PCB-1242	ND		0.22		ug/L		04/29/15 08:07	04/30/15 10:50	5
PCB-1248	ND		0.22		ug/L		04/29/15 08:07	04/30/15 10:50	5
PCB-1254	ND		0.22		ug/L		04/29/15 08:07	04/30/15 10:50	5
PCB-1260	ND		0.22		ug/L		04/29/15 08:07	04/30/15 10:50	5
Polychlorinated biphenyls, Total	**6.9**		0.27		ug/L		04/29/15 08:07	04/30/15 10:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*25 - 151*	*04/29/15 08:07*	*04/30/15 10:50*	*5*
DCB Decachlorobiphenyl	*64*		*10 - 158*	*04/29/15 08:07*	*04/30/15 10:50*	*5*

Client Sample ID: MW-11-0415

Lab Sample ID: 480-79276-4

Date Collected: 04/27/15 09:45

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.048		ug/L		04/29/15 08:07	04/30/15 11:05	1
PCB-1221	ND		0.048		ug/L		04/29/15 08:07	04/30/15 11:05	1
PCB-1232	ND		0.048		ug/L		04/29/15 08:07	04/30/15 11:05	1
PCB-1242	ND		0.048		ug/L		04/29/15 08:07	04/30/15 11:05	1
PCB-1248	ND		0.048		ug/L		04/29/15 08:07	04/30/15 11:05	1
PCB-1254	ND		0.048		ug/L		04/29/15 08:07	04/30/15 11:05	1
PCB-1260	ND		0.048		ug/L		04/29/15 08:07	04/30/15 11:05	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		04/29/15 08:07	04/30/15 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*25 - 151*	*04/29/15 08:07*	*04/30/15 11:05*	*1*
DCB Decachlorobiphenyl	*46*		*10 - 158*	*04/29/15 08:07*	*04/30/15 11:05*	*1*

Client Sample ID: MW-12-0415

Lab Sample ID: 480-79276-5

Date Collected: 04/27/15 09:00

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.045		ug/L		04/29/15 08:07	04/30/15 11:19	1
PCB-1221	ND		0.045		ug/L		04/29/15 08:07	04/30/15 11:19	1
PCB-1232	ND		0.045		ug/L		04/29/15 08:07	04/30/15 11:19	1
PCB-1242	ND		0.045		ug/L		04/29/15 08:07	04/30/15 11:19	1
PCB-1248	ND		0.045		ug/L		04/29/15 08:07	04/30/15 11:19	1
PCB-1254	ND		0.045		ug/L		04/29/15 08:07	04/30/15 11:19	1
PCB-1260	ND		0.045		ug/L		04/29/15 08:07	04/30/15 11:19	1
Polychlorinated biphenyls, Total	ND		0.054		ug/L		04/29/15 08:07	04/30/15 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*25 - 151*	*04/29/15 08:07*	*04/30/15 11:19*	*1*
DCB Decachlorobiphenyl	*63*		*10 - 158*	*04/29/15 08:07*	*04/30/15 11:19*	*1*

Client Sample ID: MW-20-0415

Lab Sample ID: 480-79276-6

Date Collected: 04/28/15 08:50

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.046		ug/L		04/29/15 08:07	04/30/15 11:34	1
PCB-1221	ND		0.046		ug/L		04/29/15 08:07	04/30/15 11:34	1
PCB-1232	ND		0.046		ug/L		04/29/15 08:07	04/30/15 11:34	1
PCB-1242	ND		0.046		ug/L		04/29/15 08:07	04/30/15 11:34	1
PCB-1248	ND		0.046		ug/L		04/29/15 08:07	04/30/15 11:34	1
PCB-1254	ND		0.046		ug/L		04/29/15 08:07	04/30/15 11:34	1
PCB-1260	ND		0.046		ug/L		04/29/15 08:07	04/30/15 11:34	1
Polychlorinated biphenyls, Total	ND		0.056		ug/L		04/29/15 08:07	04/30/15 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*25 - 151*	*04/29/15 08:07*	*04/30/15 11:34*	*1*
DCB Decachlorobiphenyl	*53*		*10 - 158*	*04/29/15 08:07*	*04/30/15 11:34*	*1*

Client Sample ID: MW-21-0415

Lab Sample ID: 480-79276-7

Date Collected: 04/28/15 09:30

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.045		ug/L		04/29/15 08:07	04/30/15 12:19	1
PCB-1221	ND		0.045		ug/L		04/29/15 08:07	04/30/15 12:19	1
PCB-1232	ND		0.045		ug/L		04/29/15 08:07	04/30/15 12:19	1
PCB-1242	ND		0.045		ug/L		04/29/15 08:07	04/30/15 12:19	1
PCB-1248	ND		0.045		ug/L		04/29/15 08:07	04/30/15 12:19	1
PCB-1254	ND		0.045		ug/L		04/29/15 08:07	04/30/15 12:19	1
PCB-1260	ND		0.045		ug/L		04/29/15 08:07	04/30/15 12:19	1
Polychlorinated biphenyls, Total	ND		0.054		ug/L		04/29/15 08:07	04/30/15 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*25 - 151*	*04/29/15 08:07*	*04/30/15 12:19*	*1*
DCB Decachlorobiphenyl	*37*		*10 - 158*	*04/29/15 08:07*	*04/30/15 12:19*	*1*

Client Sample ID: MW-24-0415

Lab Sample ID: 480-79276-8

Date Collected: 04/28/15 08:15

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		04/29/15 08:07	04/30/15 12:33	1
PCB-1221	ND		0.047		ug/L		04/29/15 08:07	04/30/15 12:33	1
PCB-1232	ND		0.047		ug/L		04/29/15 08:07	04/30/15 12:33	1
PCB-1242	ND		0.047		ug/L		04/29/15 08:07	04/30/15 12:33	1
PCB-1248	ND		0.047		ug/L		04/29/15 08:07	04/30/15 12:33	1
PCB-1254	ND		0.047		ug/L		04/29/15 08:07	04/30/15 12:33	1
PCB-1260	ND		0.047		ug/L		04/29/15 08:07	04/30/15 12:33	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		04/29/15 08:07	04/30/15 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*55*		*25 - 151*	*04/29/15 08:07*	*04/30/15 12:33*	*1*
DCB Decachlorobiphenyl	*46*		*10 - 158*	*04/29/15 08:07*	*04/30/15 12:33*	*1*

Client Sample ID: FD-0415

Lab Sample ID: 480-79276-9

Date Collected: 04/27/15 00:00

Matrix: Water

Date Received: 04/28/15 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.048		ug/L		04/29/15 08:07	04/30/15 12:48	1
PCB-1221	ND		0.048		ug/L		04/29/15 08:07	04/30/15 12:48	1
PCB-1232	ND		0.048		ug/L		04/29/15 08:07	04/30/15 12:48	1
PCB-1242	ND		0.048		ug/L		04/29/15 08:07	04/30/15 12:48	1
PCB-1248	ND		0.048		ug/L		04/29/15 08:07	04/30/15 12:48	1
PCB-1254	ND		0.048		ug/L		04/29/15 08:07	04/30/15 12:48	1
PCB-1260	ND		0.048		ug/L		04/29/15 08:07	04/30/15 12:48	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		04/29/15 08:07	04/30/15 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*25 - 151*	*04/29/15 08:07*	*04/30/15 12:48*	*1*
DCB Decachlorobiphenyl	*51*		*10 - 158*	*04/29/15 08:07*	*04/30/15 12:48*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-79276-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		TCX2	DCB2										
Lab Sample ID	Client Sample ID	(25-151)	(10-158)										
480-79276-1	MW-1-0415	67	56										
480-79276-2	MW-6-0415	68	76										
480-79276-2 MS	MW-6 MS-0415	67	38										
480-79276-2 MSD	MW-6 SD-0415	69	39										
480-79276-3	MW-9-0415	74	64										
480-79276-4	MW-11-0415	66	46										
480-79276-5	MW-12-0415	73	63										
480-79276-6	MW-20-0415	63	53										
480-79276-7	MW-21-0415	63	37										
480-79276-8	MW-24-0415	55	46										
480-79276-9	FD-0415	62	51										
LCS 480-239305/2-A	Lab Control Sample	68	49										
MB 480-239305/1-A	Method Blank	62	55										

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 480-239305/1-A
Matrix: Water
Analysis Batch: 239603

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 239305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.050		ug/L		04/29/15 08:07	04/30/15 09:20	1
PCB-1221	ND		0.050		ug/L		04/29/15 08:07	04/30/15 09:20	1
PCB-1232	ND		0.050		ug/L		04/29/15 08:07	04/30/15 09:20	1
PCB-1242	ND		0.050		ug/L		04/29/15 08:07	04/30/15 09:20	1
PCB-1248	ND		0.050		ug/L		04/29/15 08:07	04/30/15 09:20	1
PCB-1254	ND		0.050		ug/L		04/29/15 08:07	04/30/15 09:20	1
PCB-1260	ND		0.050		ug/L		04/29/15 08:07	04/30/15 09:20	1
Polychlorinated biphenyls, Total	ND		0.060		ug/L		04/29/15 08:07	04/30/15 09:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*25 - 151*	*04/29/15 08:07*	*04/30/15 09:20*	*1*
DCB Decachlorobiphenyl	*55*		*10 - 158*	*04/29/15 08:07*	*04/30/15 09:20*	*1*

Lab Sample ID: LCS 480-239305/2-A
Matrix: Water
Analysis Batch: 239603

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 239305

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.00	0.851		ug/L		85	64 - 129		
PCB-1260			1.00	0.898		ug/L		90	54 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*68*		*25 - 151*
DCB Decachlorobiphenyl	*49*		*10 - 158*

Lab Sample ID: 480-79276-2 MS
Matrix: Water
Analysis Batch: 239603

Client Sample ID: MW-6 MS-0415
Prep Type: Total/NA
Prep Batch: 239305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		0.941	0.774		ug/L		82	23 - 160		
PCB-1260	ND		0.941	0.742		ug/L		79	16 - 163		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*67*		*25 - 151*
DCB Decachlorobiphenyl	*38*		*10 - 158*

Lab Sample ID: 480-79276-2 MSD
Matrix: Water
Analysis Batch: 239603

Client Sample ID: MW-6 SD-0415
Prep Type: Total/NA
Prep Batch: 239305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		0.939	0.810		ug/L		86	23 - 160	5	50
PCB-1260	ND		0.939	0.794		ug/L		85	16 - 163	7	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*69*		*25 - 151*

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

TestAmerica Job ID: 480-79276-1

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

Lab Sample ID: 480-79276-2 MSD
Matrix: Water
Analysis Batch: 239603

Client Sample ID: MW-6 SD-0415
Prep Type: Total/NA
Prep Batch: 239305

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	39		10 - 158

QC Association Summary

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

TestAmerica Job ID: 480-79276-1

GC Semi VOA

Prep Batch: 239305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79276-1	MW-1-0415	Total/NA	Water	3510C	
480-79276-2	MW-6-0415	Total/NA	Water	3510C	
480-79276-2 MS	MW-6 MS-0415	Total/NA	Water	3510C	
480-79276-2 MSD	MW-6 SD-0415	Total/NA	Water	3510C	
480-79276-3	MW-9-0415	Total/NA	Water	3510C	
480-79276-4	MW-11-0415	Total/NA	Water	3510C	
480-79276-5	MW-12-0415	Total/NA	Water	3510C	
480-79276-6	MW-20-0415	Total/NA	Water	3510C	
480-79276-7	MW-21-0415	Total/NA	Water	3510C	
480-79276-8	MW-24-0415	Total/NA	Water	3510C	
480-79276-9	FD-0415	Total/NA	Water	3510C	
LCS 480-239305/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-239305/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 239603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79276-1	MW-1-0415	Total/NA	Water	8082A	239305
480-79276-2	MW-6-0415	Total/NA	Water	8082A	239305
480-79276-2 MS	MW-6 MS-0415	Total/NA	Water	8082A	239305
480-79276-2 MSD	MW-6 SD-0415	Total/NA	Water	8082A	239305
480-79276-3	MW-9-0415	Total/NA	Water	8082A	239305
480-79276-4	MW-11-0415	Total/NA	Water	8082A	239305
480-79276-5	MW-12-0415	Total/NA	Water	8082A	239305
480-79276-6	MW-20-0415	Total/NA	Water	8082A	239305
480-79276-7	MW-21-0415	Total/NA	Water	8082A	239305
480-79276-8	MW-24-0415	Total/NA	Water	8082A	239305
480-79276-9	FD-0415	Total/NA	Water	8082A	239305
LCS 480-239305/2-A	Lab Control Sample	Total/NA	Water	8082A	239305
MB 480-239305/1-A	Method Blank	Total/NA	Water	8082A	239305

Lab Chronicle

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

TestAmerica Job ID: 480-79276-1

Client Sample ID: MW-1-0415
Lab Sample ID: 480-79276-1
Date Collected: 04/27/15 11:15
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		2	239603	04/30/15 10:20	KS	TAL BUF

Client Sample ID: MW-6-0415
Lab Sample ID: 480-79276-2
Date Collected: 04/27/15 12:00
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		1	239603	04/30/15 10:35	KS	TAL BUF

Client Sample ID: MW-9-0415
Lab Sample ID: 480-79276-3
Date Collected: 04/27/15 10:30
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		5	239603	04/30/15 10:50	KS	TAL BUF

Client Sample ID: MW-11-0415
Lab Sample ID: 480-79276-4
Date Collected: 04/27/15 09:45
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		1	239603	04/30/15 11:05	KS	TAL BUF

Client Sample ID: MW-12-0415
Lab Sample ID: 480-79276-5
Date Collected: 04/27/15 09:00
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		1	239603	04/30/15 11:19	KS	TAL BUF

Client Sample ID: MW-20-0415
Lab Sample ID: 480-79276-6
Date Collected: 04/28/15 08:50
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		1	239603	04/30/15 11:34	KS	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-79276-1

Client Sample ID: MW-21-0415

Lab Sample ID: 480-79276-7

Date Collected: 04/28/15 09:30
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		1	239603	04/30/15 12:19	KS	TAL BUF

Client Sample ID: MW-24-0415

Lab Sample ID: 480-79276-8

Date Collected: 04/28/15 08:15
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		1	239603	04/30/15 12:33	KS	TAL BUF

Client Sample ID: FD-0415

Lab Sample ID: 480-79276-9

Date Collected: 04/27/15 00:00
Matrix: Water
Date Received: 04/28/15 12:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			239305	04/29/15 08:07	DLE	TAL BUF
Total/NA	Analysis	8082A		1	239603	04/30/15 12:48	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: 480-79276-1

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	03-31-16

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: 480-79276-1

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: 480-79276-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-79276-1	MW-1-0415	Water	04/27/15 11:15	04/28/15 12:30
480-79276-2	MW-6-0415	Water	04/27/15 12:00	04/28/15 12:30
480-79276-3	MW-9-0415	Water	04/27/15 10:30	04/28/15 12:30
480-79276-4	MW-11-0415	Water	04/27/15 09:45	04/28/15 12:30
480-79276-5	MW-12-0415	Water	04/27/15 09:00	04/28/15 12:30
480-79276-6	MW-20-0415	Water	04/28/15 08:50	04/28/15 12:30
480-79276-7	MW-21-0415	Water	04/28/15 09:30	04/28/15 12:30
480-79276-8	MW-24-0415	Water	04/28/15 08:15	04/28/15 12:30
480-79276-9	FD-0415	Water	04/27/15 00:00	04/28/15 12:30

Detection Limit Exceptions Summary

Client: CDM Smith, Inc.
TestAmerica Job ID: 480-79276-1
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 greater 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 procedures 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

480-79276 Chain of Custody

Client Information	Sampler: TIM BEAUMONT	Lab PM: Mason, Becky C	Page: Page 1 of 1
Client Contact: Timothy Beaumont	Phone: 585 734 2318	E-Mail: becky.mason@testamericainc.com	
Company: CDM Smith, Inc.			Job #:
Address: 6800 Old Collamer Road Suite 3	Due Date Requested:		
City: East Syracuse	TAT Requested (days):		
State, Zip: NY, 13057			
Phone:	PO #: 36380.105370		
Email: beaumonttj@cdmsmith.com	WO #:		
Project Name: Dewey Ave semi-annual GW Wells	Project #: 48011230		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:
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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

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-1-0415	4/27/15	1115	6	Water			2		
MW-6-0415	4/27/15	1200	6	Water			2		
MW-6 MS-0415	4/27/15	1200	6	Water			2		
MW-6 SD-0415	4/27/15	1200	6	Water			2		
MW-9-0415	4/27/15	1030	6	Water			2		
MW-11-0415	4/27/15	945	6	Water			2		
MW-12-0415	4/27/15	900	6	Water			2		
MW-20-0415	4/28/15	850	6	Water			2		
MW-21-0415	4/28/15	830	6	Water			2		
MW-24-0415	4/28/15	815	6	Water			2		
FD-0415	4/27/15	—	6	Water			2		

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, IV, Other (specify)

Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	4/28/15	CDMSmith	Carmen Wilke	4-28-15 12:30	TAB
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: #1 3.0, 3.2, 3.1

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5/11/2015

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 480-79276-1

Login Number: 79276

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wallace, Cameron

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.	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	CDM SMITH INC.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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: 480-88699-1
Client Project/Site: Dewey Ave Semi-annual GW

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

Attn: Matthew Millias

Authorized for release by:
10/16/2015 1:06:51 PM
Anne Pridgeon, Project Management Assistant I
anne.pridgeon@testamericainc.com

Designee for

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)

Case Narrative

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

TestAmerica Job ID: 480-88699-1

Job ID: 480-88699-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-88699-1

Comments
No additional comments.

Receipt
The samples were received on 10/8/2015 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.9º C, 3.0º C and 3.6º C.

GC Semi VOA
Method(s) 8082A: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1-1015 (480-88699-1) and MW-9-1015 (480-88699-3). Elevated reporting limits (RLs) are provided.

Method(s) 8082A: All primary data for the water samples is reported from the ZB-5 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

TestAmerica Job ID: 480-88699-1

Client Sample ID: MW-1-1015 — Lab Sample ID: 480-88699-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	9.1		0.24		ug/L	5		8082A	Total/NA
Polychlorinated biphenyls, Total	9.1		0.28		ug/L	5		8082A	Total/NA

Client Sample ID: MW-6-1015 — Lab Sample ID: 480-88699-2

No Detections.

Client Sample ID: MW-9-1015 — Lab Sample ID: 480-88699-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1232	26		0.94		ug/L	20		8082A	Total/NA
Polychlorinated biphenyls, Total	26		1.1		ug/L	20		8082A	Total/NA

Client Sample ID: MW-11-1015 — Lab Sample ID: 480-88699-4

No Detections.

Client Sample ID: MW-12-1015 — Lab Sample ID: 480-88699-5

No Detections.

Client Sample ID: MW-20-1015 — Lab Sample ID: 480-88699-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1221	0.053		0.047		ug/L	1		8082A	Total/NA

Client Sample ID: MW-21-1015 — Lab Sample ID: 480-88699-7

No Detections.

Client Sample ID: MW-24-1015 — Lab Sample ID: 480-88699-8

No Detections.

Client Sample ID: FD-1015 — Lab Sample ID: 480-88699-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1-1015

Lab Sample ID: 480-88699-1
Matrix: Water
Date Collected: 10/07/15 11:00
Date Received: 10/08/15 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24		ug/L		10/09/15 08:04	10/09/15 15:29	5
PCB-1221	ND		0.24		ug/L		10/09/15 08:04	10/09/15 15:29	5
PCB-1232	**9.1**		0.24		ug/L		10/09/15 08:04	10/09/15 15:29	5
PCB-1242	ND		0.24		ug/L		10/09/15 08:04	10/09/15 15:29	5
PCB-1248	ND		0.24		ug/L		10/09/15 08:04	10/09/15 15:29	5
PCB-1254	ND		0.24		ug/L		10/09/15 08:04	10/09/15 15:29	5
PCB-1260	ND		0.24		ug/L		10/09/15 08:04	10/09/15 15:29	5
Polychlorinated biphenyls, Total	**9.1**		0.28		ug/L		10/09/15 08:04	10/09/15 15:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*25 - 151*	*10/09/15 08:04*	*10/09/15 15:29*	*5*
DCB Decachlorobiphenyl	*83*		*10 - 158*	*10/09/15 08:04*	*10/09/15 15:29*	*5*

Client Sample ID: MW-6-1015

Lab Sample ID: 480-88699-2
Matrix: Water
Date Collected: 10/07/15 10:50
Date Received: 10/08/15 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		10/09/15 08:04	10/09/15 15:45	1
PCB-1221	ND		0.047		ug/L		10/09/15 08:04	10/09/15 15:45	1
PCB-1232	ND		0.047		ug/L		10/09/15 08:04	10/09/15 15:45	1
PCB-1242	ND		0.047		ug/L		10/09/15 08:04	10/09/15 15:45	1
PCB-1248	ND		0.047		ug/L		10/09/15 08:04	10/09/15 15:45	1
PCB-1254	ND		0.047		ug/L		10/09/15 08:04	10/09/15 15:45	1
PCB-1260	ND		0.047		ug/L		10/09/15 08:04	10/09/15 15:45	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		10/09/15 08:04	10/09/15 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*25 - 151*	*10/09/15 08:04*	*10/09/15 15:45*	*1*
DCB Decachlorobiphenyl	*57*		*10 - 158*	*10/09/15 08:04*	*10/09/15 15:45*	*1*

Client Sample ID: MW-9-1015

Lab Sample ID: 480-88699-3
Matrix: Water
Date Collected: 10/07/15 09:30
Date Received: 10/08/15 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.94		ug/L		10/09/15 08:04	10/09/15 18:40	20
PCB-1221	ND		0.94		ug/L		10/09/15 08:04	10/09/15 18:40	20
PCB-1232	**26**		0.94		ug/L		10/09/15 08:04	10/09/15 18:40	20
PCB-1242	ND		0.94		ug/L		10/09/15 08:04	10/09/15 18:40	20
PCB-1248	ND		0.94		ug/L		10/09/15 08:04	10/09/15 18:40	20
PCB-1254	ND		0.94		ug/L		10/09/15 08:04	10/09/15 18:40	20
PCB-1260	ND		0.94		ug/L		10/09/15 08:04	10/09/15 18:40	20
Polychlorinated biphenyls, Total	**26**		1.1		ug/L		10/09/15 08:04	10/09/15 18:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*25 - 151*	*10/09/15 08:04*	*10/09/15 18:40*	*20*
DCB Decachlorobiphenyl	*89*		*10 - 158*	*10/09/15 08:04*	*10/09/15 18:40*	*20*

Client Sample ID: MW-11-1015

Date Collected: 10/07/15 08:45
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-4
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		10/09/15 08:04	10/09/15 16:17	1
PCB-1221	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:17	1
PCB-1232	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:17	1
PCB-1242	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:17	1
PCB-1248	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:17	1
PCB-1254	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:17	1
PCB-1260	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:17	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		10/09/15 08:04	10/09/15 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*25 - 151*	*10/09/15 08:04*	*10/09/15 16:17*	*1*
DCB Decachlorobiphenyl	*41*		*10 - 158*	*10/09/15 08:04*	*10/09/15 16:17*	*1*

Client Sample ID: MW-12-1015

Date Collected: 10/07/15 08:00
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-5
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		10/09/15 08:04	10/09/15 16:33	1
PCB-1221	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:33	1
PCB-1232	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:33	1
PCB-1242	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:33	1
PCB-1248	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:33	1
PCB-1254	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:33	1
PCB-1260	ND		0.047		ug/L		10/09/15 08:04	10/09/15 16:33	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		10/09/15 08:04	10/09/15 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*25 - 151*	*10/09/15 08:04*	*10/09/15 16:33*	*1*
DCB Decachlorobiphenyl	*57*		*10 - 158*	*10/09/15 08:04*	*10/09/15 16:33*	*1*

Client Sample ID: MW-20-1015

Date Collected: 10/08/15 09:00
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-6
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		10/09/15 08:04	10/09/15 17:20	1
PCB-1221	**0.053**		0.047		ug/L		10/09/15 08:04	10/09/15 17:20	1
PCB-1232	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:20	1
PCB-1242	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:20	1
PCB-1248	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:20	1
PCB-1254	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:20	1
PCB-1260	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:20	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		10/09/15 08:04	10/09/15 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*25 - 151*	*10/09/15 08:04*	*10/09/15 17:20*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 158*	*10/09/15 08:04*	*10/09/15 17:20*	*1*

Client Sample ID: MW-21-1015

Lab Sample ID: 480-88699-7

Date Collected: 10/08/15 09:40

Matrix: Water

Date Received: 10/08/15 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.048		ug/L		10/09/15 08:04	10/09/15 17:36	1
PCB-1221	ND		0.048		ug/L		10/09/15 08:04	10/09/15 17:36	1
PCB-1232	ND		0.048		ug/L		10/09/15 08:04	10/09/15 17:36	1
PCB-1242	ND		0.048		ug/L		10/09/15 08:04	10/09/15 17:36	1
PCB-1248	ND		0.048		ug/L		10/09/15 08:04	10/09/15 17:36	1
PCB-1254	ND		0.048		ug/L		10/09/15 08:04	10/09/15 17:36	1
PCB-1260	ND		0.048		ug/L		10/09/15 08:04	10/09/15 17:36	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		10/09/15 08:04	10/09/15 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*25 - 151*	*10/09/15 08:04*	*10/09/15 17:36*	*1*
DCB Decachlorobiphenyl	*67*		*10 - 158*	*10/09/15 08:04*	*10/09/15 17:36*	*1*

Client Sample ID: MW-24-1015

Lab Sample ID: 480-88699-8

Date Collected: 10/08/15 08:20

Matrix: Water

Date Received: 10/08/15 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:52	1
PCB-1221	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:52	1
PCB-1232	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:52	1
PCB-1242	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:52	1
PCB-1248	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:52	1
PCB-1254	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:52	1
PCB-1260	ND		0.047		ug/L		10/09/15 08:04	10/09/15 17:52	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		10/09/15 08:04	10/09/15 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*25 - 151*	*10/09/15 08:04*	*10/09/15 17:52*	*1*
DCB Decachlorobiphenyl	*68*		*10 - 158*	*10/09/15 08:04*	*10/09/15 17:52*	*1*

Client Sample ID: FD-1015

Lab Sample ID: 480-88699-9

Date Collected: 10/07/15 00:00

Matrix: Water

Date Received: 10/08/15 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.048		ug/L		10/09/15 08:04	10/09/15 18:08	1
PCB-1221	ND		0.048		ug/L		10/09/15 08:04	10/09/15 18:08	1
PCB-1232	ND		0.048		ug/L		10/09/15 08:04	10/09/15 18:08	1
PCB-1242	ND		0.048		ug/L		10/09/15 08:04	10/09/15 18:08	1
PCB-1248	ND		0.048		ug/L		10/09/15 08:04	10/09/15 18:08	1
PCB-1254	ND		0.048		ug/L		10/09/15 08:04	10/09/15 18:08	1
PCB-1260	ND		0.048		ug/L		10/09/15 08:04	10/09/15 18:08	1
Polychlorinated biphenyls, Total	ND		0.057		ug/L		10/09/15 08:04	10/09/15 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*25 - 151*	*10/09/15 08:04*	*10/09/15 18:08*	*1*
DCB Decachlorobiphenyl	*71*		*10 - 158*	*10/09/15 08:04*	*10/09/15 18:08*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-88699-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(25-151)	(10-158)
480-88699-1	MW-1-1015	78	83
480-88699-2	MW-6-1015	78	57
480-88699-2 MS	MW-6 MS-1015	81	41
480-88699-2 MSD	MW-6 SD-1015	79	40
480-88699-3	MW-9-1015	76	89
480-88699-4	MW-11-1015	79	41
480-88699-5	MW-12-1015	76	57
480-88699-6	MW-20-1015	70	73
480-88699-7	MW-21-1015	73	67
480-88699-8	MW-24-1015	69	68
480-88699-9	FD-1015	82	71
LCS 480-267809/2-A	Lab Control Sample	82	60
MB 480-267809/1-A	Method Blank	82	64

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 480-267809/1-A
Matrix: Water
Analysis Batch: 267940

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.050		ug/L		10/09/15 08:04	10/09/15 14:10	1
PCB-1221	ND		0.050		ug/L		10/09/15 08:04	10/09/15 14:10	1
PCB-1232	ND		0.050		ug/L		10/09/15 08:04	10/09/15 14:10	1
PCB-1242	ND		0.050		ug/L		10/09/15 08:04	10/09/15 14:10	1
PCB-1248	ND		0.050		ug/L		10/09/15 08:04	10/09/15 14:10	1
PCB-1254	ND		0.050		ug/L		10/09/15 08:04	10/09/15 14:10	1
PCB-1260	ND		0.050		ug/L		10/09/15 08:04	10/09/15 14:10	1
Polychlorinated biphenyls, Total	ND		0.060		ug/L		10/09/15 08:04	10/09/15 14:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*25 - 151*	*10/09/15 08:04*	*10/09/15 14:10*	*1*
DCB Decachlorobiphenyl	*64*		*10 - 158*	*10/09/15 08:04*	*10/09/15 14:10*	*1*

Lab Sample ID: LCS 480-267809/2-A
Matrix: Water
Analysis Batch: 267940

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267809

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.00	0.882		ug/L		88	64 - 129		
PCB-1260			1.00	0.895		ug/L		90	54 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*25 - 151*
DCB Decachlorobiphenyl	*60*		*10 - 158*

Lab Sample ID: 480-88699-2 MS
Matrix: Water
Analysis Batch: 267940

Client Sample ID: MW-6 MS-1015
Prep Type: Total/NA
Prep Batch: 267809

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		0.947	0.838		ug/L		89	23 - 160		
PCB-1260	ND		0.947	1.00		ug/L		106	16 - 163		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*25 - 151*
DCB Decachlorobiphenyl	*41*		*10 - 158*

Lab Sample ID: 480-88699-2 MSD
Matrix: Water
Analysis Batch: 267940

Client Sample ID: MW-6 SD-1015
Prep Type: Total/NA
Prep Batch: 267809

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		0.947	0.809		ug/L		85	23 - 160	4	50
PCB-1260	ND		0.947	0.991		ug/L		105	16 - 163	1	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*79*		*25 - 151*

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

Lab Sample ID: 480-88699-2 MSD
Matrix: Water
Analysis Batch: 267940

Client Sample ID: MW-6 SD-1015
Prep Type: Total/NA
Prep Batch: 267809

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	40		10 - 158

QC Association Summary

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

TestAmerica Job ID: 480-88699-1

GC Semi VOA

Prep Batch: 267809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-88699-1	MW-1-1015	Total/NA	Water	3510C	
480-88699-2	MW-6-1015	Total/NA	Water	3510C	
480-88699-2 MS	MW-6 MS-1015	Total/NA	Water	3510C	
480-88699-2 MSD	MW-6 SD-1015	Total/NA	Water	3510C	
480-88699-3	MW-9-1015	Total/NA	Water	3510C	
480-88699-4	MW-11-1015	Total/NA	Water	3510C	
480-88699-5	MW-12-1015	Total/NA	Water	3510C	
480-88699-6	MW-20-1015	Total/NA	Water	3510C	
480-88699-7	MW-21-1015	Total/NA	Water	3510C	
480-88699-8	MW-24-1015	Total/NA	Water	3510C	
480-88699-9	FD-1015	Total/NA	Water	3510C	
LCS 480-267809/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-267809/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 267940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-88699-1	MW-1-1015	Total/NA	Water	8082A	267809
480-88699-2	MW-6-1015	Total/NA	Water	8082A	267809
480-88699-2 MS	MW-6 MS-1015	Total/NA	Water	8082A	267809
480-88699-2 MSD	MW-6 SD-1015	Total/NA	Water	8082A	267809
480-88699-3	MW-9-1015	Total/NA	Water	8082A	267809
480-88699-4	MW-11-1015	Total/NA	Water	8082A	267809
480-88699-5	MW-12-1015	Total/NA	Water	8082A	267809
480-88699-6	MW-20-1015	Total/NA	Water	8082A	267809
480-88699-7	MW-21-1015	Total/NA	Water	8082A	267809
480-88699-8	MW-24-1015	Total/NA	Water	8082A	267809
480-88699-9	FD-1015	Total/NA	Water	8082A	267809
LCS 480-267809/2-A	Lab Control Sample	Total/NA	Water	8082A	267809
MB 480-267809/1-A	Method Blank	Total/NA	Water	8082A	267809

Lab Chronicle

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

TestAmerica Job ID: 480-88699-1

Client Sample ID: MW-1-1015
Date Collected: 10/07/15 11:00
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		5	267940	10/09/15 15:29	KS	TAL BUF

Client Sample ID: MW-6-1015
Date Collected: 10/07/15 10:50
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		1	267940	10/09/15 15:45	KS	TAL BUF

Client Sample ID: MW-9-1015
Date Collected: 10/07/15 09:30
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		20	267940	10/09/15 18:40	KS	TAL BUF

Client Sample ID: MW-11-1015
Date Collected: 10/07/15 08:45
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		1	267940	10/09/15 16:17	KS	TAL BUF

Client Sample ID: MW-12-1015
Date Collected: 10/07/15 08:00
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		1	267940	10/09/15 16:33	KS	TAL BUF

Client Sample ID: MW-20-1015
Date Collected: 10/08/15 09:00
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		1	267940	10/09/15 17:20	KS	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-88699-1

Client Sample ID: MW-21-1015
Date Collected: 10/08/15 09:40
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		1	267940	10/09/15 17:36	KS	TAL BUF

Client Sample ID: MW-24-1015
Date Collected: 10/08/15 08:20
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		1	267940	10/09/15 17:52	KS	TAL BUF

Client Sample ID: FD-1015
Date Collected: 10/07/15 00:00
Date Received: 10/08/15 10:45

Lab Sample ID: 480-88699-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267809	10/09/15 08:04	MCZ	TAL BUF
Total/NA	Analysis	8082A		1	267940	10/09/15 18:08	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

TestAmerica Job ID: 480-88699-1

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	03-31-16

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

TestAmerica Job ID: 480-88699-1

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

TestAmerica Job ID: 480-88699-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-88699-1	MW-1-1015	Water	10/07/15 11:00	10/08/15 10:45
480-88699-2	MW-6-1015	Water	10/07/15 10:50	10/08/15 10:45
480-88699-3	MW-9-1015	Water	10/07/15 09:30	10/08/15 10:45
480-88699-4	MW-11-1015	Water	10/07/15 08:45	10/08/15 10:45
480-88699-5	MW-12-1015	Water	10/07/15 08:00	10/08/15 10:45
480-88699-6	MW-20-1015	Water	10/08/15 09:00	10/08/15 10:45
480-88699-7	MW-21-1015	Water	10/08/15 09:40	10/08/15 10:45
480-88699-8	MW-24-1015	Water	10/08/15 08:20	10/08/15 10:45
480-88699-9	FD-1015	Water	10/07/15 00:00	10/08/15 10:45

Detection Limit Exceptions Summary

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

TestAmerica Job ID: 480-88699-1

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: 480-72277-16322.1
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:			
City: East Syracuse	TAT Requested (days):			
State, Zip: NY, 13057				
Phone:	PO #: 36380.110154			
Email: beaumonttj@cdmsmith.com	WO #:			
Project Name: Dewey Ave semi-annual GW Wells	Project #: 48011230			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

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-1-1015	10-7-15	1010	6	Water			2		
MW-6-1015	10-7-15	1050	6	Water			2		
MW-6 MS-1015	10-7-15	1050	6	Water			2		
MW-6 SD-1015	10-7-15	1050	6	Water			2		
MW-9-1015	10-7-15	930	6	Water			2		
MW-11-1015	10-7-15	845	6	Water			2		
MW-12-1015	10-7-15	810	6	Water			2		
MW-20-1015	10-8-15	900	G	Water			2		
MW-21-1015	10-8-15	940	G	Water			2		
MW-24-1015	10-8-15	920	6	Water			2		
FD-1015	10-7-15	—	6	Water			2		

480-88699 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
1	[signature]	10/8/15 1045	Consultor	[signature]	10/8/15 1045	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 3.6, 3.0, 2.9 #1

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 480-88699-1

Login Number: 88699
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.	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	CDMSMITH
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	